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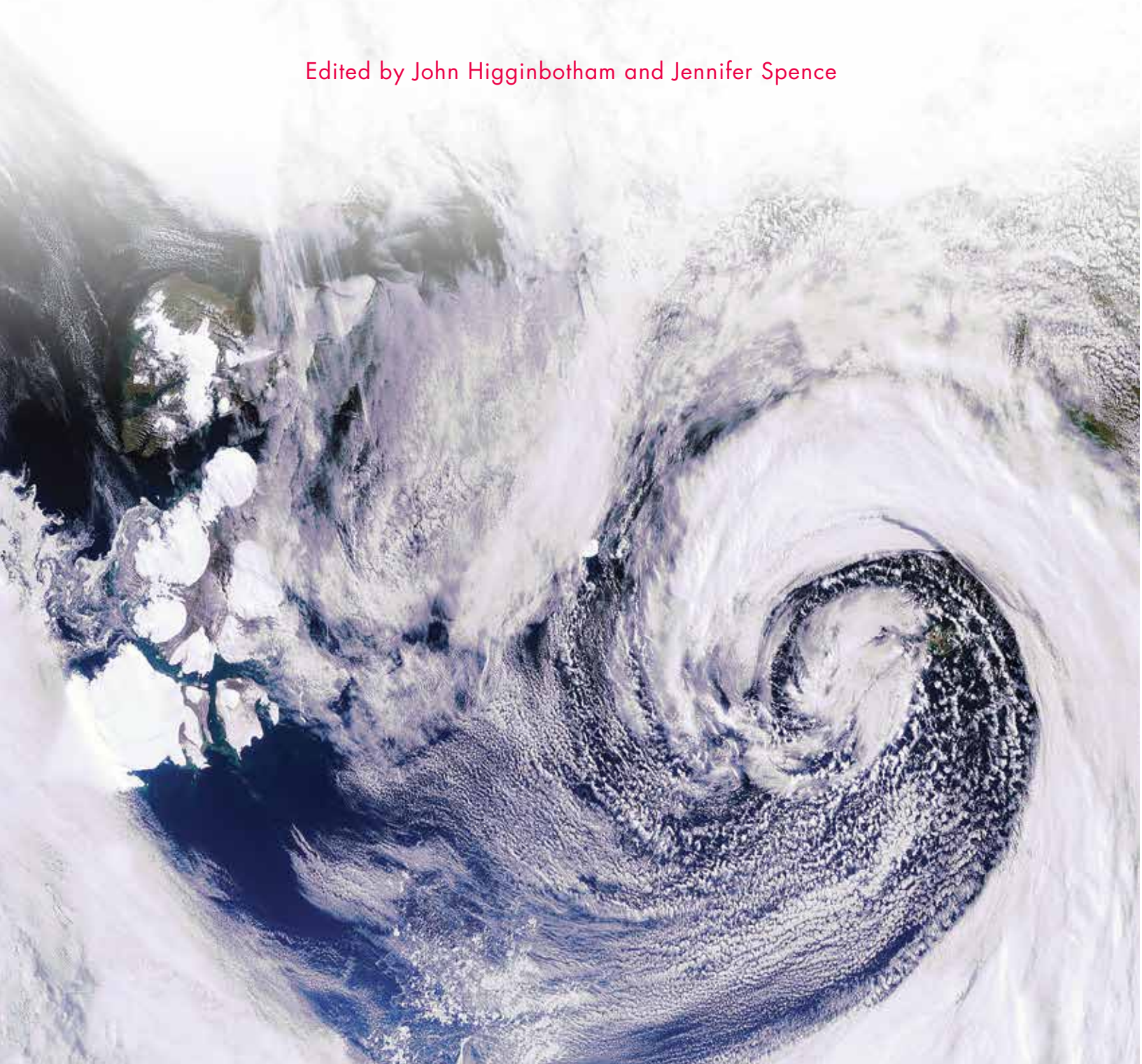
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Centre for International
Governance Innovation

SPECIAL REPORT

Canada's Arctic Agenda: Into the Vortex

Edited by John Higginbotham and Jennifer Spence



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Our research initiatives focus on governance of the global economy, global security and politics, and international law in collaboration with a range of strategic partners and have received support from the Government of Canada, the Government of Ontario, as well as founder Jim Balsillie.

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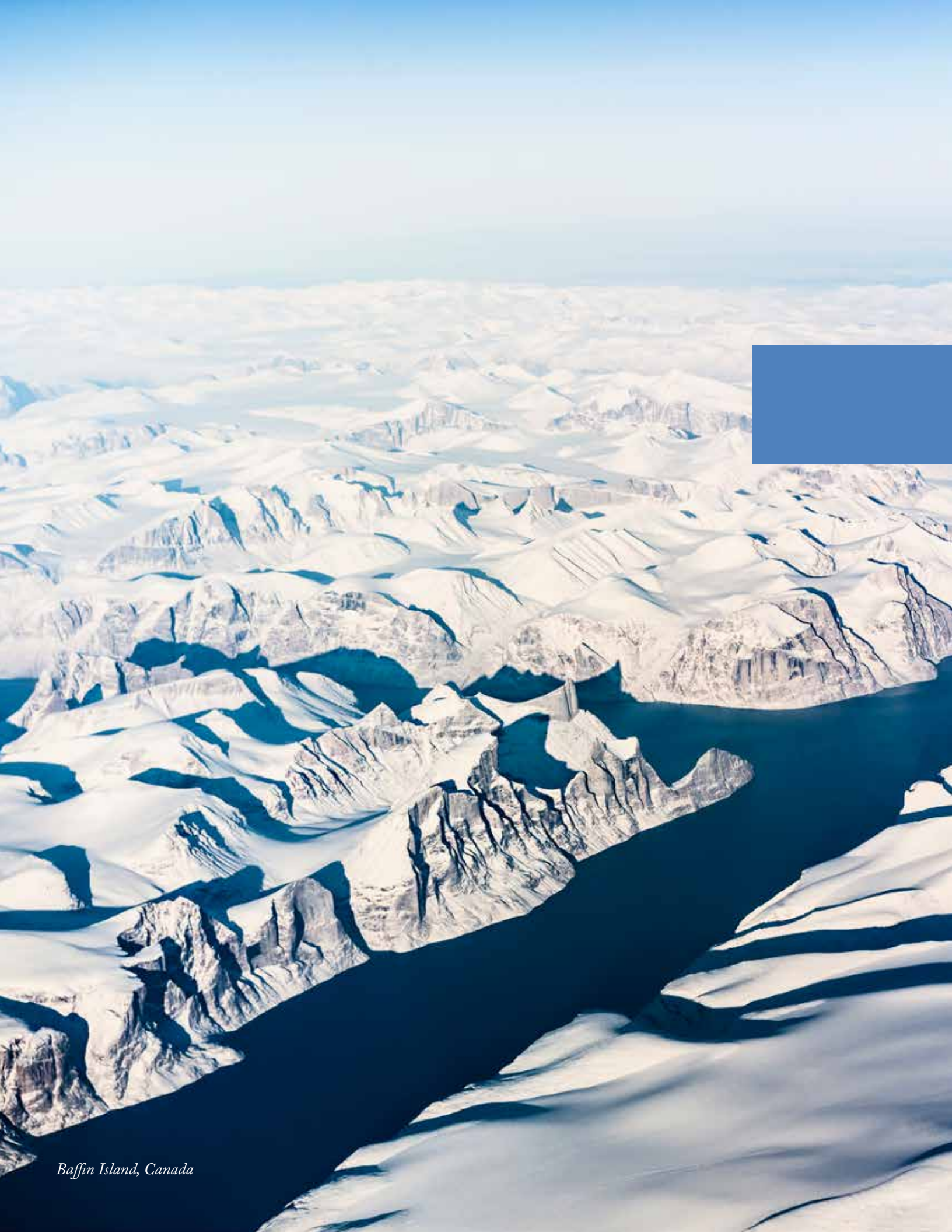
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Baffin Island, Canada

