

Language, Distance, Democracy: Development Decision Making and Northern Communications

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Abstract: In a country as large as Canada, connectivity—whether by road, rail, radio, or the Internet—plays an important role in economic growth, political and social development, and civic engagement. The importance of communications infrastructure especially is evident in the northern two-thirds of Canada, where radio, television, and the Internet have been instruments of democratic expression and civic participation. As pressures for resource extraction mount, northern communities must respond to economic, social, and political challenges from a position of geographical and, more significantly, “knowledge” isolation. Northern community residents need effective, community-led channels of communication. Addressing these needs will require both social and technological innovation—which can, fortunately, proceed from an existing base of experience and community expertise. In this article, we analyze two moments in northern public policy discourse in which new communications media played a pivotal role in advancing democratic dialogue in northern Canada: the 1975-7 Mackenzie Valley pipeline inquiry, and the 2012-3 hearings into the Mary River iron ore project in Nunavut. Our goal is to advance understanding of the purposeful use of communications infrastructure to support the development of local understanding, citizen engagement, and opportunities for effective community participation in development decisions. We find that technological capacity is foundational, but effective only under specific social and organizational conditions, which include the existence of appropriate institutions at the local level for citizen mobilization and response, dominance of Indigenous language use by northern citizens, appropriate levels of funding, and receptive public institutions to and through which northern citizens can speak.

Many of Canada's most cherished founding myths emphasize the role of the state in developing the infrastructure necessary to nation-building. Typically these myths ignore or underplay the question of the ownership of the land upon which the new country was being built. The Trans-Canada railroad system drew the colony of British Columbia into the federation while it enabled the appropriation of western Indigenous peoples' land and the destruction of their livelihoods. Later transportation projects, such as the St. Lawrence Seaway and the Mackenzie Valley pipeline, had or threatened similar impacts. On the other hand, if railways and pipeline corridors have advanced or threatened the separation of Indigenous peoples from their lands, other forms of infrastructure—particularly communications infrastructure—have on occasion had countervailing effects. Activists, reformers, and political leaders from diverse political persuasions have seen the expansion of communications infrastructure and funding of public broadcasting as integral to the development and maintenance of a healthy democracy. In particular, radio, television, and the Internet have been important instruments of democratic expression and civic engagement.

In a country as large as Canada, connectivity—whether by road, rail, radio, or the Internet—plays an important role in economic growth, political and social development, and civic engagement. The importance of communication and transportation facilities is especially evident in the northern two-thirds of Canada. The dispersion of northern communities, the high cost of travel, the relative weakness of communications infrastructure, and long distances between northern communities and traditional sites of scientific knowledge production (universities and governments), create multifaceted challenges for northern communities wanting to engage in informed public-policy decision making. As pressures for resource extraction mount, northern communities must respond to economic, social, and political challenges from a position of geographical and, more significantly, “knowledge” isolation. Northern community residents need to be able to share their knowledge with each other; they need access to high quality, pertinent information about the choices facing them; and they require adequate opportunities to discuss those choices among themselves and with interlocutors for the large public and private interests engaged in northern economic development. In short, they need effective, community-led channels of communication.

Addressing these needs will require both social and technological innovation—which can, fortunately, proceed from an existing base of experience and community expertise. In this article, we hope to contribute to the work of building effective means for northern public-policy decision

making by analyzing two moments in northern public policy discourse in which new communications media, appropriately organized, played a pivotal role in advancing democratic dialogue in northern Canada. Our cases are the 1975-7 Inquiry into the Construction of a Pipeline in the Mackenzie Valley (Berger Inquiry), and the 2012-3 Nunavut Impact Review Board hearings into the Mary River iron ore project. Separated by nearly forty years, these public processes bracket a period of rapid technological change, and equally rapid change in the legal and political circumstances of northern Indigenous people. As we shall show, each case has its origins in 1960s public investment in mineral exploration and the public promotion of private development “in the national interest” —unalloyed by any recognition of Indigenous land rights or northerners’ right to democratic participation in decision making.¹ After the 1970s, this approach to northern development ceased to be viable, as northern Indigenous people organized to represent their own interests and worked with their northern co-residents to begin to shape northern development decisions.

Among the important changes in the period between the 1970s and the present has been the advancement of northern communities’ technical capacities for communication with each other. The introduction of community radio, satellite communication, and, finally, the Internet have reduced the effects of distance on democratic communication about matters of public policy. Concurrently, norms of citizen engagement in regulatory processes, and legal requirements to consult and accommodate Indigenous peoples about development in their traditional territories, have become entrenched.² These complementary contextual changes have brought the North to the threshold of new opportunities for democratic development decision making—and they have created a need for technological and social innovation. New digital media enable and encourage oral Indigenous language communication, and, importantly, promise to make the contemporary legal requirement for effective consultation real.³

After providing a brief sketch of the history of northern telecommunications, we will describe and compare the two instances of their use in the service of enhanced democratic public deliberation about development in the North. In examining one aspect of the Berger Inquiry experience, and the more recent case of the Mary River development, our goal is to advance understanding of the purposeful use of communications infrastructure to support the development of local understanding, citizen engagement, and opportunities for effective community participation in development decisions. We find that technological capacity is foundational, but effective only under specific social and organizational conditions.

These include the existence of appropriate institutions at the local level for citizen mobilization and response, dominance of Indigenous language use by northern citizens, appropriate levels of funding, and receptive public institutions to and through which northern citizens can speak.

Extension of Northern Communications Technology and Pressures for Democracy

As is well known, the decades after the Second World War brought rapid and profound social change to the part of northern Canada that is now Nunavut and the Northwest Territories (NWT), including the centralization of the population in communities, the introduction of compulsory schooling, the extension of health care services, and the introduction of various new governing arrangements. At the same time, northern communications and transportation infrastructure was expanded.⁴ The Canadian Broadcasting Corporation (CBC) Northern [Radio] Service began broadcasting in the larger centres⁵ of northern Canada in the late 1950s, and by 1960 it carried limited northern Indigenous language programming. In 1973, the Canadian Radio-television and Telecommunications Commission (CRTC) mandated the creation of the Native Communications Program, which enabled communities to establish their own local radio stations, dividing airtime with the already established CBC. The program also began to fund regional native communications societies in all parts of Canada, including the Native Communications Society of the Northwest Territories.⁶

Broadcast radio arrived just as Indigenous people began to mobilize politically in the mid-1960s, with far-reaching impacts.⁷ Indigenous activists immediately recognized the value of radio for sharing knowledge and building community engagement. In his account of the land claims negotiation process, John Amagoalik writes that the “community radio was an important instrument to reach our people.”⁸ In 1971, the Indian Brotherhood of the Northwest Territories (IBNWT)—which saw “discussion and information as the first step for solving the social, economic, cultural and health problems [affecting] our people in the Territories”⁹—proposed to establish a communications unit that would: produce media “designed for native people by native people”; provide a platform for people to express their views on issues of importance to them to “help native persons know and understand their own problems”; and “improve the self image of native people and develop increased interest in their own history and culture.”¹⁰ The IBNWT also saw the proposed communications unit as a means to improving relations between “natives and non-natives,” and to improve the information exchange between government and the people.¹¹ The proposal

cites the need for democratic decision-making opportunities for Indigenous peoples in the NWT as the driving force behind developing Indigenous media.¹²

Television had arrived in the North in 1967 with the CBC *Frontier Package*, which provided taped programs previously broadcast in the south to communities in the Western Arctic. Just six years later, in 1973, the launch of the Anik satellite obviated the need for rebroadcast of taped programming. Anik took television coverage to a new level, enabling broadcasts to any community with a signal receiver through the CBC Northern Television Service. One by one, northern communities applied for and accepted television signal receivers.¹³

