

The History and Historiography of Natural Resource Development in the Arctic: The State of the Literature

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ReSDA
RESOURCES and SUSTAINABLE
DEVELOPMENT in the ARCTIC

The History and Historiography of Natural Resource Development in the Arctic: The State of the Literature

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Natural resource development is a prominent and controversial topic in the Far North. While media attention focuses largely on the potential for oil and natural gas discoveries – the extension of the Norway-Russia extraction frontier to North American Arctic waters – the active exploration for and development of mineral deposits has come to feature prominently in the region. For the Governments of Nunavut, Northwest Territories and Yukon, and for the communities across the territorial and provincial Arctic regions, the prospect for economic and social improvements based on cooperative exploitation of natural resources is viewed as an important part of the political puzzle in the North. The recent developments, however, build on a long and complicated history of resource development, albeit one marked more by hope and promise than practical results.

This report focuses on the history of the Canadian Arctic and does not examine developments in other parts of the Arctic. The Canadian situation, understandably, reflects the realities of the Canadian North, national and territorial policies, and the actions of corporations active in Canada. The analysis shows that historical research to date has focused on government policies and the macro-level study of the mining sector. Only recently have scholars turned their attentions to the central concern of the ReSDA project, namely the impact of resource developments on communities and methods and approaches that might improve community benefits from resource development.

One of the first major forays by Europeans into the Far North, the expedition led by Martin Frobisher that arrived in the Baffin Island region in 1576, returned with what some believed was gold bearing ground. Frobisher secured support for two more expeditions, which focused more on mining than mapping the desired by unidentified Northwest Passage, and started mining operations around the bay that bears his name. Frobisher's gold turned out to be iron pyrite – Fool's Gold – thereby marking the first, but not the last, time that the promise of Arctic riches would fail to be realized.¹

This paper examines the history of natural resource developments in the Arctic.² While the geographic scope is broadly defined to include portions of the provincial North in Canada and

¹ Robert McGhee, *The Arctic Voyages of Martin Frobisher: An Elizabethan Adventure* (Montreal and Kingston, Canadian Museum of Civilization and McGill-Queen's University Press, 2001), 200.

² For overview histories of the North, see Morris Zaslow, *The Opening of the Canadian North, 1870-1914*, (Toronto and Montreal, McClelland and Stewart, 1971), 339; Zaslow, *The Northward Expansion of Canada, 1914-1967*, (Toronto, McClelland and Stewart, 1988) 423; Ken Coates,

comparable areas in other Arctic countries, it is important to recognize that the vast majority of the mining activity in the Canadian North has occurred in the lower reaches of the provincial Norths.³ The Arctic regions, in comparison, attracted little resource development until after World War II, and even then the attention was sporadic and typically short-term. Much of the scholarship on northern resources development, therefore, focuses on more southerly districts and not on the Arctic as that geographic term is generally understood. This holds, incidentally, for much of the Circumpolar World, with Russia being a major exception. This essay will look, specifically, at the contributions of existing historical literature to our understanding of the impact of resource developments on northern communities. In this way, the paper will describe how historians and historically minded scholars (geographers have long been vital to the historical understanding of the North)⁴ have contributed to the collective understanding of the problems for northern communities associated with resource development and the more constructive impacts that resource developments have played in shaping the human history of the region.

For the purposes of this study, natural resources will be taken to include only non-renewable resources. There is, of course, a rich literature on such economic development sectors as fur trading, northern agriculture, fishing, whaling and forestry.⁵ This is very important scholarship and has contributed significantly to our understanding of the evolution of northern societies. The issues raised by this literature are, however, quite different from those related to the extractive industries (mining and oil and gas development). For this reason, the paper will adopt a more narrow focus on mining and oil and gas activities in the Arctic regions.

Canada's Colonies: A History of the Yukon and Northwest Territories, (Toronto, James Lorimer & Company, 1985), 251; William Morrison, *True North: The Yukon and Northwest Territories*, (Toronto, Oxford University Press, 1998) 202; Shelagh Grant, *Polar Imperative: A History of Arctic Sovereignty in North America*, (Vancouver, Douglas and McIntyre, 2010), 540. For more recent developments, see John D. Hamilton, *Arctic Revolution: Social Change in the Northwest Territories, 1935-1994*, (Toronto, Dundurn Press, 1994), 304; and Ken Coates and Judith Powell, *The Modern North: People, Politics and the Rejection of Colonialism* (Toronto, James Lorimer & Company, 1989), 168.

³ See for example Kerry Abel's excellent study *Changing Places*. See also Ken Coates and Bill Morrison, *The Forgotten North: A History of Canada's Provincial Norths* (Toronto, Lorimer, 1992), 144; and Ken Coates and W.R. Morrison, *The Historiography of the Provincial Norths* (Thunder Bay: Centre for Northern Studies, 1996), 335:

⁴ See the excellent contributions of Robert Bone, *The Canadian North: Issues and Challenges*, (Toronto, Oxford University Press, 2009), 310.

⁵ There is superb work available on the fur trade. See, for example A.J. Ray, *I Have Lived Here Since the World Began: an illustrated history of Canada's Native people* (Toronto, Key Porter Books, 2005), 422. See also Frank Tough, *As Their Natural Resources Fail: Native Peoples and the Economic History of Northern Manitoba, 1870-1930* (Vancouver, UBC Press, 1996), 292; James Waldrum, *As Long as the Rivers Run: Hydroelectric Development and Native Communities in Western Canada* (Winnipeg, University of Manitoba Press, 1988), 253.