Acronyms and Abbreviations

ACA	Arctic Circle Assembly
AEC	Arctic Economic Council
ANPF	Arctic and Northern Policy Framework
BSP	Beaufort Sea Partnership
CADIZ	Canadian Air Identification Zone
CIGI	Centre for International Governance Innovation
CIRRICQ	Centre interuniversitaire de recherche sur les relations internationales du Canada et du Québec
CJOC	Canadian Joint Operations Command
CLCS	Commission on the Limits of the Continental Shelf
DCASS	Documents on Canadian Arctic Sovereignty and Security
ECS	extended continental shelf
GIUK	Greenland, Iceland and the United Kingdom
IMO	International Maritime Organization
LNG	liquefied natural gas
LOSC	Law of the Sea Convention
MMG	Mineral and Metals Group
NAA	North American Arctic
NATO	North Atlantic Treaty Organization
NEP	Northeast Passage
NORAD	North American Aerospace Defense Command
NORDREG	Northern Canada Vessel Traffic Services Zone Regulations
NSR	Northern Sea Route
NWP	Northwest Passage
NWS	North Warning System
NWT	Northwest Territories
OPP	Oceans Protection Plan
RCMP	Royal Canadian Mounted Police
SDWG	Sustainable Development Working Group
UNCLOS	United Nations Convention on the Law of the Sea
USNORTHCOM	United States Northern Command



Glacier lagoon in Greenland

Preface

John Higginbotham and Jennifer Spence

Four years ago, the Centre for International Governance Innovation (CIGI), with the active support of Carleton University and the Department of Indigenous and Northern Affairs (now Crown-Indigenous Relations and Northern Affairs Canada), drew together a group of Canadian Arctic experts to discuss the way ahead under the newly elected federal government of Prime Minister Justin Trudeau. There was a spirit of openness and possibility in the room, as ideas were exchanged about where a new government could take us with a fresh perspective and a broad range of opportunities and challenges to explore in Canada's North.

The preceding experience had been generally favourable. Canada had just completed its term as chair of the Arctic Council, and the previous government under Prime Minister Stephen Harper had launched promising domestic projects in several areas, while maintaining key continuities in Canadian Arctic policy. Moreover, President Barack Obama had demonstrated the United States' new interest in the Arctic, largely through the lens of climate change, and cooperation rather than conflict was the leitmotif of international Arctic diplomacy, despite Russian activities in Crimea.

A collection of short, action-oriented essays and interviews was published by CIGI under the title *North of 60: Toward a Renewed Canadian Arctic Agenda*, which presented the fruits of our group's discussions on a wide range of Arctic issues (Higginbotham and Spence 2016).

Now, in 2019, CIGI has again brought together leading Arctic thinkers to examine key elements of Canadian Arctic and Northern policy. These experts reflect on the progress that has been made in Arctic policies and programs during the intervening years and consider the impact of powerful forces of change and division, both within Canada and abroad.

We are also pleased to include a collection of interviews with Jane Glassco Northern Fellows. These thoughtful Indigenous women from across Canada's North share their perspectives and ideas on the policy issues that require urgent attention to ensure the prosperity of their Northern communities.

The contributors obviously speak for themselves, but some generalizations can be ventured.

The Trudeau government came to power in 2015 with a national progressive agenda focused on climate change, environmental regulation, Indigenous reconciliation, infrastructure development and open, consultative governance.

In the North, these broad government priorities are being advanced through the development of a new Arctic and Northern policy framework; however, at time of writing, after more than two years of discussion and consultation with Northern governments, Indigenous organizations, community members and experts, this policy framework has not yet been released, and its implementation will depend on the results of a federal election slated for October 2019.

Canada's North continues to struggle with diverse social, economic and environmental challenges. Opinions vary about what sustainable development means in the North and how it can be achieved. The direction that the federal government supports remains uncertain, and articulating a clear path is key to moving forward.

Climate change continues to diminish the ice cover of the Arctic Ocean and alter the marine and terrestrial environments in Canada's North at alarming speed. This heightens tensions between those who seek to expand the carbon economy northward and those who seek to arrest and reverse climate change. As if to illustrate this existential challenge, Canada continues its commitment to the precautionary moratorium on oil and gas development in the Arctic, while President Donald Trump does his utmost to reverse the Obama administration's policies restricting offshore Alaskan energy developments as fast as the courts would permit.

The external environment affecting the Canadian Arctic has become more challenging and unpredictable. The interplay between the fact of the melting Arctic Ocean and global geopolitical rivalries between the United States under Trump and Russia, in financial partnership with a more assertive China, has made the policy-making environment in the circumpolar region unstable and ambiguous. Russia is making heavy investments in dual-use Arctic military outposts and doubled down on expanding liquefied natural gas and other Arctic investments and exports, in cooperation with China, opening the Northern Sea Route for approved traffic.