As television coverage was extended, Indigenous leaders and others began lobbying the federal government to extend greater programming capacity to the northern public. In response, in 1978 the federal Department of Communications offered Inuit Tapirisat of Canada (ITC) access to the Anik B satellite for Inuit programming. ITC used this opportunity immediately to improve inter-community communication. In 1980 the first television broadcast was aired from Frobisher Bay (present day Iqaluit) to five Inuit communities as part of the so-called Inukshuk Project. The satellite technology allowed people watching in the communities to send audio signals back to Frobisher Bay, which were then broadcast to other communities. The power of the new technology to convene a “pan-northern town hall”¹⁴ was immediately evident:

This interactive capacity led to some of the Inukshuk project’s most innovative and important programming. For example, interactive programs to discuss game management were held among HTA’s [Hunters and Trappers Associations] and officials of the GNWT [Government of the Northwest Territories] met with local education committees via the system. [It] was also used to link six Northwest Territories communities with four in Northern Quebec to discuss aboriginal rights during the process of reforming the Canadian constitution.¹⁵

While the Inukshuk Project lasted only eighteen months, it showed what was possible. Stability in programming was achieved by the establishment of the Inuit Broadcasting Corporation (IBC), which ITC saw as “a symbol of Inuit determination to take their own place as active participants in the Canadian nation.”¹⁶ IBC aired its first program in 1982 and became an important institution for cultural preservation and public affairs in the Eastern and Central Arctic.¹⁷ The same year in the west, the Native

Communications Society of the Northwest Territories (NCS-NWT) added Indigenous language radio programming to its print publications (the newspaper, *Native Press*), expanding later into television broadcasting.

During the first three decades after the Second World War, northern communications infrastructure had evolved rapidly (see table 1). Indigenous communities and their representative organizations saw that these developments in radio and television infrastructure represented both a threat to and opportunity for Indigenous language and culture. The link between radio and television, Indigenous self-determination, and participation in the democratic institutions of Canada was accepted by Indigenous communities and their leaders, as well as by the federal government. But just as these initiatives were up and running, the federal government began a series of funding cuts to northern and Aboriginal communications programs. The period between 1985 and 1993 saw three rounds of cuts to the NNBP, and the eventual dissolution of the Native Communications Program.

Table 1. Milestones in Northern Communications Infrastructure and Policy

| | |
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| 1960 | First Indigenous language broadcasting in the North |
| 1967 | Frontier Package brings taped television programming to some northern locations |
| 1973 | Federal Native Communications Program funded Anik Satellite launched |
| 1978 | Inukshuk Project experiments with televised and audio public dialogue |
| 1980 | Therrien Report established the first framework for northern communications policy, linking communications to the preservation of Indigenous language and culture |
| 1983 | Northern Native Broadcasting Access Program (NNBAP) began to fund regional communications societies to operate all across the Northwest Territories. |
| 1990 | Igloodik Isuma Productions Incorporated founded |
| 1998 | Internet connectivity comes to Northern Canada |
| 2005 | Household internet access expands across Nunavut and Northwest Territories |
| 2008 | IsumaTV launched |
| 2012 | Digital Indigenous Democracy launched |

As these changes were underway, a new communications technology was introduced—the Internet. By 1998, all the communities across the NWT were connected to the Internet; however, connections were limited primarily

to government offices. It was not until well into the 2000s that private households began to have regular access to the Internet in the smaller northern communities. Access in the Western Arctic (now NWT), spread faster than it did in the east (now Nunavut).¹⁸ In 2005, two commercially available services were launched and household Internet access increased. However, as Internet speeds have increased in the rest of Canada, reliable and affordable access to high-speed Internet has remained a challenge for northern and remote communities. By way of example, in 2012, nearly 80% of Canadians had access to bandwidth speeds up to 99.9 megabytes per second.¹⁹ In Nunavut, by contrast, bandwidth speeds were just 1.5–4.9 megabytes per second.²⁰ Not only are Internet speeds significantly slower in the North but the cost of bandwidth is much higher. For example, in southern Canada, households can purchase 80 gigabytes for around \$60/month, compared to Nunavut where just 10 gigabytes a month can cost \$80 or more.²¹ These limitations notwithstanding, northern Indigenous people (and other northerners) are making use of Internet technology. From online banking and retail sales (of carvings and sealskin clothing and accessories, for example), to Facebook, Twitter, and YouTube, the Internet has connected northern citizens and communities to one another and the world. Social media, in particular, have been taken up by northerners, not only for personal communications but also for storytelling, commerce, and civic engagement and action.²²

The Internet has also become an important vehicle for dissemination of documentary and feature film. Igloolik's Isuma Productions became Canada's first independent Inuit film production company in 1990, producing a series of award-winning films by Zacharias Kunuk and Norman Cohn.²³ Through the 1990s, Isuma Productions steadily increased its activities, moving beyond filmmaking to searching for innovative digital media solutions in Nunavut. In 2001, the Isuma team established Nunavut Independent Television to expand community access to Inuktitut-language programming and to work toward developing Internet TV to connect with other Inuit communities. By 2008, IsumaTV was launched. IsumaTV is a collaborative multimedia platform for Indigenous filmmakers and media organizations. IsumaTV has also created an independent multimedia network through the introduction of digital MediaPlayer, which makes it possible for people living in remote communities to create and share digital media at high speeds.²⁴

With these developments in mind, we turn now to consider the two cases, one situated in the early heyday of northern radio and television communication, and the other at the beginning of the northern digital age.

Geopolitical Context of the Mackenzie Valley Pipeline

The 1974–7 Berger Inquiry into the Construction of a Pipeline in the Mackenzie Valley is widely recognized as a turning point in Canadian northern public policy. This is in part a matter of the historical moment in which it appeared—a period of less than a decade in which both Canadian and global energy relations were turned upside down, and the fundamentals of natural resource-based economic development of the North were changed forever.²⁵

In January 1968, Humble Oil and Atlantic Richfield discovered a massive oilfield in Prudhoe Bay, Alaska. The Prudhoe Bay discovery fulfilled a long-standing expectation, based upon analyses of northern geology, that Arctic North America held commercially important petroleum energy reserves. While oil was already being produced at Norman Wells, about 500 km south of the Arctic coast on the Mackenzie River, the Prudhoe Bay discovery was of an entirely different scale. Many observers, including industry leaders and public officials in the United States and Canada, saw the Prudhoe Bay discovery as the harbinger of a new era in northern development, driven and financed by petroleum rents. American corporations immediately made plans to build a pipeline from Prudhoe Bay to Valdez, where oil would be loaded on tankers for shipment to a refinery in Washington State. Within a few years, this pipeline was built, after Alaskan Indigenous people negotiated a settlement of their land rights (in 1971)²⁶.

The Prudhoe Bay discovery had complex consequences in Canada. Initially, in 1968, Canadian officials saw the giant oil discovery in Alaska as a threat to the Canadian petroleum industry. Since the 1961 adoption of the National Oil Policy, western producing provinces depended on US markets, while Eastern Canada relied upon imported foreign oil. The large Alaskan find threatened to displace Alberta crude in the American market. Quickly, other concerns surfaced as different modes for transporting northern crude oil and natural gas were mooted. US companies supported by the United States government moved to test one possible mode of northern petroleum transportation by taking an ice-breaking supertanker, the *SS Manhattan*, through the Northwest Passage. Undertaken without permission of the Canadian government, the 1968 voyage of the *Manhattan* challenged Canadian sovereignty over the passage. This provoked consternation in federal policy circles and eventually a creative solution—the 1971 Arctic Waters Pollution Prevention Act.²⁷ The need to safeguard US markets for Alberta and Saskatchewan oil, the presence of massive northern energy reserves, and expectations of even greater discoveries in the Canadian Arctic, prompted federal officials to promote the construction of a pipeline in the

Mackenzie Valley—connecting Arctic offshore reserves with the northern Alberta end of the western Canadian pipeline network that was already oriented to US markets. Federal officials promoted first an oil, and then a natural gas, pipeline in the Mackenzie Valley. Construction of the pipeline, along with associated spur lines and production facilities, would have been the largest engineering project on the planet at that time.