Despite the long-term significance of natural resource development to the Canadian society and economy, historians have devoted a surprisingly limited amount of attention to the topic. There are some major exceptions, such as the excellent work done by Morris Zaslow⁶ and Parks Canada historians on the mining aspects of the Klondike Gold Rush⁷ and, more recently, top notch scholarship by Kerry Abel, John Sandlos,⁸ Arn Keeling⁹ and Liza Piper¹⁰ on aspects of post-World War II mining activity in the North. Mining, however, has not attracted systematic scholarship, largely because of the southern and urban focus of the Canadian historical profession. Moreover, the presence of the remarkable documentary record left by the Hudson's Bay Company has encouraged an historiographical preoccupation with the fur trade era that, with archival material much more scattered and limited in scope and volume, has never occurred with the

⁶ Morris Zaslow, *The Opening of the Canadian North, 1870-1914* (Toronto, McClelland and Stewart, 1971), 339; Zaslow, *The Northward Expansion of Canada, 1914-67* (Toronto: McClelland and Stewart, 1988), 332.

⁷ David Neufeld and Frank Norris, *Chilkoot Trail: Heritage Route to The Klondike* (Whitehorse, Yukon, Lost Moose Publishing Company and Parks Canada, 1996), 182; Hal Guest, *A Socioeconomic History of the Klondike Goldfields, 1896-1966*, Microfiche Report Series, no. 181 (Ottawa, Parks Canada, 1985); Richard Stuart, "The Underdevelopment of Yukon," (paper presented to the Canadian Historical Association annual meeting, Montreal, June 1980).

⁸ John Sandlos and Arn Keeling, "Aboriginal Communities, Traditional Knowledge, and the Environmental Legacies of Extractive Development in Canada," *Extractive Industries and Society* (accepted June 2015 as part of special issue on Arctic extractive industries); John Sandlos, Arn Keeling and Jean-Sebatien Boutet, "Mining and the Aboriginal Social Economy," In *Northern Communities Working Together: The Social Economy of Canada's North*, edited by Chris Southcott (University of Toronto Press, 2015), 198-227; John Sandlos and Arn Keeling, "Claiming the New North: Mining and Colonialism at the Pine Point Mine, Northwest Territories, Canada," *Environment and History* Vol. 18, No. 1 (2012), 5-34.

⁹ J.S. Boutet, A. Keeling and Sandlos, J. "Historical Perspectives on Mining and the Social Economy," In *Northern Communities Working Together: The Social Economy of Canada's North*, ed. C. Southcott (University of Toronto Press, 2015), 198-227;

Cater, T., and Keeling, A. 'That's Where Our Future Came From': Mining, Landscape, and Memory in Rankin Inlet, Nunavut. *Etudes/Inuit/Studies* 37, 2 (2013): 59-82;

Sandlos, J. and Keeling, A. Claiming the New North: Mining and Colonialism at the Pine Point Mine, Northwest Territories, Canada. *Environment and History* 18, 1 (February 2012): 5-34;

Keeling, A. "Mining Waste" and "Sewage," in C. Zimring (Ed.), *SAGE Encyclopedia of Consumption and Waste* (Sage, 2012), 553-556, 799-801; See also "The Toxic Legacies Project," http://www.abandonedminesnc.com/?page_id=470

¹⁰ Liza Piper, *The Industrial Transformation of Subarctic Canada*. (Vancouver: UBC Press, 2009), 403; Piper, L. and J. Sandlos, "A Broken Frontier: Ecological Imperialism in the Canadian North." *Environmental History* 12.4 (October 2007): 759-95; Piper, L. "Subterranean Bodies: Mining the Large Lakes of Northwest Canada, 1921-1960." *Environment and History* 13.2 (May 2007): 155-86; Piper, L. "Backward Seasons and Remarkable Cold: the Weather over Long Reach, New Brunswick, 1812-1821", *Acadiensis*, XXXIV, 1 (Autumn 2004), 31-55.

mining sector. Indeed, the historical documentation on the mining community is sparse indeed, particularly when mining communities closed down following the closure of the mines.¹¹

Until the arrival of more North-centred scholars in the 1970s and 1980s, northern historiography also lacked the regional orientation that might have led scholars to examine the impact of mining on the people, communities, eco-systems and overall economy.¹² Northern mines were isolated, their populations very transient, and the mining communities themselves often short-lived. Without a regional imperative driving the historical agenda, the nuances of hard-rock mining camps, Indigenous displacement by mining activity, and community formation and restructuring associated with the resource cycles seemed of little interest in the broader national narrative. This is starting to change, a function of more regionally engaged scholarship, growing national interest in northern resources, and ongoing debates about the socio-economic benefits of resource activities on northern peoples and ecosystems.

Natural Resource Development in the Arctic

From Frobisher's humble and forgettable beginnings, Arctic natural resource development got off to a very slow start. Generations would pass before outsiders turned their attentions more systematically to the mineral potential of the Far North. There were, as Morris Zaslow has documented, forays into the middle and provincial Norths in the 19th century, most notable perhaps being the steady northward extension of the placer gold mining activities during the Cariboo Gold Rush in what became British Columbia. The development of Barkerville in the middle of British Columbia in the 1860s hardly constituted a northern development, but it directed prospector's attentions further northward.¹³ In the 1870s, the first prospectors reached the upper Yukon River basin and, after more than 20 years of hard-scrabble work, touched off the Klondike Gold Rush with the discovery at Rabbit (Discovery) Creek in 1896.¹⁴ The boom that

¹¹ One significant exception relates to Cassiar, British Columbia. When the mining company was in the final stages of wrapping up their Cassiar operations, the University of Northern British Columbia arranged for a large volume of company documents to be transferred to the university.

¹² Ken Coates and William Morrison, "Northern Visions: Recent Writing in Northern Canadian History", *Manitoba History* 10 (Autumn 1985), 2-8; Shelagh Grant and Bruce Hodgins, "The Canadian North: Trends in Recent Historiography," *Acadiensis*, 16:1 (Fall 1986), 173.

¹³ Jean Barman, *The West Beyond the West: A History of British Columbia* (Toronto, University of Toronto Press, 1991), 449.