The Canadian domestic Arctic governance and accountability structure is divided and diffuse, and slow to adapt to new external and internal challenges.

The cumulative effect of these volatile international and domestic pressures has produced a vortex of economic, security, environmental and identity challenges for Canada, and an intense, if understated, debate on Canada's Arctic agenda. One consistent message is that Northerners must play a leadership role in creating and implementing the policies that affect them.

Both the House of Commons Standing Committee on Foreign Affairs and International Development and a Special Senate Committee produced excellent major reports in 2019 on Canada's Arctic, arguing for urgent national focus and action on the Arctic challenges Canada is now facing externally and internally (House of Commons 2019; Senate of Canada 2019). Both reports underline the need for the full involvement of Northern and Indigenous peoples.

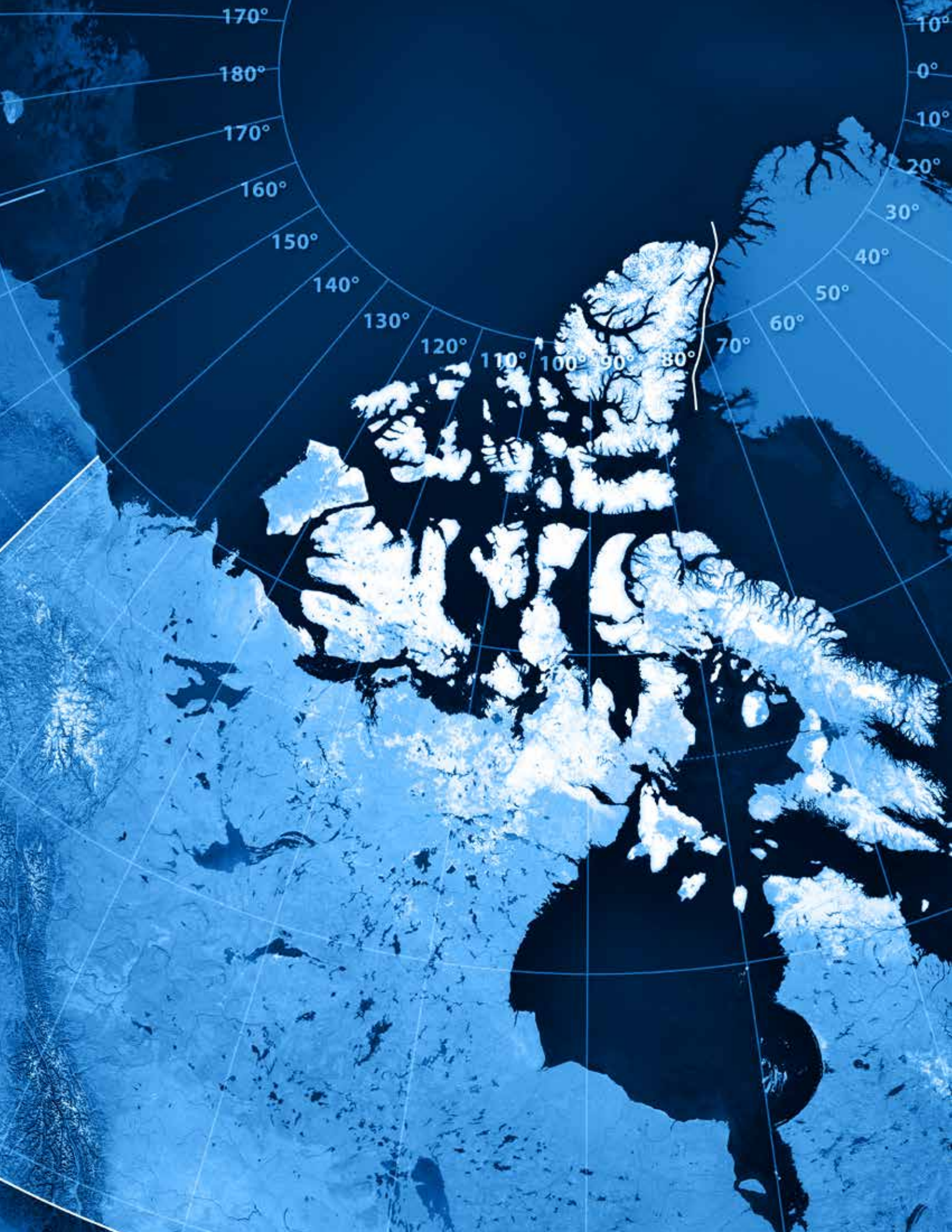
We hope the well-informed essays and interviews in this report will spark thoughtful debate about Canada's Arctic policy priorities and provide concrete advice to inform the work of Canada's policy makers moving forward.

John Higginbotham is a senior fellow at CIGI in Waterloo and the Norman Paterson School of International Affairs at Carleton University in Ottawa. John's research focuses on Arctic economic and governance development and international relations, Canada's ties with the United States and China in a global context, and North American Arctic marine transportation as the Arctic Ocean melts. John led CIGI's Global Security & Politics Program's research project on the Arctic, including organizing action-oriented round tables and publications. John's previous work with the Government of Canada, including lengthy international assignments, spanned more than 30 years. He was an assistant deputy minister in three departments, including for policy development at Global Affairs Canada, and served at Canadian embassies in Washington, Beijing and Hong Kong.

Jennifer Spence is a CIGI fellow and an expert in international governance and public policy. Jennifer has a particular interest in the Arctic region, including infrastructure, transportation, local and regional development, and strengthened domestic and regional governance. She holds a Ph.D. in public policy from Carleton University and is currently an adjunct research professor at Carleton University's Northern Studies Program. Previously, she held numerous senior positions with a variety of Government of Canada departments.

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1

Nation to Neighbour

Tony Penikett

Good Intentions?

The stated intentions of government policies toward Indigenous peoples always deserve close examination.

On Christopher Columbus's return from his first voyage to the Americas in 1493, Pope Alexander VI "awarded" the New World to Spain's rulers, Ferdinand and Isabella (Alexander VI 1493). As the world knows, for Indigenous Americans, slaughter, slavery and smallpox soon followed. University of London scientists found that this Amerindian genocide caused the reforestation of Latin America's corn fields and, consequently, the eighteenth century's Little Ice Age, which froze the River Thames — obviously an unintended consequence (Bodkin 2019).