When Dene, Métis, and Inuvialuit in the Northwest Territories learned of the plans for a pipeline, and effectively a transportation corridor in the Mackenzie Valley, they objected. The pipeline would span hundreds of miles of their traditional territories, opening them to a whole new scale of development. Dene Chiefs filed a caveat on development of their lands, which was successful at the territorial level, though ultimately denied in the Supreme Court of Canada.²⁸ This action followed closely a Supreme Court of Canada decision in a case brought by the Nisga'a in defence of their land rights. While the Nisga'a did not win the case at the Supreme Court, the judgment laid the basis for the comprehensive land claim negotiations—the modern treaties—premised on the reality of Indigenous interest in their lands.²⁹ These two important legal cases, and evident Dene resistance to the Mackenzie Valley pipeline, led the federal government to establish a public inquiry to consider the terms and conditions under which a pipeline could be built. Prime Minister Pierre Trudeau appointed Thomas Berger, the lawyer who had taken the Nisga'a case to the Supreme Court of Canada, to head the inquiry.

These events delayed commencement of northern pipeline construction in Canada for a decade. By the late 1970s, the American Trans-Alaskan Pipeline had been built, and international energy relations had been transformed. In 1973, the Organization of Petroleum Exporting Arab Countries (OPEAC) restricted supplies of oil, causing a quadrupling of oil prices in one year and raising deep fears in Canada (and other countries) about security of supply. Canadian energy policy eventually responded to this circumstance, and to a second “oil shock” following the Iranian revolution in 1979, with the 1980 National Energy Program (NEP). The NEP heavily subsidized northern oil and gas exploration on the grounds that Canada needed to know the extent of domestic reserves, and it established a Canadian equity presence in the industry through the Crown corporation, Petro-Canada. In the event, it would be many years before oil and gas discoveries in the offshore revived the idea of a major pipeline in the Mackenzie Valley.³⁰

The CBC Northern Service and the Berger Inquiry

The 1974–7 Inquiry into the Construction of a Pipeline in the Mackenzie Valley—widely known as the Berger Inquiry—was a response to Dene, Métis, and Inuvialuit insistence that major projects could not be launched on their lands without their consent. They made excellent use of the opportunity the Inquiry provided for drawing Canadian and international attention to their concerns, and for promoting northern public discussion of land rights and development. Also important was the innovative approach taken by Commissioner Thomas Berger and his small staff in separating community and technical hearings, providing simultaneous translation, and funding intervenors, to mention just a few groundbreaking measures.³¹ Of interest to us here, though, is the way in which northern communications media were engaged by the Inquiry while enabling discussion among northern community residents.

While the Berger Inquiry was in progress, national radio and television news stories about it were broadcast almost daily, while the *Globe and Mail* and other southern dailies dispatched reporters who travelled with and reported on the Inquiry. In addition to the daily broadcasts, CBC radio ran bi-weekly documentaries on the hearings on the national program, *Our Native Land*. Though the Inquiry had a relatively small permanent staff, one of these was a full-time information officer, Diana Crosby, who reached out repeatedly to news editors in all the major communications institutions to ensure that the Inquiry received informed and steady media coverage.³² In this she was aided by the dramatic interest of the story, in which members of northern Indigenous communities spoke to the country for the first time about their perceptions of, and hopes for, development in their lands.

While all of this attention was important to the Inquiry's impact in both northern and southern Canada, it was probably less important to northern public discourse than the work done by a corps of northern Indigenous language broadcasters, hired on the initiative of two dedicated and determined members of the CBC Northern Service. These reporters travelled with the Inquiry, filing daily reports in seven Indigenous languages. Whit Fraser, who was then the senior CBC reporter in a two-person Yellowknife office, describes the advent of this unprecedented level of and system for coverage of a public policy issue. Andrew Cowan, director of the CBC Northern Service, asked Fraser to prepare a suitable approach to covering the Berger Inquiry. Fraser explains that he responded saying:³³

Our coverage should match the magnitude of the undertaking and it must be done in the languages of the people who would be most impacted by the pipeline. Cowan agreed and he put his neck and reputation on the line to get the money needed to provide that coverage. Committing to cover the hearings every day in seven aboriginal languages: Chipewyan, Dogrib, North and South Slavey, Gwich'in, and both the western and eastern Inuktitut dialects plus English was one thing, finding the people to do it, and to get them ready in a few short weeks, was something else.

Occasionally a remote location works in your favour. We were able to fly under the radar of human resource managers and unions to recruit the people we needed. Essentially, five broadcasters committed to provide daily coverage in eight languages. It was only possible because Louie Blondin (north and south Slavey), Joe Tobie (Dogrib and Chipewyan), and Abe Okpik (eastern and western Inuktitut) would each cover two languages. Jim Sittichinli came to us as a retired Gwich'in Anglican Minister from Aklavik. In addition to producing and co-coordinating the daily broadcasts, I would provide the English coverage.

These broadcasts, which continued for the duration of the Berger Inquiry, ensured that individuals living in all regions of the North, and, particularly, in all communities that would be affected by the Mackenzie Valley Pipeline project, could hear daily reports from each community and technical hearing. By the time the Inquiry reached a community, residents would have had a visit from a team of Indian Brotherhood or Committee for Original Peoples Entitlement³⁴ fieldworkers who explained the project—and they would have been following the northern public discussion of the project through daily radio broadcasts, in their own language as well as in English. In addition to the radio broadcasts, the reporters also provided weekly five-minute television reports throughout the Inquiry. Since CBC Television North did not exist until after the Berger Inquiry, these television reports were shipped by air each day to CBC Vancouver, where they were edited and aired back to the North during the weather slot of the Vancouver evening news program.³⁵

Scholarship awaits an empirical study of the impact of these broadcasts on public opinion, and also on the deliberations of the Inquiry itself. Fraser offers the following illustration of the role played by the Indigenous language reporters in that regard:

The matter of burying a pipeline under Shallow Bay at the mouth of the Mackenzie River was a particularly touchy environmental issue. Nobody knew the possible adverse impacts on the Beluga that migrate to the area each summer to calve. Moreover, no one seemed to know when, or where, the calves were born. There were tense moments, and questions had been going back and forth for some time with the company, Canadian Arctic Gas, saying it spent several summers and a million dollars researching, and would continue to do so until it found the answers. Justice Berger called a break. Jim looked at me, smiled and said, "I know where and when the calves are born" and he motioned to the head of the research team. I can still see their heads together over the coffee cups and a map. Fifteen minutes later when the inquiry resumed, to his everlasting credit, Dr. Richard Webb said, "Mr. Commissioner, during the break Mr. Sittichinli of the CBC was good enough to share his knowledge on this, and tells me the calves are born in this particular bay, pointing to a map, and usually on the second of July." He went on to say the construction would be scheduled accordingly. That evidence went into the record and, to my recollection, was the only "scientific fact" that was not challenged by one or all of the other participants.

As a testament to the quality of the work of the northern broadcasters, Berger himself often said the success of his inquiry was in part because people in the northern communities, especially the Aboriginal population, understood the issues.³⁶

The impact of the CBC Indigenous language reporters in mobilizing informed public testimony is difficult to separate from the impact of other measures, such as the work of inquiry-funded fieldworkers who travelled to communities in advance of the commission to provide information about the pipeline project and to encourage participation, and the community-based research that was being conducted by research staff hired by the Indian Brotherhood of the Northwest Territories and the Committee for Original Peoples' Entitlement.³⁷ There is little doubt that together they had a major impact. The inquiry heard from nearly 1,000 northern individuals in thirty-five locations, along with 300 "expert" witnesses; the verbatim testimony is eloquent, analytical, and detailed.³⁸ As veteran journalist Paul Andrew explained the impact of Indigenous language broadcasting on community audiences:³⁹

[Listeners and viewers would observe] ‘Oh, the people in Aklavik are saying the same things [as us]. The people in Fort Simpson have the same concerns we have.’ This was Louis Blondin, our Louis Blondin. It was our James Sittichinli. These were people we knew, and they were speaking our language. So we started listening to that.