¹⁴ Melody Webb, *Yukon: The Last Frontier* (Vancouver, UBC Press, 1993), 416; Allen Wright, *Prelude to Bonanza: The Discovery and Exploration of the Yukon* (Sidney, BC, Gray's Pub Ltd, 1976), 321; Coates and Morrison, *The Land of the Midnight Sun: A History of the Yukon* Carleton Library Series. (Montreal, McGill-Queens University Press, 2005), 362; Howard Blum, *The Floor of Heaven: A True Tale of the Last Frontier and the Yukon Gold Rush* (New York, Crown/Archetype, 2011), 432; Charlotte Gray, *Gold Diggers: Striking it Rich in the Klondike* (Toronto, HarperCollins, 2010), 425.

followed – based on real gold and not Frobisher-like ore – was as important for how it changed international assumptions about the Far North as for the millions of dollars of gold dust and nuggets wrestled from the permafrost.

Mining interest in the North escalated during and after the Klondike Gold Rush, with prospectors fanning out across vast territories in search of the next Bonanza. They found pockets of gold and, over time, hard rock mineral properties like the lead-zinc at Elsa-Keno in the Yukon, copper near Whitehorse, gold at Yellowknife and uranium at Great Bear Lake.¹⁵ The discovery of oil at Norman Wells along the Mackenzie River added a new commodity into the mix and generated a surge of interest in northern petroleum. None of these properties matched the Klondike discovery in scale or impact, but the identification of commercial grade deposits kept dozens of prospecting teams in the field. Across the provincial North, particularly in northern Ontario and Manitoba, promising discoveries matched with a speculative zeal generated ongoing pre-World War II interest in sub-Arctic mining and saw several mines come into production. The war accelerated the development of the Eldorado Mine on Great Bear Lake and resulted in a massive but ill-conceived American plan to deliver Norman Wells oil to a poorly designed refinery in Whitehorse, Yukon, a wartime experiment that was abandoned shortly after the war.¹⁶ Mining activity accelerated after the Second World War, due to a fortuitous combination of surging continental and international demand, improved exploratory and extractive technologies, higher prices and Cold War military imperatives. A resource boom swept across the North, from Labrador to British Columbia, and through the three territories. Company towns emerged, like Schefferville, Quebec, Thompson, Manitoba, Uranium City, Saskatchewan, Granisle, British Columbia, Pine Point, NWT,¹⁷ and Faro in the Yukon. At Rankin Inlet, a nickel and copper property became the first to make extensive use of Inuit miners in their operations. The resource projects attracted a great deal of subsidiary investment, much of it by governments, in road, rail, airfields, telecommunications and power generating capacity. The resource boom did not last. By the 1980s, many of the mines and company towns had been closed, the grand promise of long-term prosperity fueled by resource development in tatters. Promising individual discoveries and developments followed, including the Voisey Bay in Labrador, Mary River project on Baffin

¹⁵ William Hunt, *North of 53°: The Wild Days of the Alaska-Yukon Mining Frontier, 1870-1914* (New York, Macmillan, 1974), 99.

¹⁶ Robert Bothwell, *Eldorado: Canada's National Uranium Company* (Toronto, University of Toronto Press, 2011), 514; Ken Coates and William Morrison, *The Alaska Highway in World War II: The US Army of Occupation in Canada's Northwest* (Norman, University of Oklahoma Press, 1992) 3-12; Murphy, Richard. "Eldorado mine." *Structural Geology of Canadian Ore Deposits. The Canadian Institute of Mining and Metallurgy, Geology Division* (1948): 259-268; Nassichuk, W. W. "Forty years of northern non-renewable natural resource development." *Arctic* (1987): 274-284.

¹⁷ See the work by Arn Keeling, Sandlos and Piper

Island, and most famously the Diavik Diamond Mine in the Northwest Territories, the first of the Canadian diamond mines.¹⁸

The oil and gas industry followed a similar cycle, with a slow start in the 1950s and 1960s, vast Beaufort Sea expansion plans in the 1970s (including the Mackenzie Valley Pipeline project), and a sustained downturn in the 1980s and 1990s. Pan Arctic Oils and other companies ran test projects in the high Arctic Islands, but the grand vision of national prosperity based on northern resource development faded.¹⁹ The most successful initiative – the oil sands around Fort McMurray, Alberta – also proved to be the most controversial, attracting considerable local opposition, particularly from Aboriginal communities, and from the international environmental movement. The oil sands also proved central to national economic development plans in the early 21st century.²⁰

A quick glance at the natural resource landscape across the Canadian North reveals as many closed and abandoned mines as active ones, grandiose visions of resource-driven prosperity, and dashed dreams of regional expansion. Several of the mines – Thompson, Manitoba, Fort McMurray and a few others – have had substantial lives. But many, including the planned natural gas developments in the Beaufort Sea, absorbed billions of dollars in investment but did not produce lasting northern prosperity. The vast majority of the mines were located far from

¹⁸ Robert Gibson, "Sustainability assessment and conflict resolution: Reaching agreement to proceed with the Voisey's Bay nickel mine." *Journal of Cleaner Production*, 14, no. 3-4 (2006): 334-348; Susan Wismer, "The nasty game: how environmental assessment is failing Aboriginal communities in Canada's north." *Alternatives Journal* 22, no. 4 (1996): 10; Bryan C. Hood, and Gary Baikie, "Mineral resource development, archaeology and aboriginal rights in northern Labrador." *Études/Inuit/Studies* (1998): 7-29; W. W. Nassichuk, "Forty years of northern non-renewable natural resource development." *Arctic* (1987): 274-284; Lawson W. Brigham, "Arctic marine transport driven by natural resource development." *Edited by Saara Majuri* (2013); Rebecca Hall, "Diamond mining in Canada's Northwest Territories: A colonial continuity." *Antipode* 45, no. 2 (2013): 376-393; Lindsay Galbraith, Ben Bradshaw, and Murray B. Rutherford, "Towards a new supraregulatory approach to environmental assessment in Northern Canada." *Impact Assessment and Project Appraisal* 25, no. 1 (2007): 27-41.