In this period, Ottawa warrior chief Pontiac, a military genius, organized a powerful Indigenous resistance against British colonization of the western Great Lakes region. In response, on October 7, 1763, England's King George III issued the Royal Proclamation that reorganized British colonies in North America and affirmed that "the several Nations or Tribes of Indians...who live under our Protection, should not be molested or disturbed in the Possession of...their Hunting Grounds."¹ Meanwhile, the Crown negotiator Sir William Johnson wrote: "The Indians of the Ottawa Confederacy...also the Six Nations...were amused by both parties [the British and French] with stories of their upright intentions, and that they made War for the protection of the

1 See https://indigenousfoundations.arts.ubc.ca/royal_proclamation_1763/.

Indian rights, but they plainly found, it was carried on to see who would become masters of what was the property of neither the one nor the other" (Tully 1995, 119).

Colonization

Nevertheless, in consequence of the Royal Proclamation, the United States negotiated hundreds of Indian treaties, almost all of which were subsequently violated by American authorities. We might ask: was that their original intention?

At Fort Carlton in August 1876, Canada negotiated Treaty 6 with 2,000 starving Cree Assiniboiné and Ojibwa hunters and their families. Much nation-to-nation ceremony attended the negotiations and Canada's representatives routinely invoked the honour of the Crown (Erasmus 1999, 238). But, that same year, Parliament approved the Indian Act, which infantilized First Nations peoples by making them wards of the federal state. Then, in 1927, Canada forbade Indian Nations from hiring lawyers to press their land claims — early in the twentieth century, Canada still spoke with a forked tongue. However, in February 1973, Canada's Supreme Court rendered a split decision on *Calder*, the Nisga'a Nation's land rights lawsuit against the Government of British Columbia, which had asserted that the Royal Proclamation did not apply to the province.² The decision led Prime Minister Pierre Trudeau to send negotiators to those areas without treaties: British Columbia, northern Quebec, Northwest Territories and Yukon Territory.

Canadians may now see colonial horrors simply as ancient history but still ask reasonable questions about the intentions of today's politicians. In its early days, given a choice between assimilation and accommodation, Canada's government chose *assimilation*, a policy revealed in Prime Minister John A. Macdonald's notorious defence of the residential school system before the House of Commons (Canada 1883, 1107-8). Late in the twentieth century, opinion shifted toward *accommodation*. One hundred and thirty-two years after Macdonald's statement before Parliament, the Truth and Reconciliation Commission of Canada (2015) published its 94 *Calls to Action*. On March 16, 2018, Simon Fraser University hosted a BC Reconciliation Conference, which asked of those 94 calls: "When are we going to get to the hard stuff?" This remains an excellent question.

The Arctic and Modern Northern Treaties

In the Arctic, "two solitudes" existed, not as the English and French divide described in Hugh MacLennan's masterpiece (1945), but as distinct Indigenous and settler communities. Justice Thomas R. Berger's report on the Mackenzie Valley Pipeline Inquiry, *Northern Frontier, Northern Homeland* (1977), explored the collision of competing Indigenous and settler aims for the Far North. For decades, the federal Ministry of Indian and Northern Affairs perpetuated this duality. Under this regime, ignorance and absurdity often reigned, as when, for example, Ottawa ordered the territories to host Canada Day fireworks displays in the Land of the Midnight Sun, the one region where few could enjoy them.

Back in 1968, when oil was discovered in Alaska, the American government and oil

2 *Calder et al v Attorney-General of British Columbia*, [1973] SCR 313.

companies set about building a pipeline, until the Alaska Federation of Natives told them that they did *not* own the land along the pipeline route. Land claim negotiations got underway in the halls of the US Congress. By 1971, Congress had passed the Alaska Native Claims Settlement Act, which returned 178,000 km² of land to Native control, but under forms of *corporate*, not tribal, governance. Inspired by the scale of the settlement for Alaska Natives, their tribal cousins (Gwich'in, Han, Tanana and Tlingit) in Yukon and Northwest Territories (Dene and Inuit) also filed land claims.

After the Supreme Court of Canada ruled on the Nisga'a treaty rights case in 1973, Trudeau's representatives arrived in the North to set up the treaty-negotiating tables. In 2006, I published *Reconciliation: First Nations Treaty Making*, a book about the glacial pace of these negotiations. In the course of this work, a finance official opined that it was far cheaper to negotiate forever than to finalize treaties — clearly, a penny-wise, pound-foolish policy. The BC Treaty Commission report *Looking Back, Looking Forward: A Review of the BC Process* (2001, 4) argued that “before 1991, road blockades, angry rhetoric and litigation filled the daily news. Now, most First Nations in BC have chosen treaty negotiations over direct action and lawsuits” — an admission that, for the Government of BC Treaty Commission, negotiations meant *management* of the Indian issue.

As Douglas McArthur (2002) argues, federal officials intentionally wrote mandates as prescriptive formulas based, in part, on per capita cash calculations. First Nations negotiators protested that, rather than promoting reconciliation, such mandates were designed to manipulate the Indigenous treaty parties (Penikett 2006, 161–73). Cowichan chief Lydia Hwitsum likened “cookie-cutter” mandates to bureaucratic culture. She contrasted that mindset with the give-and-take needed for effective negotiations (*ibid.*, 159).

Federal negotiators readily conceded that treaties based on precedent were supposed to assure that modern treaties would be broadly equitable. Nevertheless, federal negotiator Jim Barkwell declared that “prescriptive mandates and excessive rigidity are enemies of interest-based agreements, while vision and principled flexibility are their friends” (*ibid.*, 163). Nisga'a Nation negotiator Jim Aldridge added that, for Canada, “aboriginal title is a burden” that its negotiators sought to remove “for the cheapest possible cost” (*ibid.*). Should financial considerations ever trump those of justice?

Just at the point when Arctic states started talking to Indigenous northerners, an equally important event occurred: settler populations in Arctic cities began to dialogue with their Indigenous neighbours. These dialogues produced Canada's first Aboriginal self-government agreements; agreements which, decades after their negotiation, still represent *half* of all such agreements in our country. Why was the regional government role so significant? The answer is that in self-government negotiations, there was little federal jurisdiction on the table. Innovative power-sharing accords between Indigenous and Territorial leaders underpinned these breakthrough self-government agreements.