The case of the Berger Inquiry is interesting for a number of reasons. First, it demonstrates the importance of institutions adapted to the purpose of drawing out public discussion. Berger and his staff made the most of the democratic traditions available to those conducting public inquiries, especially in seeking practical ways to engage public testimony. Second, both the CBC Northern Service and the inquiry staff had sufficient funds to support community participation, and in particular to hire and transport a corps of reporters with the necessary linguistic competence. Third, public participation was enabled by arm’s-length public institutions, all provided with federal funding, whether they were the public broadcaster (CBC), the public inquiry, or the newly formed Aboriginal political organizations whose role was recognized as vital to the development of northern democracy. Fourth, in the framework provided by these public institutions and expenditures, grassroots participation was forthcoming to a level that sustained the process through to the end. Indeed, on the evidence of testimony before the inquiry, it is likely that concerns among the northern public about the pipeline project and what had gone before it stimulated the provision of funding to ensure that they had a voice.

Perhaps most important, though, is the fact that the CBC Northern Service covered the proceedings of the Berger Inquiry in Indigenous languages, and it did so using skilled reporters who were themselves well-grounded in their own cultures and adept at cross-cultural interpretation. Radio and television amplified the range of their reports and ensured that they reached the ears waiting to hear it. Thus, the Mackenzie Valley Pipeline project and all its dimensions were explained and discussed in the first languages of the people who would be most directly affected by the project. Doubtless this improved community residents’ understanding of the project and supported their consideration of the key issues. Further, as Fraser’s anecdote about calving grounds illustrates, the sustained presence of an expert corps of local language reporters improved the accuracy of information available to the commission itself.

Indigenous language broadcasts on CBC North (Radio and Television) have continued. For example, CBC Radio transmits approximately eleven

hours a day of local programming in Nunavut during an average work week, about 70% of which is Inuit language programming from Nunavut and Nunavik.⁴⁰

The Geopolitics of the Baffinland Mary River Project

The Baffinland Iron Mines Mary River iron ore development project is located on Inuit owned lands in the North Baffin region of Nunavut approximately 160 km southwest of Pond Inlet. The Mary River project is a multi-billion dollar open-pit high-grade iron ore mine with a life expectancy of twenty-one years (for Deposit No. 1), with opportunities for expansion to other deposits in the area. The present-day Mary River project has its roots in the early Cold War years when the Government of Canada was actively encouraging exploration and prospecting in northern Canada. In the mid 1950s, minerals had already been discovered on northern Baffin Island near Arctic Bay, which would later become the now-defunct Nanisivik Mine. In 1962, aerial mineral exploration by well-known Canadian prospector Murray Watts and his pilot Ron Sheardown revealed rich iron ore deposits in the region. That year, Watt's prospecting company, British Ungava Explorations, applied for permits in 400 square miles (644 km²) of Baffin Island.⁴¹

Over the next four years, more than \$2.5 million dollars was spent on preliminary mining activities, including the construction of a permanent camp, a 105 km tote road, and three airstrips near the main deposit, all of which remain intact today. Baffinland Iron Mines Corp. also identified town sites at Mary River and Milne Inlet with plans to build power stations, mine shops, a school and hospital, recreation facilities, as well as a harbour and loading facilities for materials and ore. Watts and his colleagues had the financial and technical support of three federal departments and agencies— Indian Affairs and Northern Development; Energy, Mines, and Resources; and the National Research Council—indicating that “Ottawa regard[ed] this Baffin bonanza as being very much in Canada’s national interest.”⁴²

The Baffin discovery held great promise not simply for investors, but it was considered to be the only viable economic option for the Inuit residents of the region, and the Department of Indian Affairs and Northern Development committed to training Inuit for employment at the mine.⁴³ Indeed, like the Prudhoe Bay discovery, stakeholders and observers saw that this development could set a precedent for Arctic mining for decades to come.⁴⁴ However, the Mary River iron ore development project faced real challenges stemming from its remote location and the Arctic climate, which required disproportionately high capital investments, a larger than normal workforce, and very particular knowledge and experience to be successful.

Ultimately, the original Mary River project was deemed unfeasible owing to high costs and the lack of an “economically sound shipping method.”⁴⁵ The temporary abandonment of the Baffinland mine coincided with the Indigenous rights movement, which evolved into calls by Inuit leaders for the settlement of a land claims agreement in the Eastern Arctic.

In 2004, after a long hiatus, mining activities resumed at Mary River, this time with Baffinland Iron Mines carrying out larger-scale exploration drilling. Two of the main drivers behind the mine’s resurgence included improvements in international commodities markets, and significant changes in the mining industry’s knowledge and experience in developing projects in remote locations under challenging environmental conditions.⁴⁶ Changes to the Arctic climate, making year-round shipping a possibility that did not exist in the 1960s, along with enhancements in Arctic building and construction, mean that a large-scale mine on northern Baffinland while still capital intensive, is more viable. Also, importantly, in 2009 the Stephen Harper led federal government released its Northern Strategy, citing non-renewable resource development as a key element of its vision for northern Canada.⁴⁷

In the years since Watts’ and Sheardown’s discovery, there have been many changes to the mining development process, not least of which was the settlement of the Nunavut Land Claims Agreement in 1993, which not only created the Nunavut Impact Review Board (NIRB) and a number of other licensing and permitting bodies, but also designated large parts of the Mary River area as Inuit owned lands. Beneficiary organizations designed by the Nunavut Land Claims Agreement (Nunavut Tunngavik Inc. and the Qikiqtani Inuit Association, for example) are entitled to issue permits and leases for activities on surface and subsurface lands. The Nunavut Impact Review Board is responsible for assessing the potential biophysical and socio-economic impacts of proposed development projects across the Nunavut Settlement Area, including projects proposed on Inuit owned lands.⁴⁸

After its rebirth in 2004, as part of the formal review process mandated by NIRB, Baffinland began to collect baseline data related to all aspects of the project, including scientific and traditional Inuit knowledge related to the physical environment and ecosystem, as well as the community and regional socio-economic conditions.⁴⁹ The company submitted a formal project proposal to NIRB in March 2008. It envisioned an open-pit iron ore mine on northern Baffin Island, a tote road between Milne Inlet and Mary River mine site, two ports (one at Milne Inlet and the other at Steensby Inlets), and 150 km of rail line to transport iron ore from the mine site to the all-season

deep-sea port at Steensby Inlet for year-round shipping through Canadian (and Inuit walrus hunting) waters to global markets via Europe.

As the environmental review process unfolded, the once promising increase in iron ore prices resulting from growing interest by Chinese steel makers and powerful historic European buyers dwindled as the global recession continued into the second decade of the twentieth century. Despite this, Baffinland continued to pursue its original proposal, meeting with communities and other stakeholders to discuss employment opportunities and impact monitoring and management. North Baffin residents understood the economic potential of the mine, but raised serious concerns about the impacts on the environment from the proposed year-round shipping route, and from the construction of a railway on permafrost. In February 2012, Baffinland submitted its ten-volume Final Environmental Impact Statement (FEIS) for review, with Final Hearings scheduled for July in Iqaluit, Igloolik, and Pond Inlet.

The July 2012 hearings involved several days of technical hearings, as well as “community roundtables,” in which community members were invited to speak about their concerns and ask questions. It is important to note that no intervenor funding was made available for the Baffinland hearings, and only one formal submission was made by an independent intervenor during the technical hearings. All other intervenors were federal and territorial government departments and agencies.⁵⁰ Zacharias Kunuk, accompanied by human rights lawyer Lloyd Lipsett, made the sole independent intervention, which we will discuss in detail below. In September 2012, NIRB published its Final Hearing Report, which recommended approval of the project with 184 conditions. The Minister of Aboriginal Affairs and Northern Development accepted this recommendation and all of the conditions. A project certificate was issued on December 28.