¹⁹ Robert Page, *Northern Development: The Canadian Dilemma* (Toronto, McClelland & Stewart, 1986), 360; Whitney P. Lackenbauer, *From Polar Race to Polar Saga: An integrated strategy for Canada and the circumpolar world*. (Toronto, Canadian International Council, 2009); Philip Isard, "Northern Vision: Northern Development during the Diefenbaker Era." (2010).

²⁰ Barry Ferguson, *Athabasca Oil Sands: Northern Resource Exploration, 1875 to 1951* (Regina: Canadian Plains Research Center, 1986), 283; Benjamin R. Cowie, Bruce James, and Bernhard Mayer, "Distribution of total dissolved solids in McMurray Formation water in the Athabasca Oil Sands Region, Alberta, Canada: implications for regional hydrogeology and resource development." *AAPG Bulletin* 99, no. 1 (2015): 77-90; Frank J. Atkins, and Alan J. MacFadyen, "A resource whose time has come? The Alberta oil sands as an economic resource." *The Energy Journal* (2008): 77-98.

established settlements. In some instances, like Rankin Inlet, Aboriginal people coalesced around the mining developments.²¹ The inability to sustain the company towns created from the 1950s through to the 1970s convinced mining firms to look for alternate models. The firms increasingly turned to the transient workforce approach, typically described as fly in/fly out, offering high wages and excellent local conditions for workers who generally maintained their southern permanent addresses.²² These same mines have developed strong collaborative relations (or impact and benefit agreements) with regional Indigenous communities, offering skills training and jobs, business preferences and other economic benefits.

Major Themes in the Historiography of Natural Resource Development, Northern Peoples and Community Development

There are some key themes that emerge from a review of the scholarly literature on northern resource development. The list is designed to illustrate some of the general patterns, leading to the last part of the essay which focuses on major gaps requiring additional scholarly research.

Natural resources and community development have attracted comparatively little research.

The first theme is the most disappointing. In contrast to other prominent themes in northern history, particularly the fur trade, Christian missionaries and the role of the Government of Canada, mining has not drawn sustained scholarly interest. The limited amount of scholarly writing, while often very good, has underscored the need for much more research on this subject. This problem is not unique to the North. Mining remains seriously understudied in the historical profession at large, with little sustained interest in community formation and social relations associated with mining activity. The problem, it seems, rests with the comparatively low status of mining in the broader scholarly community, a most unfortunate trend that needs to be addressed.

Favourable Portrayals of Developers: After the 1970s the advent of ecological awareness and greater concern for Indigenous peoples turned scholars' attentions toward the disruptive impact of natural resource development. Before that time, resource development was viewed in a more pro-development and celebratory mode. The prospectors and developers were viewed in generally positive terms, as leaders in the economic development of the region and country. Throughout

²¹ Arn Keeling, and John Sandlos. "Environmental justice goes underground? Historical notes from Canada's northern mining frontier." *Environmental Justice* 2, no. 3 (2009): 117-125; Thomas K. Suluk and Sherrie L. Blakney, "Land claims and resistance to the management of harvester activities in Nunavut." *Arctic* (2008): 62-70; Thierry Rodon, and Francis Lévesque, "Understanding the Social and Economic Impacts of Mining Development in Inuit Communities: Experiences with Past and Present Mines in Inuit Nunangat." *Northern Review* 41 (2015); William C. Wonders, *Canada's changing north*, (McGill-Queen's Press-MQUP, 2003), 449.

²² Gregory F Finnegan, and John Jacobs, "Canadian interprovincial employees in the Canadian Arctic: a case study in fly-in/fly-out employment metrics, 2004–2009." *Polar Geography* (2015): 1-19.

this period, with the country encouraging resource development and with government policy oriented towards “opening” the North, the individuals behind mineral and oil and gas developments were singled out for attention, much of its favourable.²³

Southern-focused scholarship: Led by the invaluable work of Morris Zaslow, the pre-1980s scholarship was dominated by a southern orientation.²⁴ The focus was squarely on to use the title of one of Zaslow’s major works, *The Northward Course of Canada*. In this important formulation, the scholarly attention was on what the country (by which the author’s generally meant Ontario and Quebec) thought about the North and on the agents of government, commerce and culture that were dispatched to the region to extend national influence. The southern-focused scholarship was concerned primarily with relations between the North and the South and much less so on the nuances of regional or community life. Indeed, in much of this work, northerners appear as a largely undifferentiated group, largely passive in their reaction to the forces of development and rapid change.

Policy-oriented work: Much of northern scholarship, and not just on natural resource development, is actually Ottawa-centric, focused primarily on demonstrating and understanding the role of national government policy in the shaping of northern history. From studies on Aboriginal policy through to extensive coverage of Prime Minister John Diefenbaker’s interest in northern development through to the lengthy political debates about northern oil and gas exploitation, scholars have retained their interest in federal policies toward the North.²⁵ This is valuable context-setting work, but it generally lacks two key elements: an examination of how the policies worked on in practice and the responses of northerners to the policies that influenced and shaped the evolution of the region.

Toward Critical Assessments of Resource Development: For the past 30+ years, scholarly analysis of northern resource development has shifted from the celebratory tone of the pre-1970 era to the more critical evaluation of mining and oil and gas development. The academy has, in recent decades, taken a more sceptical stance toward the development impulse and has offered more analytical evaluations of short and long environmental impacts, social disruption and contradictory influences on the North itself. This work is part of a much larger analytical re-

²³ There is not a great deal of writing on northern mining developers, but see Lewis Green, *The Gold Hustlers* (Alaska Northwest Books, 1977), 339.

²⁴ This issue is examined in Coates and Morrison, “Northern Visions: Recent Writing in Northern Canadian History”, *Manitoba History* 10 (Autumn 1985), 2-8; and Coates and Morrison, “Writing the North,” in Sherrill Grace, ed., *Essays in Canadian Writing* (1997).