In time, 20 northern land treaties covered the northern 40 percent of Canada's land mass and recognized collective “tribal” title to 500,000 km². These modern twentieth-century treaties dwarf their nineteenth-century counterparts. For example, the Yukon settlement provides 41,000 km² for 7,000 first citizens — more land than is contained in all reserves in Southern

Canada. Yukon First Nations, Canada and, as noted, the Yukon Territorial Government also negotiated Canada's first third-order Indigenous self-government agreements.

In the same time frame, Greenlanders achieved home rule and then self-government, while the Saami people in Norway won the Finnmark Act, a form of co-management borrowed from northern Canadian treaties. In 1987, Mikhail Gorbachev promised to make the Arctic "a zone of peace."³ He invited the Arctic states to dialogue about security issues and environmental questions, and to include their Indigenous populations. With the end of the Cold War, Indigenous land-rights negotiations around the Arctic accelerated.

With the best of intentions, Canada helped create the Arctic Council, but the eight founding states based the organization on the fiction that the Arctic region consists only of nation-states and Indigenous peoples. With the 1996 Ottawa Declaration, eight Arctic states acknowledged the successful Indigenous rights struggles in Alaska, Northwest Territories, Quebec and Yukon, and recognized six Indigenous Permanent Participants (Aleut, Athabaskan, Gwich'in, Inuit, Saami and Russian), each with a voice in Council proceedings.⁴ That Indigenous representatives now sit at the Arctic ministers' table is a great innovation, one that likely would not have happened without northern land-treaty negotiations between federal states, Arctic village leaders *and* settler governments based in Arctic cities.

Regrettably, the Arctic Council left out settler cities and regional governments that represent the vast majority of Arctic residents, leaving them without a single seat at the ministers' table. Nevertheless, China, Germany, India, Italy, Japan, the Republic of Korea, the Netherlands, Poland, Singapore, Spain, the United Kingdom and others were invited to join as Arctic Council observers.

What's wrong with privileging six international Indigenous organizations? Nothing — but when, in 1999, the Northern Forum representing Arctic regional governments, who, with Indigenous authorities, nowadays do most of the governing (hospitals, roads, schools and so on) in the Arctic, asked for a single seat at the ministerial table, the eight Arctic nation-states rejected their application (Penikett 2017, 86).

What was Canada and other states' intention here? Did slick spin doctors persuade Arctic ministers that occupants of air-conditioned workstations in distant capitals adequately represented the views of Northern residents? Ask residents of Tromsø, Yellowknife or Fairbanks if government officials in faraway capitals speak for them, and they'll laugh in your face.

By repute, Alaska is a fairly conservative state, but even during Barack Obama's time in the White House, polls showed that Alaskan Indigenous communities trusted their state government in Juneau more than they did Washington or the White House (EKOS Research Associates 2011). As Ólafur Ragnar Grímsson, the former president of Iceland, observes, in the Arctic it is the federal states — Canada, Denmark, Russia and the United States — that operate at the greatest physical and *psychological* distance from regions they claim to rule (Penikett 2017, 2-3).

3 See www.barentsinfo.fi/docs/Gorbachev_speech.pdf.

4 See <https://oarchive.arctic-council.org/handle/11374/85>.

Transformation

Modern land claims treaties, devolution and self-government agreements transformed the Far North:

- Alaska Natives have land, money and political power;
- Indigenous villages in Yukon and Northwest Territories enjoy regional government powers;
- The Northwest Territories and Nunavut boast consensus legislatures;
- Greenlanders achieved home rule and self-government and are now debating when to become a nation-state;
- Norway's Finnmark County has co-management of lands and resources; and
- the Inuit of Nunavut are collectively the largest private landowners in the world.

All this happened with the cooperation of regional governments. Young scholars sometimes paint modern treaties as just another form of assimilation, but the peace and prosperity of the Arctic's self-governing Nations, in contrast to the situation on many Southern reserves, would impress Canadians, if they knew the facts.

Sixty years ago, Ottawa talked down to Northern and Indigenous communities. Over time, Northerners began to talk back. Nowadays, village chiefs and legislators in Arctic cities are learning to govern together. Over two generations, Northern Indigenous and settler leaders negotiated an astonishing array of syncretic compromises: collective "tribal" ownership of titled land; treaty-based fish, game and land co-management boards, which replace the old-order fish harvesting priorities with a new hierarchy: conservation first; subsistence second; recreation uses third; and commercial uses fourth. Indigenous and settler leaders today work together on issues such as boom-and-bust economies, fair returns from resource developments, as well as suicide prevention and climate change. For Northerners, *decolonization* is a shared goal. In the interest of reconciliation, perhaps it is time now for the South to start learning from the North?

Northern Models

With the election of a new Liberal administration in 2015, Canada's federal government embraced climate action and the Trans Mountain pipeline, as well as the process of reconciliation. As it happens, the one area where reconciliation is becoming a reality is the Far North. Unfortunately, hardly anybody in Ottawa has noticed. With good reason, Northerners support the broad objectives of Justin Trudeau's reconciliation policy. But what are the prime minister's intentions? Are they accurate expressions of settled Canadian principles and values? Or are we skating on a thin-ice consensus? One doesn't need to search far for contrarian voices. As an example, in a recent opinion piece for the *National Post*, Conrad Black (2019) resurrected the legally problematic *terra nullius* or "empty land" thesis of America's colonization, arguing that opposition parties in Canada should take up, rather than pursue reconciliation, "the position that the Europeans and other immigrants who came to Canada moved into largely vacant land."

Black reminds us that Canadians have yet to seriously debate what might constitute our principles of reconciliation. That said, Ottawa's ambitions may be too vague. Based on media reports, the responsible officials must have hundreds of reconciliation files on their desks, but how many has the Treasury Board funded? Who is managing this workload? By promising so much, is the prime minister building disappointment?

Canada has created a new ministry of Crown-Indigenous Relations and Northern Affairs, and Prime Minister Trudeau commendably deals directly with Inuit Tapirit Kanatami (ITK) President Natan Obed on serious issues such as Inuit education. But what role do the four regional governments with Inuit treaty settlements and jurisdiction over schools play in such exchanges? ITK is *not* a government, yet Obed envisions developing ITK's program delivery and self-government capacities.