Just two weeks later on January 13, 2013, Baffinland submitted a request to amend the project certificate in order to make changes to specific activities as well as the project schedule citing “various business drivers” as the reason for the change. While the regulatory process was unfolding, the global price of iron ore had dropped and the company’s original plan was no longer deemed economically viable. Instead, Baffinland proposed to scale back the approved project and proceed with a multi-phase plan, beginning with an “Early Revenue Phase.” Under the revised plan, the railroad and port would be deferred for several years, and the production of iron would be significantly reduced from 18 to 3.5 million tonnes a year. Iron ore would be transported by truck to cargo ships until the railway could be built. Baffinland’s request to make these changes to the project stimulated a new

round of technical hearings and public consultations. Baffinland submitted a formal addendum to the FEIS, outlining the Early Revenue Phase plan in June 2013, and the hearings and consultations were held later that fall in Pond Inlet.

The Mary River project is still one of the largest mining projects in the world and while it has the potential to bring considerable economic gains to Nunavut and to its investors, it is still subject to the unique challenges that Arctic mining development faces, and it continues to be vulnerable to global commodity prices. For residents of Nunavut, the project offers a limited number of full-time jobs,⁵¹ resource revenues, and an opportunity to build a regional economic development strategy that incorporates mining as one aspect.

Digital Indigenous Democracy and the Baffinland Mary River Project

More than thirty years after the Berger Inquiry reported on matters of resource development in Dene, Métis, and Inuvialuit lands, Inuit communities of the northern Qikiqtani region of Nunavut faced similar decisions about major resource development in their lands. In the years between the Berger Inquiry and the environmental review for the Baffinland Mary River iron ore project, the political and economic landscape has changed significantly—as has communications technology. Nevertheless, the communications challenges experienced by communities and the need for opportunities for citizen participation and democratic expression persist, as does the importance of Indigenous language broadcasting.

In the years leading up to the Mary River regulatory review, the Hamlet of Igloodik, in collaboration with researchers from Carleton University,⁵² designed a socio-economic baseline study with the purpose of preparing to measure social changes brought about by the mine and help plan for the future. Through this collaboration grew the idea for an alliance of North Baffin communities and university-based researchers, the purpose of which was to meet the urgent need in the communities for readily accessible, research-based information about their own circumstances in light of emerging resource development opportunities. This idea in turn was folded into the Digital Indigenous Democracy (DID), created by renowned filmmaker and community activist Zacharias Kunuk and his long-time creative partner Norman Cohn. DID responded to concerns that the environmental review of the \$6 billion Baffinland iron mine did not incorporate sufficient and effective means for Inuit participation in decision making, given the mine's potential for profound environmental, social, and economic impacts on the predominantly Inuit communities of the North Baffin. DID is a project

of IsumaTV, also the brainchild of Kunuk and Cohn, and the world's first northern Internet distributor for Inuit and Aboriginal films, TV, and new media. IsumaTV, which currently streams more than 5,000 films in fifty languages, is "an independent online interactive network of Inuit and Indigenous multimedia, using the power and immediacy of the Web to bring people together to tell stories and support change."⁵³

DID is a multifaceted and multi-layered initiative that used Internet, community radio, local TV, and social media to amplify Inuit traditional decision-making skills at a moment of crisis and opportunity. DID was premised on centuries of experience through which Inuit learned that deciding together, called *angjqtigiingniq*⁵⁴ in Inuktitut—a complex set of diplomatic skills for respectful listening to differing opinions until arriving at one unified decision everyone can support—was the smartest, safest way to go forward in a dangerous environment.⁵⁵ Through DID, Inuit adapted traditional practices of "deciding together" to modern transnational development in order to obtain the information they needed in their own language, to talk about their concerns publicly, and to reach collective decisions with the power of consensus. This consensus was then presented in a multimedia Human Rights Impact Assessment (HRIA),⁵⁶ looking at the positive and negative impacts of the proposed mine in terms of international human rights standards and best practices.. The HRIA was made available online through IsumaTV, and through local radio and TV channels in all Nunavut communities.

The architects of DID saw the project as a multimedia experiment with precedent-setting potential for the environmental review process in Nunavut and beyond. In linking together Inuktitut language media activities and human rights impact assessment, DID set out to make it possible for "Inuit to participate meaningfully in public hearings and decision-making ... bringing what appear to be "nostalgic" Inuit values onto the main stage of twenty-first century current events, affecting not only Inuit but the interconnected planet we all occupy."⁵⁷

The project started with a series of radio call-in shows in spring and summer 2012, called *Nipiout Nunatinnii* (Our Voice at Home).⁵⁸ Operating out of Igloolik in Inuktitut and English for several weeks, *Nipiout Nunatinnii* featured guests who could provide information about the Baffinland mining project from a variety of perspectives. These included representatives from NIRB, the Government of Nunavut, and the Qikiqtani Inuit Association, as well as university researchers, Elders, and local leaders. Respected members of the community with knowledge of the development decision-making process hosted the programs. Often the call-in shows would run for several

hours, stimulating dynamic discussions and debates in Inuktitut, with translation into English, when required. Although the programs were aired on local radio in Igloolik, they were also live-streamed through IsumaTV's website making it possible for listeners from across Nunavut, Canada, Alaska, and Greenland to participate in these programs. In Fall 2012, NIRB "broke new ground for regulators in Canada"⁵⁹ by recommending in its final report that the proponents (Baffinland Iron Mines) and government "use new media technology to inform, consult and connect Inuit communities."⁶⁰

The success of *Nipivut Nunatinnii* in engaging citizens and stimulating informed discussion demonstrates the vitality of locally generated, Aboriginal language programming, and the appetite among citizens for opportunities to learn and ask questions about development decisions. Kunuk has described DID's radio call-in shows as "combining the interactive engagement of community radio with the focused discussion format of CBC radio's Cross Country Checkup or the US National Public Radio's (NPR) On Point."⁶¹ *Nipivut Nunatinnii* both supplemented and amplified the environmental review process for the Mary River project by demonstrating that citizens and communities can and will engage with institutions like NIRB under the right conditions. One of the primary conditions in this case was that they were able to participate in their own language, using a familiar medium hosted by trusted and well-respected facilitators. In 2013, a second phone-in program, this time digitally televised through IsumaTV and based in Pond Inlet provided a similar opportunity for information dissemination and discussion of the revised Baffinland project submission to the Nunavut Impact Review Board.

There was an important technical element to DID as well, the purpose of which was to address the so-called "digital divide" experienced by most northern communities in Canada. *Inuktiturmiut* (Our Own Language) installs Internet-connected local community TV channels in low-speed, low-bandwidth communities like the ones in the North Baffin. Through the use of an IsumaTV MediaPlayer as a local Internet server, audio and visual files, such as Indigenous language content or regulatory hearings for example, can be accessed at high speed. These MediaPlayers make it possible for people living in northern communities to have continued access to the archive of DID-created materials related to the Mary River project regulatory review. For example, the DID team recorded the technical and community roundtable hearings in Igloolik in July 2012, as well as the hearings that took place in 2013 in Pond Inlet concerning the "Early Revenue Phase" amendment to the project certificate.

In July 2012, Zacharias Kunuk and human rights lawyer Lloyd Lipsett made a formal submission to NIRB. Kunuk's submission, called *Ataatama Nunanga, My Father's Land*, which used digital media to communicate a comprehensive and coherent message about the potential impacts of the Baffinland mining project, was not a conventional intervention by NIRB standards. Kunuk's submission builds on his own experiences as a filmmaker and hunter, on the knowledge of his ancestors, and on the knowledge and points of view drawn from the community radio call-in shows.⁶²

The submission had two main parts: a written version of Kunuk's statement in English with executive summaries in Inuktitut and French, coupled with other written documents including the technical analyses of two academic partners on matters relating to the potential socio-economic and environmental impacts of the project. It also included a video of Kunuk giving his statement in Inuktitut, coupled with hours of previously recorded interviews with Inuit Elders and community members, recordings of the radio call-in shows, and other information that provided context for Kunuk's personal statement.⁶³ In *My Father's Land*, Kunuk presents an analysis of the regulatory process itself, tying it to human rights discourse and the potential impacts of the Mary River project. In particular, he articulates a vision for how mining companies and regulatory agencies can meaningfully consult with Inuit, and how Inuit can be more actively involved in decision making about resource development in the future:

This NIRB Public Hearing isn't the only one. Many other mines are proposed. My Intervention recommends that NIRB, Baffinland and decision-making Ministers of Canada bring this Environmental Review up to date in the professional field I know best: information. Since 1987 our films speak Inuktitut to Inuit and the outside world, to put our Inuit history and Point of View into the 'Public Hearing' of our fast-changing 21st century ... Without using media today to inform and consult Inuit better than before, Canada, Nunavut and Baffinland risk falling behind our time, stuck back in the 20th century.