²⁵ Philip Isard, "Northern Vision: Northern Development during the Diefenbaker Era." (2010); Harvery N. Lethwick, "Regional Development Policies: Context and Consequences." *Still Living Together. Recent Trends and Future Directions in Canadian Regional Development* (1987); Klaus J. Dodds, "Northward ho! Obama, Diefenbaker and the North American Arctic." *Polar Record*: 1-4.

evaluation of resource and economic development generally, and differs sharply from the more supportive writing of the pre-1970s period.²⁶

Toward north and community-centred scholarship: One of the greatest transitions in northern scholarship has been the shift from south-centred studies (concerned primarily with policy and the work of southern actors) to north-centred approaches (concerned principally with the socio-economic transitions in the North).²⁷ This work has the added benefit of prioritizing the experiences of Indigenous peoples and focusing on long-term transitions in the region. The scholarship has been driven by the growing number of scholars raised in the North, and reflects their “insider’s” perspectives on Northern realities. Importantly, the focus on the North also increased the attention given to community-level studies, which emphasize the unique nature of the various cities, towns and villages across the region, differences driven by a combination of Indigenous cultures, economic activity, Indigenous-newcomer relations and historic transitions.²⁸

Growing awareness of the impact of resources on Aboriginal communities: From the vantage point of the 2010s, it is difficult to imagine the limited attention given to Indigenous peoples by scholars only half a century ago. Indeed, the pendulum has swung sharply in the opposite direction, to the point that non-Aboriginal people are given much less attention than in the past. Scholarship has now documented the fact that resource activities caused considerable, sometimes devastating, impacts on local Indigenous populations. As Aboriginal voices – as interview subjects, as writers and more regularly now as scholars – have entered the debate, a much greater sense has emerged of the impact of mining, oil and gas activities on Aboriginal communities. This has resulted in growing attention to Aboriginal protests against resource development, particularly related to the Mackenzie Valley Pipeline project.²⁹ Interestingly, there has been less attention to the engagement of Indigenous peoples as resource workers, a pattern that emerged at the outset of the resource expansion, and that has some important contemporary manifestations. Most importantly, recent scholarship has demonstrated that the transitions associated with major resource projects have been pivotal, along with social welfare programming, in accelerating the transformation of Aboriginal life in the Far North. While the specifics and nature of the transitions remain largely uncharted, there is a growing realization that resource development

²⁶ The work cited earlier by Keeling, Piper, Sandlos are excellent examples of this approach.

²⁷ Many examples of this scholarly approach can be found in the *Northern Review*, the only Canadian scholarly journal based North of 60. See “The Northern Review”, Yukon College website, accessed October 15, 2015,

http://yukoncollege.yk.ca/index.php/research/pages/the_northern_review

²⁸ One of the best works of this type, albeit with little coverage of resource issues, is Julie Cruikshank, *Life Lived Like a Story: Life Stories of Three Yukon Native Elders*, (Lincoln, University of Nebraska, 1990), 428.

²⁹ See Thomas Berger, *Northern Frontier, Northern Homeland* (Douglas & Macintyre, 1971), 280.

accelerated the rate and complexity of change in Aboriginal communities associated with the sector.

Newcomer Populations, Community Formation and Change, and Natural Resource

Development: One of the interesting patterns in northern scholarship is how research on the territories focuses on Aboriginal people while studies of the provincial North has much more comprehensive coverage of non-Indigenous peoples. There are major exceptions to this generalization; the Klondike Gold Rush work is largely focused on newcomers and there is good writing on aspects of northern Manitoba's development.³⁰ Across the North, however, there is surprisingly limited attention to the experience of newcomers, both in the pre and post-World War II era. Even the resource boom of the 1950s and 1960s has generally been studied at the macro level, focusing largely on policy issues and industry trends, with much less attention given to community-level and social issues in the non-Aboriginal populations. In this period, newcomers made up the vast majority of the northern population, with a significant number making the transition from short-term resource workers to long-time northerners. The non-Aboriginal people, starting in the 19th century, both shaped the evolution of the North and were transformed by the North themselves. To a quite surprising degree, historians have devoted comparatively little effort to understanding the role of non-Aboriginal northerners in the resource sector. There has been some work on single industry and company towns, although little of this was done by historians. Indeed, the expansion of fly in/fly out operations has lessened interest in the company town phenomena, which is increasingly looking like a time-limited experiment in northern and resource social organization. At present and historically, the North has been shared space from the fur trade era on, with prominent non-Aboriginal populations across much of the North. Ultimately, the historical understanding of the North must draw on the experiences of Aboriginal people, newcomers and the interactions between Indigenous and non-Indigenous peoples. In this important respect, the history of the North remains substantially incomplete.

Infrastructure, Natural Resources and Northern Communities: The resource sector brought many changes to the Far North, one of the most important being the development of transportation, communications and community infrastructure. While some of the projects were undertaken for traditional government-centred reasons, such as connecting a distant territory to the rest of the nation, most were connected to resource projects. Even the largest set of infrastructure projects in northern history – the Northwest Staging Route – include a substantial resource component. While the major project, the Alaska Highway, was driven by para-military priorities, the substantial side-initiative, the Canol pipeline and Whitehorse refinery, had its routes

³⁰ On the Klondike, see the excellent study by Charlene Porsild, *Gamblers and Dreamers: Women, Men, and Community in the Klondike* (University of British Columbia Press, 1998), 264. See also Ken Coates and William R. Morrison (Eds.), *The Historiography of the Provincial Norths* (Thunder Bay, Ont. Centre for Northern Studies, Lakehead University, 1996), 335.

in continental excitement about the potential of the Norman Wells oil field.³¹ Scholars looking at the post World War II period have focused on the Diefenbaker government's Road to Resources program, which brought roads and railways into the North. Other crucial initiatives attracted a great deal less attention. These undertakings included the development of port facilities and shipping capabilities generally, the slow and expensive expansion of the communications and electrical systems in the northern communities, and the enhancement of satellite television and, later, Internet services across the region. To this point, historians have written little on these vital developments and have not contributed a great deal to the understanding of how infrastructure investments responded to community needs and demands, how the national government prioritized and funded northern projects, and how these infrastructure initiatives reshaped the Far North. This is one of the major lacunae in the historical understanding of the Canadian North, and requires much more attention than it has received to this point.