Late in the last century, Ottawa seemed ready to fund a transfer of government programs to the management of prairie *political organizations*, including the Assembly of Manitoba Chiefs and the Federation of Saskatchewan Indian Nations. However, these plans faced loud objections from First Nations *governments* in both provinces. Here is a reconciliation issue that has, so far, enjoyed too little public debate.

Sometimes, Trudeau's reconciliation does appear to be a project framed mainly as a negotiation between the nation-state and First Nations. Because Indian Bands (First Nations) are subjects of the Indian Act, a colonial law, "reconciliation" between Canada and its Indian Bands might seem too much like an "in-house" program.

The 1996 Royal Commission on Aboriginal Peoples recommended the reconstitution of Aboriginal Nations, but so far only the courts have acted. In the BC Supreme Court's 2007 *Tsilhqot'in* decision, Justice David Vickers noted that Indigenous rights-holders to land and governance may be the pre-colonial Nations, *not* Indian Act Bands. In 2014, the Supreme Court of Canada in its *Tsilhqot'in* ruling echoed Vickers's opinion.

If the Court is correct, then reconciliation might better be framed as a process involving Indigenous nations and their non-Indigenous neighbours — *nations* and *neighbours* — such as has been substantially advanced over the last 50 years with modern treaties in Northern Canada. Conceptualized this way, rather than being the first party to all reconciliation projects, Ottawa might more properly play the role of *facilitator* in seeking reconciliation across the country between Indigenous nations and their non-Indigenous neighbours.

In this decade, Canada might well re-examine its reconciliation priorities, dialogue with Indigenous and non-Indigenous communities about shared principles, and come to negotiating tables with honest statements of Crown intentions. Although provinces seem to lack the openness of the Northern territories, constitutionalist John Whyte argues that we do need some recognition and space for the norms of Canadian nationality.⁵ That said, true reconciliation should start with truth telling about intentions.

5 Email to author, May 8, 2019.

Tony Penikett is the author of two books, *Hunting the Northern Character* and *Reconciliation: First Nations Treaty Making in British Columbia*, a former BC deputy minister of negotiations and, from 1985 to 1992, premier of Yukon Territory.

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Canada's Northern Economic Development Paradigm and Its Failures

Heather Exner-Pirot

Diefenbaker and Berger's Legacy

The genesis of the modern Northern economy can be traced to Prime Minister John G. Diefenbaker's "Northern Vision," a campaign speech he delivered in November 1958: "I see a new Canada — a Canada of the North....We will open that northland for development by improving transportation and communication and by the development of power, by the building of access roads" (Diefenbaker 1958, 6-7).

This vision was formalized in the Progressive Conservative government's Roads to Resources program from 1957 to 1963, which focused on building transportation links to mineral-rich areas in order to promote their exploitation. A seed was planted: an image of Northern Canada as a resource-rich area with untapped potential that only access and infrastructure could resolve. It established a "build it and they will come" approach to northern economic development that persists today.

About a decade later, another foundational episode occurred: the Mackenzie Valley Pipeline Inquiry, led by Justice Thomas R. Berger, which resulted in his report, *Northern Frontier, Northern Homeland* (Berger 1977). Berger led the royal commission tasked with considering the environmental, cultural, social and economic impacts of a series of oil- and gas-drilling proposals across the Mackenzie Valley delta. Significantly, the commissioners held community hearings across the territories to gain the perspectives and document the concerns of Indigenous Northerners. The Berger report, as it became known, led to an evolution in how resource projects were approved and generated

an expectation of community consultation that has only deepened today. It ultimately recommended against development.

Both of these streams of thinking underlie our approach today: that the Canadian North is ripe — overdue even — for development, if only there was adequate infrastructure to move product to market and make the region more attractive for investors, and simultaneously, that development must proceed extremely carefully, because the area is environmentally and culturally vulnerable, and so requires layers of regulatory barriers and high levels of social licence. Their coexistence is uneasy.

Filling the inevitable gap is public sector investment. It was the federal government that imposed an unsustainable economic system upon the Canadian North, stripping away the traditional economy through policies of settlement and dependence in the first half of the twentieth century, and restricting the resource economy. It must therefore bear the responsibility of propping up what is left.

The end result is a northern economic development paradigm in the Canadian North that is not only unviable, but also hasn't evolved in 50 years. The welfare state that was introduced in the 1960s and 1970s, coupled with the Diefenbaker and Berger doctrines, is the framework that the North operates within today. While there have been impressive political changes in this time, as evidenced by the movement toward devolution, self-government and, in general, greater political self-determination, there has been no concomitant increase in economic self-sufficiency.

This state of affairs is further reinforced by the lack of scholarly economic analysis on northern development. Northern social sciences are dominated by political scientists, anthropologists and geographers (of which this author is one). While these disciplines can bring important insights, there is no doubt that the almost complete lack of economists studying the Canadian North, and drawing from the theories and knowledge of that field, is a gap. Fundamental and basic principles of economics, such as supply and demand, incentives, and rationality, are rarely applied to our understanding or development of northern economic policies.

The Modern Northern Economy

While some may ask, “What kind of northern economy do we want?” the more practical question is “What kind of northern economy can we have?” The North is short in human and financial capital. It is sparsely populated and far from markets. Its residents, in particular those in rural and Indigenous communities, do not collectively have skill sets that are in demand in the global market. The exception is the cultural and creative sector, in the form of tourism, arts and crafts; however, this sector forms a small portion of the northern economy as a whole (see Everett 2018).

As such, large-scale resource development — the kind of project that can justify its own, dedicated infrastructure — is by far the most obvious path for generating wealth in Northern Canada and diversifying away from the public sector. However, there is significant division within the North as to how much and how fast to develop non-renewable resources, with legitimate concerns raised about their environmental, economic and social sustainability.

And then there is the question of global social licence. Due to the marketing success of several recent environmental campaigns that portray Arctic development as uniquely problematic and unethical, some investors have determined they will not finance, for example, oil and gas projects in the region.

As a result, policies — regulatory burdens — have been implemented that make northern resource extraction more time-consuming, risky and expensive than it would already be if based solely on market considerations. It is not certain that resource development will provide the economic future the North wants, but at any rate, public policies have not been designed with that outcome in mind.

A State-run Economy

Despite their small population and tax base, the territories have to supply the full gamut of public services to their citizens, across vast distances. In addition, the territorial North is characterized by numerous and sometimes competing public service providers, including federal, territorial, municipal and Indigenous authorities. Together, these factors create a need for significant public administration.