Canada is a world leader. We promote fairness and social justice; we respect constitutional rights and international law. Our Nunavut Land Claims Agreement is one of the best treaties ever signed to protect indigenous people anywhere. Baffinland's Mary River Project is one of the biggest, richest mining developments in the world. With a development this size, with impacts this large, we have the opportunity and responsibility to create a new model for our information century. This Baffinland Model could

demonstrate to other mining companies coming along soon, and to other countries in the same situation with the same problems, how Inuit and Baffinland use state-of-the-art media tools to meet 21st century standards of knowledgeable democratic participation by Inuit in our own spoken language. This information model could prove how resource development can be honorable and just; how it can be proposed, reviewed, approved, monitored and enforced using today's top information technology.⁶⁴

Despite the political and constitutional achievements of the last forty years, broader neo-liberal trends in political and economic development have resulted in a marked decrease in funding for the para-state institutions of the 1960s and 1970s, which made it possible for the CBC Northern Service and its Indigenous language reporters to carry out their activities during the Berger Inquiry. The Digital Indigenous Democracy project, while supported by public funds,⁶⁵ lives from grant to grant; however, DID's relative independence from the state and its community roots put it in a unique position in the twenty-first century environmental review process in Nunavut.

The different components of DID represent an innovative, community-driven use of communications media for the joint purposes of informing and engaging citizens, and facilitating democratic dialogue about potential development in their region. Like the Indigenous reporters of the 1970s, DID documented the NIRB process for the Mary River project, making hearings accessible to interested people all over the world. However, DID also facilitated a parallel review process through the *Nipivut Nunatinnii* (Our Voice at Home) radio series, and generated the resources needed to support a high-impact intervention in the formal NIRB process by Zacharias Kunuk. In this way, DID made it possible for the citizens of North Baffin and their allies to become creators of knowledge and analysis about development, rather than simply consumers of information generated by the formal processes mandated under the existing institutional framework. The potential democratic effects of this engagement and participation will endure long after the mines close.

The Cases Compared: Some Tentative Conclusions

In the nearly forty years that separate the Berger Inquiry and the Nunavut Impact Review Board hearings into the Mary River project, a great deal has changed. The changes in political, legal, and institutional context are striking. Public participation concerning the Mary River project involved

not a one-off, limited-term public inquiry appointed at the discretion of the federal cabinet, but rather a permanent regulatory body (admittedly an advisory one) operating under a constitutionally protected modern treaty. The same constitution entrenches Aboriginal and treaty rights, prompting a succession of Supreme Court of Canada decisions that have specified concrete consequences of entrenchment.

In contrast to the period of nascent institutional development and high mobilization in the 1970s, the northern institutional landscape of the twenty-first century includes strong Indigenous organizations, a constitutionally protected regulatory system, and public governments with much more political legitimacy and reach than was the case in the 1970s. It also features an arguably more integrated and more resigned northern Indigenous population. There is much political water under the bridge, and many questions of land use and ownership have been resolved.

In subtle and not-so-subtle ways, the balance of state and citizens' public responsibility and initiative has altered. In the Mary River case, a non-governmental, and also non-political, organization took the initiative to mobilize public discussion, complementing the work of regional Inuit organizations and the Nunavut Impact Review Board. IsumaTV's multimedia communications—radio, Internet, television, film—concerning the Baffinland development are without precedent. The local broadcasting infrastructure and the broadcasts themselves that enabled citizen education and discussion about the resource development project were owned and maintained by IsumaTV, a non-governmental body relying on publicly provided satellite communication. Regional Inuit organizations reached out to the communities they represent, not with a corps of fieldworkers drawn from those same communities, but with a travelling staff that did its best to disseminate and collect knowledge about the project. Strikingly, the CBC provided little sustained coverage of community hearings on the Mary River project.

In the Mackenzie Valley pipeline case, the CBC, a federal Crown corporation, owned the means of communication and dispatched the multi-lingual corps of reporters. Coverage was frequent and sustained. Public funding made it possible for the Indian Brotherhood, the Métis Association, and the Committee for Original People's Entitlement to send fieldworkers into all of the affected communities, ensuring that knowledge about the development proposal was well distributed. A commission of inquiry hired the corps of Indigenous language broadcasters who played such an important role in advancing the public discussion. In forty years, the role of the federal order of government and all federal institutions in facilitating the

northern policy discussion has diminished substantially, while northern non-governmental organizations—though less so the political organizations—have developed significant capacity.

Yet so much remains the same. Each case engaged northern Indigenous people living in dispersed communities on their traditional territories in the consideration of a massive natural resource development project that had the potential to bring social, cultural, and environmental damage as well as social and economic opportunity. Each involved a sequence of public hearings in which citizens and their representative organizations played a prominent role. And in each, broadcast media were important in the mobilization of public discourse, with the potential to support democratic dialogue among citizens speaking with each other in their own languages.

Each case is a powerful demonstration of the importance of effective communication among the people who will be affected by a project for democratic decision making, and an illustration in particular of the importance of Indigenous language discussions. These are important not only because they ensure that the discussion will be more inclusive, or fair to all, but also because the use of an Indigenous language to explain and discuss a development question *builds into the conversation the perspectives, the heritage in terms of values and insight, of the people who will be most affected*. This is likely to be even more the case when those to whom the comments are addressed speak the same language, as did most of the NIRB members, in contrast to what was the case for Justice Berger and the inquiry staff.

As Kunuk argued in *My Father's Land*, the decision-making processes for and the outcomes of resource development in the North would be greatly enhanced by the incorporation of Indigenous knowledge and perspectives. In order to facilitate this in a meaningful and democratic way, Indigenous language use must be supported. The architects of DID saw the critical importance of giving citizens a chance to have well-informed discussions, in their own languages, about pressing development matters well in advance of the formal review hearings.

Democratic decision making about resource development requires more than just providing communities with the opportunity to speak at local hearings. Multilingual public hearings are important avenues for expression but they are insufficient. Our cases show that the communication of ideas and knowledge that takes place before and alongside the formal review process is equally important; it is in these spaces that valuable conceptual and analytical work is done by citizens. For this to occur, there must be representative organizations that have a mandate and the resources to commission research and convene discussions among the people they

represent in order to analyze and interpret. Testimony by individuals leaves much of the interpretive work to review board members, which places both a huge burden and a huge amount of power in their hands. Even if the board members are objective and honourable, they will still interpret information through their own lenses and may miss what the individuals are trying to tell them.

Improvements in technology have made it easier for citizens to communicate with one another, and for large quantities of information to be shared. The Digital Indigenous Democracy project demonstrates the powerful potential of coupling twenty-first century digital media technology with traditional Inuit decision-making practices. However, the technology is only a tool. Local institutions and leadership, appropriate and sustained sources of funding and support, and receptive public institutions are also needed.