Arctic Environments and the Long-Term Effects of Natural Resource Development on Northern Peoples:

The combination of resource development, climate change/global warming, and greater scientific understanding of Arctic ecosystems has sparked global interest in the environment in the Far North. Much of the southern and international engagement in the Arctic is tied to global concern about Arctic sustainability and the unique vulnerability of the eco-systems of the region.³² In the 1950s and 1960s, analysts paid more attention to the best means of developing the North than to the proper approaches to protecting the environment. A series of major initiatives, including the proposed Mackenzie Valley Pipeline and the massive James Bay hydroelectric developments (and comparable hydro projects across the Middle North)³³ and the oil sands in northern Alberta, generated widespread interest in northern ecosystems and, in the process, spurred scholarly and general interest in Arctic ecology. Historians have responded impressively to this growing concern about the Far North, studying the long-term effects of the Klondike Gold Rush, the environmental and socio-environmental impacts of specific mining projects and the effect of the industrial economy generally. Historians have a particularly

³¹ Ken Coates and William Morrison, *The Alaska Highway in World War II: The US Army of Occupation in Canada's Northwest* (Norman, University of Oklahoma Press, 1992) 3-12; Coates and Morrison, *Working the North: Labor and the Northwest Defence Projects, 1942-1946* (Fairbanks: University of Alaska Press, 1994), 272.

³² See the excellent work associated with the international project, "Network in Canadian History & Environment (Niche)", accessed October 15, 2015, <http://niche-canada.org/about/>

³³ Boyce Richardson, *Strangers Devour the Land* (Toronto, Macmillan, 1975); Jean L. Manore, *Cross-Current: Hydroelectricity and the Engineering of Northern Ontario* (Waterloo, ON, Wilfrid Laurier University Press, 1999), 223; Fikret Berkes, "The intrinsic difficulty of predicting impacts: lessons from the James Bay hydro project." *Environmental Impact Assessment Review* 8, no. 3 (1988): 201-220; Paul Rynard, "'Welcome In, But Check Your Rights at the Door': The James Bay and Nis [vert, dbl bar (under)] ga'a Agreements in Canada." *Canadian Journal of Political Science/Revue canadienne de science politique* 33, no. 02 (2000): 211-243.

important opportunity to contribute at the micro-level to the greater understanding of the environmental manifestations of resource development. Given the intense global interest in Arctic adaptation, resilience and ecological change, it is likely that the historical work will continue to expand and contribute to the better understanding of the environmental effects of resource development.

Historians and the Natural Resource Evaluation Process: Why Have Historians' Been Largely Silent?:

Northern development is highly contentious. Many Aboriginal communities support resource development; others are either cautious or opposed to a specific project or to extraction activities in general. All across the North, debate continues about northern pipelines, mines, and oil and gas development. The courts are involved in the process, as are politicians at multiple levels. To date, historians have been comparatively silent in this often controversial and very important regional conversation. Historians, it must be noted, have not been overly prominent in public policy debates generally, so the concern is not limited to the North and resource development. The lack of historical engagement works in the opposite direction, as government officials and industry proponents have demonstrated little interest in the history of northern resource development. The historical silence or, to be more fair, near silence, has implications for the North. Research on early infrastructure projects demonstrated the transformative effects of roads, railways and other initiatives on the region. Detailed studies of Aboriginal engagement or, conversely, marginalization demonstrate the manner in which Indigenous peoples and communities responded to major economic and environmental changes. Historians believe, with good reason, that historical understand is central to a society's abilities to confront the present and major constructive choices about the future. There is ample evidence that such historical work would make valuable contributions to contemporary conversations about the future resource development in the Far North. Greater historical study is required, perhaps as outlined below, but this has to be matched by increased engagement by historians in the debates about resource activity in the Arctic.

Gaps in Historical Research on Natural Resources and Arctic Communities: Preliminary Themes

The commentary above focuses on the work that historians have undertaken related to resource development in the Far North. The scholarship is spotty and irregular, with areas of real contribution and surprisingly large gaps in the historical work. While the list of possible subjects is long – and other scholars could readily add other items – it provides an indication of the possibilities for further historical research on the history of resource development in the North. More specifically, this list and the discussion above highlight ways in which historians have, could and should contribute to the region-wide debate about the impact of resource projects on Arctic communities. These are the areas that seem to require urgent and sustained historical attention.