Public sector jobs — be they territorial, federal or municipal administration, or in health care, education or something else — tend to pay well in the territorial North.¹ These salaries reflect the relatively small pool of qualified workers for those jobs, most of which require a university degree, a qualification that is rare in rural northern communities. The high demand and small supply push high wages and benefits. In many cases, benefits may include recruitment and retention bonuses, housing allowances or provisions, and even annual travel allowances to the South. The capacity for governments to pay high wages is removed from their ability to raise taxes or generate revenues within their own jurisdictions to fund them. Rather, the source of the funding depends largely on Ottawa's willingness and ability to finance it, which distorts the labour market.

Indeed, the entire apparatus of the contemporary northern economy has been built on the conceit of the state as the major investor, consumer and stakeholder. This system has engendered the phenomenon known to economists as Dutch disease: the causal relationship whereby the increase in the economic development of one sector fosters a decline in other sectors. In Northern Canada, the public sector has become dominant, which has had unintended but predictable consequences. It has driven up the cost of wages, which has inflated the cost of all other goods, resulting in an extremely high cost of living. The draw of public sector wages has made it hard for small businesses to compete for labour at all, so that entrepreneurship and business creation have been dampened. And so, the North has been divided into two classes — those who can obtain a job in either the public sector or resource development, and those who cannot.

The gravity of the public sector results in other economic perversities. Social problems are frequently framed in this way: that food insecurity could be resolved if the federal government provided more subsidies through Nutrition North Canada; or that homelessness could be

1 See, for example, Yukon Bureau of Statistics (2018, 3).

addressed if the federal government built more public housing. These are not solutions, but rather symptoms of a larger problem, that is, that most Indigenous Northerners do not earn enough to be able to afford nutritious food and decent housing on their own. The optimal outcome is not to increase federal subsidies but to increase Northerners' earnings.

Toward a New Paradigm

Federal spending in the northern territories is not the solution, but rather the problem, for economic development. By definition, the high rate of dependence on Ottawa detracts from self-determination. Territorial governments and Indigenous organizations are incentivized to spend more of their time on lobbying the federal government than on persuading citizens to generate income and subsequently pay taxes to support public sector spending. This distorts the democratic process by promoting clientelism — the exchange of goods and services for political support — which subsequently spawns and empowers political elites. The acceptance, effectiveness and legitimacy of policies that deserve resources are decided not by popular support but by the ability of political elites to appeal to federal politicians.

Because so many funding decisions are based on political appeal rather than a strong business case, they are often divorced from reality. The \$190 million Canadian High Arctic Research Station in Cambridge Bay sits mostly unused, and at time of writing, May 2019, unlaunched. The \$300 million highway from Tuktoyaktuk to Inuvik is built on shifting permafrost and has faced frequent closures; it was only completed after the Trudeau Liberals announced a moratorium on offshore oil and gas exploration in the region, its original *raison d'être*. The federal government has invested \$117 million into a railway and port upgrades in northern Manitoba that the private sector has abandoned, continuing a decades-long practice of subsidization interspersed with bankruptcy. And in May of this year, NWT Premier Bob McLeod called for a tripling of both Canada's icebreaker and deep port capacities, and the addition of a 5,000-personnel-strong military base in Inuvik (Sarkadi 2019) — economic stimuli completely divorced from defence requirements.

It is not as though the rest of Canada is immune to these ailments; every province has had its share of boondoggles. It's that they are so much more pronounced in the North.

Meanwhile, literally billions of dollars from Indigenous title settlements and resource development royalties sit in First Nations and Inuit trusts. If Indigenous Northerners thought money was the solution to the problems of northern development, surely that would be a logical place to start. Evidently, they do not.

Greenland's Model

The South is not the North, and it is not helpful to insist or expect that the territories' development track with that of the provinces. Remoteness, population sparsity, extreme weather conditions and a lack of connectivity, coupled with a very different economic culture, ensure that a different development pathway must be devised.

But there are inescapable facts, one of them being that there is no political self-determination without economic self-determination. There is an apples-to-apples comparison, Greenland, that has wrestled with this issue much more assiduously than the Canadian territories. It has sought, as a result, a more aggressive strategy to attract investment. Although there has been heated public discourse with multiple viewpoints, in general Greenland has determined that they want, in the medium term, independence, and to get there they need to reduce their dependency on Denmark. In 2017, their block grant was 3.8 billion kroner (about CDN\$770 million or \$13,700 per capita), representing about half their government budget and a quarter of their GDP. To reduce their reliance on the transfer, Greenland has issued offshore oil exploration licences, started new consultations for uranium mining and engaged with Chinese investors. None of these efforts looks to change the calculus on Greenlandic financial independence any time soon, but the discussion has certainly impacted the political culture of that nation.

Slow and Steady

Although the territories do not share Greenland's ambition for independence, there is a lesson to be learned from its experience: to enhance self-determination, incrementally reduce reliance on federal transfers (Tables 2.1 and 2.2).

Table 2.1: Federal Transfers to the Territories, 2019-2020

Jurisdiction	Total Federal Transfers (see note)	GDP (2017)	Transfers as a Percentage of GDP	Transfers
Yukon	\$1.058 billion	\$2.895 billion	36.5%	25,650
Northwest Territories	\$1.375 billion	\$4.856 billion	28.3%	30,704
Nunavut	\$1.699 billion	\$2.846 billion	59.7%	43,790
Canada	\$78.7 billion	\$2,137.5 billion	3.7%	2,097

Data sources: Statistics Canada (2017); Department of Finance Canada (2019).

Note: Total federal transfers include Territorial Formula Financing, Canada Health Transfer and Canada Social Transfer; they do not include federal ministry spending.

Table 2.2: Percentage of Territorial Budget Derived from Federal Transfers, 2019-2020

Jurisdiction	Percentage from Federal Transfers
Yukon	84.2%
Northwest Territories	79.8%
Nunavut	91%

Data source: Department of Finance Canada (2019).

Note: Total federal transfers include Territorial Formula Financing, Canada Health Transfer and Canada Social Transfer; they do not include federal ministry spending.

This does not seem to be a strategy that has gained support in Whitehorse, Yellowknife or Iqaluit. On the contrary, the forthcoming Arctic and Northern Policy Framework (ANPF) seems designed to entrench the current levels of dependence (Government of Canada 2019). All problems, and all solutions, rest in Ottawa with our current paradigm, and there is no sign that the ANPF will disrupt it.