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Notes

1. See E. J. Dosman, *The National Interest: The Politics of Northern Development*, 1968–75 (Toronto: McClelland and Stewart, 1975).
2. As we shall argue below, the Berger Inquiry set the precedent for many specific practices of citizen engagement in development decision making. In recent years a series of important legal decisions has reinforced the importance of effective engagement practices: *Haida Nation v. British Columbia (Minister of Forests)*, 2005 SCC 73, [2004] 3 SCR 511; *Taku River Tlingit First Nation v. British*

Columbia (Project Assessment Director), 2004 SCC 74 [2004], 3 SCR 550; *Beckman v. Little Salmon/Carmacks First Nation*, 2010 SCC 53, [2010] 3 SCR 103; *Rio Tinto Alcan Inc. v. Carrier Sekani Tribal Council*, 2010 SCC 53, [2010] 3 SCR 103; *Mikisew Cree First Nation v. Canada (Minister of Canadian Heritage)*, 2005 SCC 69, 3 SCR 388.

The specific measures mandated by these decisions are not entirely resolved, but there is no debate about the principle. See Aboriginal Affairs and Northern Development Canada, *Aboriginal Consultation and Accommodation Updated Guidelines for Federal Officials to Fulfill the Duty to Consult* (March 2011); Lori Sterling and Peter Landmann, "The Duty to Consult Aboriginal Peoples in Government Approaches to Unresolved Issues" (Canadian Bar Association, n.d.), accessed http://www.cba.org/cba/cle/PDF/Constit09_Sterling_paper.pdf; Rachel Ariss and John Cutfeet, "Kitchenuhmaykoosib Inninuwug First Nation: Mining, Consultation, Reconciliation, and the Law," *Aboriginal Law Journal* 10, no. 1 (2012): 2–10.

3. Valerie Alia, *Un/covering the North: News, Media and Aboriginal People* (Vancouver: UBC Press, 1999).
4. K. J. Rea, *The Political Economy of the Canadian North: An Interpretation of the Course of Development in the Northern Territories of Canada to the Early 1960s* (Toronto: University of Toronto Press, 1968); Frances Abele, "Northern Development: Past, Present and Future," in *Northern Exposure: Peoples, Powers and Prospects in Canada's North*, ed. Frances Abele et al. (Montreal: Institute for Research in Public Policy, 2009); Wilf Bean, "Colonialism in the Communities," in *Dene Nation: the Colony Within*, ed. Mel Watkins (Toronto: University of Toronto Press, 1977), 130–141.
5. Whitehorse, Yellowknife, Inuvik, Churchill, Frobisher Bay, and Goose Bay. See Heather E. Hudson, "The Role of Radio in the Canadian North," *Journal of Communications* 27, no. 4 (1977).
6. Hudson, "The Role of Radio," 133. See also Marian Bredin, "Aboriginal Media in Canada: Cultural Politics and Communications Practices," Doctoral dissertation, McGill University, 1995.
7. Shortwave radios began to be used much earlier, primarily for person-to-person (-to person) communication. Many future leaders found early employment working for the Canadian Broadcasting Corporation Northern radio service: Nellie Cournoyea, Rosemarie Kuptana, Mary Simon, Eric Tagoona, Jose Kusugak, Simon Awa, Paul Quassa, Abe Okpik, Peter Ittinuar, Paul Andrew.
8. John Amagoalik, *Changing the Face of Canada*, ed. Louis McComber (Iqaluit: Nunavut Arctic College, 2007), 80.
9. G.I. Kenney, "People Communications in Canada's North Part II: The Solution," *Man in the North Technical Paper Communications Study Part II* (Montreal: Arctic Institute of North America, 1971), 45.
10. *Ibid.*
11. *Ibid.*

12. Ibid., 47.
13. It is interesting to note that the community of Igloolik—home of Zacharias Kunuk, IsumaTV, and Digital Indigenous Democracy—was among the last to accept television receivers. In fact, the community voted against them twice—first in 1977 and then again in 1980, over concerns about Inuktitut language programming. It was not until 1982 when IBC was launched that Igloolik welcomed television into the community.
14. Marybelle Mitchell, *From Talking Chiefs to a Native Corporate Elite: The Birth of Class and Nationalism Among Canadian Inuit* (Montreal: McGill University Press, 1996), 416.
15. Debbie Brisbois, “The Inuit Broadcasting Corporation,” *Anthropologica* 25, no. 1 (1983): 109.
16. Inuit Broadcasting Corporation quoted in Mitchell, *From Talking Chiefs to a Native Corporate Elite*, 416.
17. Amagoalik, *Changing the Face of Canada*, 112.
18. Recent reports show that 70% of NWT households have access to the Internet, compared with just 60% of Nunavut households. However, in both territories household Internet access in the smaller communities is significantly less. For example, in 2009 just 45% of households in Fort Providence, NWT and 36% of those in Sanikiluaq, NU had access to the Internet. NWT Bureau of Statistics, “Home Internet Access, by Community,” 2009 Community Survey (2010); Nunavut Bureau of Statistics and Statistics Canada, “Table 18. Number and percentage of households with Internet access from within the dwelling,” 2009/2010 Nunavut Housing Needs Survey (2011).
19. Canadian Radio-television and Telecommunications Commission, *Communications Monitoring Report September 2013* (Ottawa: Government of Canada, 2013), 179, accessed from <http://www.crtc.gc.ca/eng/publications/reports/policymonitoring/2013/cmr2013.pdf>.
20. Ibid.
21. Northern Connections: Broadband and Canada’s Digital Divide, 19–20. For more information on telecommunications infrastructure in the territorial North, see: Frances Abele, Sheena Kennedy Dalseg, and Joshua Gladstone, “Promises to Keep: Federal Spending on Communications and Transportation Infrastructure in the Territorial North,” in *How Ottawa Spends 2013-2014*, ed. Bruce Doern and Christopher Stoney (Montreal & Kingston: McGill-Queen’s University Press), 159–171.
22. See for example: Nancy Wachowich and Willow Scobie, “Uploading Selves: Inuit Digital Storytelling on YouTube,” *Etudes/Inuit Studies* 34.2 (2010): 81–105. Two well-known examples of northerners using Facebook for civic action are: “Feeding My Family” founded by Leese Papatsie, and “Housing Issues in the Northwest Territories & Nunavut” founded by Frances Wolki. For more information about these initiatives see: “Healthy Homes: Arlene Hache

- and Frances Wolki” and “Feeding My Family: An Interview with Leese Papatsie” in *Northern Public Affairs* 1.2 (Fall 2012). Both available at: www.northernpublicaffairs.ca/index/portfolio/volume-1-issue-2/
23. For example, the feature film *Atanarjuat – The Fast Runner*, directed by Kunuk and produced by Cohn, has won multiple awards, including the Camera d’or at the Cannes film festival in 2001. For an extended discussion of Isuma, see Evans c. 2008.
 24. For more information visit: www.Isuma.tv
 25. Unless otherwise noted, the details in the next three paragraphs are drawn from Dosman, *The National Interest*, 1975; for details of Canadian energy policy in the period, see Doern, G. Bruce and Glen Toner, *The Politics of Energy: The Development and Implementation of the NEP* (Toronto: Methuen, 1985).
 26. Alaska Native Claims Settlement Act, 1971; see Thomas R. Berger, *Village Journey: The Report of the Alaska Native Review Commission* (Inuit Circumpolar Conference, 1985).
 27. Without provoking US opposition to any extension of the limits of Canadian territorial jurisdiction in coastal waters, the *Arctic Waters Pollution Prevention Act* declared Canada’s intention to safeguard northern waters from pollution to a limit of 200 miles offshore.
 28. *Paulette et al. v. Registrar of Land Titles* (1973) 39 DLR (3d) 45.
 29. See Michael Asch, “From Calder to Van der Peet: Aboriginal Rights and Canadian Law, 1973–96,” in *Indigenous Peoples’ Rights in Australia, Canada, & New Zealand*, ed. Paul Havemann (Oxford: Oxford University Press, 1999), 428–445.
 30. For a thorough discussion of these events, see G. Bruce Doern and Glen Toner, *The Politics of Energy: The Development and Implementation of the NEP* (Toronto: Methuen, 1985). In 1983, the federal government permitted construction to begin on a shorter, smaller oil pipeline from Norman Wells (about 500 km south of the Arctic coast) to Zama in northern Alberta. A consortium of companies revived the idea of a large diameter natural gas pipeline and gas production system in the Mackenzie Valley in 2001. The Joint Review Panel struck to consider this new project reported in 2009, conditionally recommending that the project proceed. Subsequently, the National Energy Board approved the project, but it has not commenced.
 31. For more details, see Kim Stanton, “Truth Commissions and Public Inquiries: Addressing Historical Injustices in Established Democracies” (PhD diss., University of Toronto, 2010); Frances Abele “The Immediate and Lasting Impact of the Inquiry into the Construction of a Mackenzie Valley Pipeline,” in *Commissions of Inquiry and Policy Change: A Comparative Analysis*, eds. Greg Inwood and Carolyn Johns (Toronto: University of Toronto Press, 2014); Martin O’Malley, *The Past and Future Land: An Account of the Mackenzie Valley Pipeline Inquiry* (Toronto: Peter Martin Associates, 1976); and Drew Ann Wake,