- **Non-Aboriginal Communities and Resource-Dependant Societies:** We know far too little about the non-Aboriginal people involved in resource-dependant societies. There is very little work to date on labourers involved with resource development, the private business people who worked alongside the mining companies, and the social dynamics of the communities themselves. It is vital that we understand more about how these communities functioned, about social and economic relationships among the resource workers and others, and about wages, working conditions and other aspects of camp life in the North. There is a particularly urgent need to look into the operations of labour organizations, particularly after World War II, in enhancing the working and social conditions for working people and their families. A surprisingly limited amount of scholar work has been devoted to the people who constituted the majority of the resource work force and who, across much of the North, made up the majority of the total population.
- **Transiency in Northern Resource Communities:** The northern resource sector is notoriously transient. Workers come North to “make a killing, not to make a living,” and typically leave on a seasonal basis or after a few years of high-grading the resources of the North. The contours of demographic transiency are poorly understood and need far greater analysis as this pattern is among the most important social characteristics of the North.³⁴
- **Pre-World War II Resource Communities:** While there has been some scholarly work on the post-WWII resource centres, study of the pre-WWII mining and oil camps is extremely thin. The historical amnesia about this topic, save for the Klondike Gold Rush, means that we have a skewed sense of the historical evolution of northern resource communities and, indeed, the whole resource economy in the region.
- **Value Systems (Indigenous, Newcomer Populations, Outside Corporations, Governments, Southerners Generally) related to Arctic Resource Development:** Interestingly, few scholars have offered much more than superficial comments about one of the most important aspects of northern resource development, naming the attitudes and assumptions the various participants hold about the sector. The result is recourse to stereotypes and generalities. We need to know much more about how participants, local and distance, viewed the resources and the development processes in the Far North.
- **Impact of Pre-World War II Resource Developments on Aboriginal Peoples:** It is fascinating that the national preoccupation with the impact of the fur trade and contemporary concern about the impact of resource activities has not been matched by an historical concern about the nature of social, economic and cultural changes associated with resource activity in the North. Comments available to date are limited in scope and depth.
- **Wage Economies in the Natural Resource Sector, including the Role of Unions in Arctic Development:** Workers, oddly, have attracted very little attention in the Far North and, more generally, outside the industrial and manufacturing sector. There is a great deal to

³⁴ An early effort on this theme is Coates and Morrison, *Sinking of the Princess Sophia: Taking the North Down With Her* (Fairbanks, University of Alaska Press, 1991), 220.

be learned from the operation of the wage economy in the sector, with a particular need to understand the role of unions in post-World War II Arctic development activity. This is one of the most important themes in post-war history but it has attracted little attention.

- **High Arctic Resource Developments, focusing on Nearby Indigenous Communities and Temporary Workers:** To the degree that northern resource activity has attracted any attention it has focused on the middle North regions. The high Arctic activities, such as oil and gas exploration in the 1970s and 1980s, have not yet draw scholarly study, particularly as this relates to the Aboriginal communities in the North.
- **Coping with Winter and Arctic Conditions: The Effects on Northern Communities:** One of the great oddities of northern scholarship is that very little attention has been paid to the impact of winter, easily the dominant characteristic of northern life. The specific study of the impact on winter and Arctic conditions on the natural resource sector is a matter of high priority, but has yet to draw serious or systematic research.
- **Private and Public Sector Investments in Infrastructure and the Impact of these Investments on Arctic Communities:** Each northern mining project attracted significant private and public infrastructure investment. In most instances, the development of a road, railway, airport or other facilities had an impact on nearby Aboriginal communities. The nature and extend of that impact remains little known.
- **Indigenous Engagement with the Resource Economy:** Recent research in British Columbia has shown that Aboriginal people have historically been more deeply engaged in resource activities than is generally believed. Working from the apparent assumption that Aboriginal were not engaged in the sector, scholars have so far given little attention to the degree and nature of Indigenous participation.
- **Environmental Impact of Resource Activities on Northern Eco-Systems, Indigenous Peoples and Arctic Communities:** The crux of much of the debate about northern resource development is that these initiatives have significant impacts on the environment, communities and peoples of the North. Surprisingly, there has been little historical study to determine the impact of such development projects in the past, which could shed important light on the long-term impact of mining and other resource activity.
- **Indigenous Protests against Resource Development:** Canadians were shocked when Aboriginal people protested the construction of the Mackenzie Valley Pipeline and managed to stop the project. Very little is known about Indigenous responses – protests, support or indifference – to other northern mining project. This is an important theme that warrants much deeper investigation.
- **Government Policies re: Community Formation, Servicing and Transitions in Arctic Regions:** The study of federal government policy (and provincial government policy in the northern provinces) has typically focused on broad questions of strategy and general regional management. Much less attention has been given to community-level strategies and the activities associated with support, serving and sustaining northern communities, specifically those affected by major resource projects.

- **Mine/Project-Specific Studies of the Impact of Resource Developments in the Arctic:** In recent years, specific studies of the Pine Point mine have added dramatically to our understanding of northern mining activity. We need many more such studies, particularly of the smaller and less well-known resource projects and the early stage developments of places such as the Norman Wells field. These are essential building blocks in the attempt to understand the full impact of resource development.
- **Resource Speculation and Arctic Communities (particularly related to oil and gas):** Over time, a great deal of time and effort is devoted to projects – like High Arctic natural gas the Beaufort Sea oil and gas – that do not result in ongoing resource activity. The period of speculation, investigation, preliminary testing and heavy promotion is vital to the development process and can have sizeable impacts on associated communities.
- **The Military, Strategic Considerations and Major Investments in Northern Natural Resource Development and Infrastructure:** In many northern countries, resource activities have vital strategic considerations and, further, military investments can spark expanded resource development. The contrast between the United States and Canada in this regard is notable and is worthy of expanded study. To date, the strategic work on the Arctic has focused on international relations and much less on the practical impact of military engagement on the region.
- **The Advent of Environmental Remediation in the Arctic:** Environmental assessment is an integral part of northern development, and is a key factor in the establishment, monitoring and remediation of mining and other project sites. Little is known about the early stages of remediation and the emergence of environmental assessment and remediation as a political, economic and environmental force in northern life.
- **Fly In-Fly Out Camps and the Transformation of Northern Societies:** Fly-camps now dominate the operation of the northern resource frontier. The concept of mobile workforces is not particularly new, however. Much more work is required on the origins of the mobile work force and the implications of this labour management approach for the social and economic development of the North, particularly as this relates to northern and Aboriginal communities.
- **Aboriginal Land Claims and Land Claims Settlements and the Development Frontier:** Since the 1970s, Aboriginal land claims (and, later, settlements) have reshaped the development process in the North. Sufficient time has passed that historians should expand their studies of the relationship between land claims, land claims agreements and implementation measures and the exploitation of northern resources. This kind of contemporary history could be extremely valuable in understanding the future of resource activity in the Arctic.
- **Comparative Aspects of Northern Resource Development and Arctic Communities:** Resource development is an international enterprise. Capital, professional expertise, and the workforce is truly global in nature. It was not always as international as the sector is in the 21st century, but we have a limited sense of how resource development occurred in other

Arctic and sub-Arctic environments. Comparative historical study remains quite limited, despite the fact that it is well-suited for such a global industry as resource extraction, with historic and contemporary international connections.