Thunder in Our Voices, Travelling exhibition and website. Available at: <http://www.livewwwires.com/ubc>. Wake's travelling exhibition and web resource are a rich source of recorded interviews with many inquiry participants and observers, as well as information about the inquiry itself. Wake was the author of the bi-weekly Our Native Land reports on the hearings.

32. The core full-time staff barely reached the low double digits. See Berger 1977 Volume 1 p. 213. For an account of how the media coverage was arranged, <http://www.cbc.ca/thetrailbreaker/episodes/2012/05/08/telling-the-story-of-the-berger-inquiry/>.
33. Whit Fraser, "Then There Were Four: Pioneers in Northern Broadcasting," *Above and Beyond* (March/April 2011); Andrew Cowan, "Pipeline Probe," Letter to the Editor, *Globe and Mail* (March 3, 1975): 6.
34. The Indian Brotherhood of the Northwest Territories (later the Dene Nation) had been formed in 1968 to represent Dene; the Committee for Original Peoples Entitlement (later the Inuvialuit Regional Corporation) was formed in 1970, and by the mid-1970s, was representing Inuvialuit, whose territory was the Beaufort Sea area.
35. Whit Fraser, Personal Communication, August 11, 2015.
36. Fraser, "Then There Were Four," 2011.
37. We have found few accounts of the community organizing and development work undertaken by the Indigenous organizations' research staff and fieldworkers. One very valuable collection holds the words of Nellie Cornoyea, Paul Andrew, Steve Iveson, Fibbie Tattie and Nick Sibbeston at <http://www.braincells.net/ubc-inquiry/fieldworkers-home.html>.
38. See Edward Jackson, "Resisting Pipeline Imperialism The Struggle for Self-Determination in the Canadian North," *Alternatives* 7, no. 4 (1978): 40–51.
39. Alison Devereux, "The Anchorman," *Up Here* (June 2013). Available at: <http://archive.uphere.ca/node/944>.
40. Nunavut Tunngavik Incorporated, State of Culture and Language Report 2009-10 (Iqaluit: NTI, 2010), 43.
41. Lawrence F. Jones and George Lonn, eds., "Baffin Bonanza," *Pathfinders of the North* (Toronto: Pitt Publishing Company Limited, 1970), 132.
42. *Ibid.*, 135. For more information about the government's interest in the Baffinland mine, see also, Dubé, Galibois and Associates, *Baffinland Iron Mine Project: A Study of Possible Modes of Government Participation* (1970).
43. Murray Watts, "The Inuit," in Lawrence F. Jones and George Lonn, eds., *Pathfinders of the North*, 163; Jones and Lonn, "Baffin Bonanza," 135.
44. *Ibid.*
45. *Ibid.*, 137.
46. Russell Noble, "Hot Prospects in a Cold Climate," *Canadian Mining Journal* (January 2014).

47. Government of Canada, *Canada's Northern Strategy: Our North, Our Heritage, Our Future* (Ottawa: Government of Canada, 2009). Available at: <http://www.northernstrategy.gc.ca/cns/cns-eng.asp>.
48. More information about the Nunavut Impact Review Board, and the Nunavut regulatory system in general, can be found online: <http://www.nirb.ca>. Thank you to Joshua Gladstone for his assistance on this section of the paper.
49. As part of the formal Environmental Impact Statement, Baffinland carried out Inuit knowledge studies in collaboration with community liaisons in Pond Inlet, Igloolik, Arctic Bay, Hall Beach, and Clyde River. The purpose of these was to obtain local knowledge regarding wildlife, land use, and areas of cultural value. According to Final Environmental Impact Statement for the Mary River Project, Inuit knowledge working groups were created to facilitate the sharing of Inuit knowledge between knowledge holders and the Proponent. Information was collected from existing sources, such as the Igloolik Oral History Project, and Elder and hunter interviews were carried out by community residents trained by anthropologists, where required. Focus groups were also held with a range of community members. Nunavut Impact Review Board, *Mary River Project Final Environmental Impact Statement*, Volume 1, Part 7. NIRB File No.120213-08MN053 (Cambridge Bay: NIRB, December 2010), 34-36.
50. Nunavut Impact Review Board, *List of Final Hearing Exhibits*, NIRB FILE No.: 08MN053 (Cambridge Bay: NIRB, 2012).
51. A recent Labour Market Report (December 2014) estimates that approximately 400 jobs will be available at the mine during the Early Revenue Phase. Nunavut Impact Review Board, Baffinland Response to QIA Comments, Labour Market Report December 2014 NIRB File No. 150331-08MN053 (Cambridge Bay: NIRB, 2014).
52. The authors of this paper are the researchers who collaborated on the socio-economic baseline study, and they along with others from Carleton University (Joshua Gladstone and Teevi McKay) played a small supporting role in the 2012 Digital Indigenous Democracy project. Sheena Kennedy and Frances Abele, 2009-2010 Igloolik Socio-Economic Baseline Study Report Prepared for the Hamlet of Igloolik (Ottawa and Igloolik: Carleton Centre for Community Innovation, 2011).
53. IsumaTV, About Us. Available at: <http://www.isuma.tv/about-us>.
54. [ahng-ee-kha-te-GING-nik]
55. Norman Cohn and Zacharias Kunuk, "Our Baffinland: Digital Indigenous Democracy," *Northern Public Affairs* 1, no.1 (June 2012): 50-52.
56. The Human Rights Impact Assessment is an important aspect of the story that we do not have the space to discuss here. For more information about Lloyd Lipsett's work and the Human Rights Impact Assessment conducted for the Baffinland project please see: <http://www.isuma.tv/lloyd-lipsett>.

57. Zacharias Kunuk, "My Father's Land: Attatama Nunanga," submission to the Nunavut Impact Review Board Mary River hearings, June 8, 2012.
58. More information about Nipivut Nunatinnii can be found at: <http://www.isuma.tv/DID/radio/igloolik>.
59. Digital Indigenous Democracy, "NIRB Baffinland Decision Recommends Digital Indigenous Democracy," Press Release (September 25, 2012). Available at: <http://www.isuma.tv/en/DID/nirb-baffinland-decision-recommends-digital-indigenous-democracy-press-release>.
60. Nunavut Impact Review Board, *Final Hearing Report Mary River Project Baffinland Iron Mines Corporation* NIRB File No. 08MN053 (Cambridge Bay: NIRB, 2012).
61. Kunuk, "My Father's Land," 2012.
62. My Father's Land is also the name of a feature-length documentary film by Kunuk and Cohn that brings together "elders, hunters, families, and youth to record Inuit knowledge and points of view on Foxe Basin and Steensby Inlet."
63. Videos and audio from the Digital Indigenous Democracy project available at: <http://www.isuma.tv/en/DID/MyFathersLand?page=6>.
64. Kunuk, "My Father's Land," 2012.
65. DID was originally financed by a \$1 million dollar investment from the Canada Media Fund.

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