History, Historians and the Improvement of Community Benefits

The historical profession has been less than fully engaged in the debates about the current and future challenges of Canada and other nations. The nature of the discipline – backward looking by definition and generally disconnected from public policy debates – favours informing the public about previous developments rather than focusing specifically on reshaping the present and influencing the future. As the recent contributions to contemporary debates from Niall Ferguson,³⁵ Simon Schama, Jared Diamond and Margaret Macmillan demonstrates, historians can be of fundamental importance in defining and clarifying public policy issues. In a different vein, historians are playing major roles in helping the Canadian and international legal community understand and redefine Aboriginal legal and treaty rights. The idea of the policy-engaged historians, not commonplace only twenty years ago, is becoming much more familiar.

The situation facing northern, largely Aboriginal, communities seeking to capitalize on the opportunities presented by resource development lends itself to historical engagement. Aboriginal peoples themselves take a strong historical view on contemporary opportunities. Community memories are strong, extending across many generations, and there is a strong tradition of examining current opportunities in light of earlier experiences. There should, as a consequence, be a reception local and region audience for historical studies of the impact of resource projects on local communities. In addition, historians are well placed to look at specific or region-wide developments in a detailed, multi-party perspective, utilizing company documents, government materials, and interview with a variety of participants to determine the local impacts of resource activities. Historians have the opportunity, for example, to compare the effects on Aboriginal communities of long-running mining operations, such as those in the Dawson City gold fields, the Elsa-Keno properties, and the Yellowknife mine and contrast those with short-term or episodic developments, including Whitehorse Copper, Cantung, Cyprus-Anvil, and others. There is now sufficient passage of time to test various interventions, ranging from corporate hiring policies, government training programs, community-based initiatives, and corporate financial and other commitments to communities. Very few of these were on offer in

³⁵ Cite two books from each of these scholars – more recent works. Niall Ferguson, *Civilization: The West and the Rest* (New York, Penguin Books, 2012), 432; and Ferguson, *The Great Degeneration: How Institutions Decay and Economies Die* (New York, Penguin Books, 2014), 192; Simon Schama. *A History of Britain: The British Wars 1603-1776*. Vol. 2. (Random House, 2003); and Schama, *Citizens: A chronicle of the French Revolution* (Penguin UK, 2004); Jared Diamond, *Collapse: How societies choose to fail or succeed* (Penguin, 2005); and Jianguo Liu, and Jared Diamond. "China's environment in a globalizing world." *Nature* 435, no. 7046 (2005): 1179-1186; Margaret Macmillian, *Paris 1919* (Toronto: Random House, 2003).

the 1950s. Beginning in the 1960s, companies and governments started paying attention to community impacts, both in preventative terms (isolating mining camps from Indigenous settlements) and by promoting participation.

Arctic communities considering resource development in their traditional territories need to know what has worked – and what has not worked – in other jurisdictions, with other Indigenous populations, and with various resource projects. At present, information is substantially anecdotal, without the substantial and sustained analysis that an historical investigation would produce. One worries, in fact, that major contemporary decisions are being made in the absence of historical understanding, particularly of post-World War II resource developments and initiatives designed to encourage or support Aboriginal engagement. It is important, therefore, for historians to examine the resource frontier from the community perspective, to determine what has worked and what has been less successful. A detailed evaluation of the community impact of specific resource developments, combined with a northern Canadian and comparative Arctic study of resource activity generally could provide crucial to Aboriginal decision-making going forward and could produce a substantial quantity of solid, evidence-based advice on how to evaluate current and future possibilities.

Concluding Comments

This overview of historical work on northern resource development and suggestions about areas for future historical studies is, by nature, individual and idiosyncratic. Other scholars, and there are fortunately many fine historians working on northern themes, would undoubtedly have a different set, equally valid and rich with scholastic opportunity. What stands out is that historians have not been particularly active in studying resource development and, in particular, the impact of such projects on Arctic residents, communities and environments. Historians believe that historical understanding, while worthy on its own, contributes substantially to contemporary awareness and forward planning. If the Arctic is to better understand the likely implications for the North from expanded resource development, it follows that a greater appreciation for historical patterns and processes could and should be invaluable.

Historical research, of course, requires substantial documentary and other records. For many years, the abundant and remarkable records of the Hudson's Bay Company served like a magnet for northern researchers, to be detriment of studies on other areas and topics. There is no comparable set of documentary materials on natural resource developments, although the federal and territorial government collections contain a substantial amount of material. The corporate record, unlike the Hudson's Bay Company's archive, is scattered and far from complete. Many of the pre-World War II projects have precious little documentary materials and even the post-war records are much less complete than historians would like. The richest sources, one that is being tapped by the newest generation of scholars, include oral testimony, photographic records, video materials and physical objects. The passage of time, of course, erodes these sources,

creating a sense of urgency about the historians' collective responsibility to gather, preserve and utilize the existing historical records.

Arctic communities approach the prospect of major resource development with nervousness. They want to know how the projects, some of them massive in scale and potential impact, might affect the North and they want and need strategies for mitigating the negative effects and maximizing the positive elements. Understanding the experiences of the past could provide the North with an excellent means of considering contemporary options and planning for the future. It is incumbent on historians, therefore, to both expand their work on northern resource development and finding new ways of sharing their scholarship with the affected communities. History matters. To historians falls the task of making history relevant and meaningful to Arctic peoples wrestling with the prospect of rapid resource-driven change.