There is a cognitive dissonance in all of this — to ask for more from Ottawa in order to need less from it. Nothing will make the territories financially independent overnight, and, indeed, given their structural characteristics, they may never be able to maintain a satisfactory level of public services on their own. But surely being *more* self-sufficient is a desirable public policy goal, and would lead to a more diversified economy, opportunities for entrepreneurs and small businesses, and better public spending decisions. Having a viable vision as to what reducing dependence might look like would be an important first step.

Recommendations

There are a number of policy precedents that could help address the challenges of territorial dependence, Dutch disease and the weakness of the local private sector, which the limits of this short essay preclude describing in depth. However, it has two main takeaways.

The first is that the fiscal culture in Northern Canada is one that perfectly tolerates dependence, with the ANPF process demonstrating that northern and federal leaders alike are quite content to deal with almost any challenge by injecting federal funds, regardless of whether there is evidence to suggest those funds will address the actual problem. Greenland, in its determination to achieve independence, shows an alternate approach is possible.

The second is that since there is unlikely to be a perfect solution to the challenges of northern economic development, the task is to choose the least bad option. The current policy paradigm of relying on vast per capita sums of federal monies to prop up the northern economy is fiscally sustainable — that is, Canada can afford it; and it is ethically justifiable, as there is a moral obligation to provide redress for the problems that colonization has imposed on northern livelihoods and self-sufficiency. However, there are predictable consequences to the current paradigm, the most significant of which is a binary class system: those who work for the public sector and large resource developers, and those who don't. If there is no appetite to disrupt the current paradigm — to strategically and systematically reduce northern dependence on federal transfers and the public sector — the better course would be to accept those predictable consequences and adjust accordingly. As it stands, a great deal of resources and efforts are wasted promoting policies and structures that are internally inconsistent and mutually exclusive.

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Northern Canada after Climate Equilibrium

Christopher Burn

Climate change is an existential problem. Its incremental nature has diluted the perceived importance of its anthropogenic causes, because the gradual changes in temperature occur in a context of well-known year-to-year variation. The North is where Canada's greatest change in temperature has been registered and also, now, a substantial increase in rainfall. The increases in temperature and in rainfall are greater than climate models anticipated in the early 2000s. The most recent versions of these climate models, together with the possible future trajectories of greenhouse gas concentrations in the atmosphere, project continuing climate warming and wetting in the North over the next three to four decades if emissions are halted, and extreme changes by the end of this century if they are not. Environment and Climate Change Canada (2019) has compiled an easily accessible report that presents these conclusions unequivocally.

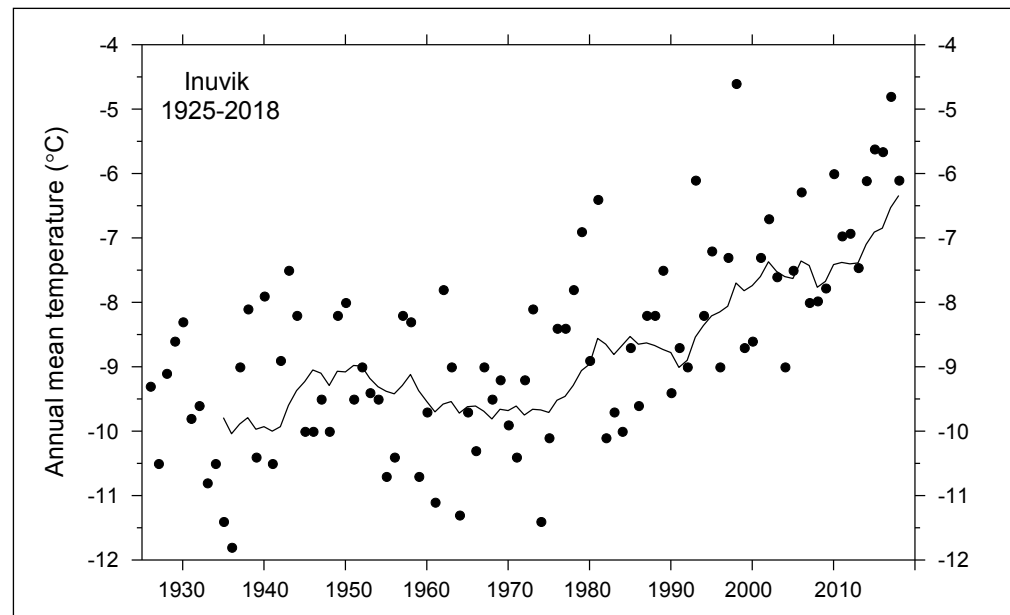
Mitigation of climate change is a matter of reducing emissions or removing greenhouse gases from the atmosphere. As the technology for carbon capture improves, the potential for its implementation will increase, even in the North. However, more urgently, northern governments and their federal partner agencies must anticipate developments in environmental systems expected with climate change and construct policy to mitigate adverse consequences. This awareness is particularly important for transportation and municipal infrastructure because of the public investment in these assets. In planning new structures, the expected magnitude of terrain adjustments, especially in regions with permafrost, may threaten the integrity of foundations over the service life of the facilities. This essay illustrates changes in climate that have occurred in northern Canada and demonstrates their magnitude. It then presents three categories of environmental response: steady, incremental change; enhancement

of recurring effects; and increasing frequency of large-magnitude events. Examples are given for each category to suggest specific circumstances that will require attention in the short term. Policy responses to these different climate-induced effects are discussed and specific recommendations presented.

Climate Change in Northern Canada

Climate warming has been prevalent in northwest Canada since 1970 and in the eastern Arctic since the 1990s. At Inuvik in the Northwest Territories, for example, the mean annual air temperature in the 1960s was -9.7°C but -6.3°C for the years 2009–2018. The warmest year in the record was 1998 (-4.6°C), which, at the time, was considered a one-in-300-year event. Figure 3.1 shows that such conditions are no longer exceptional. Total warming has been greatest in the western Arctic, although the current rate of warming there ($0.14^{\circ}\text{C}/\text{year}$, 2000–2018) is exceeded in the High Arctic at Alert ($0.19^{\circ}\text{C}/\text{year}$, 2000–2018). In other regions, the warming is less rapid.

Figure 3.1: Annual Mean Air Temperatures for the Mackenzie Delta Area, Western Arctic Canada, 1925–2018

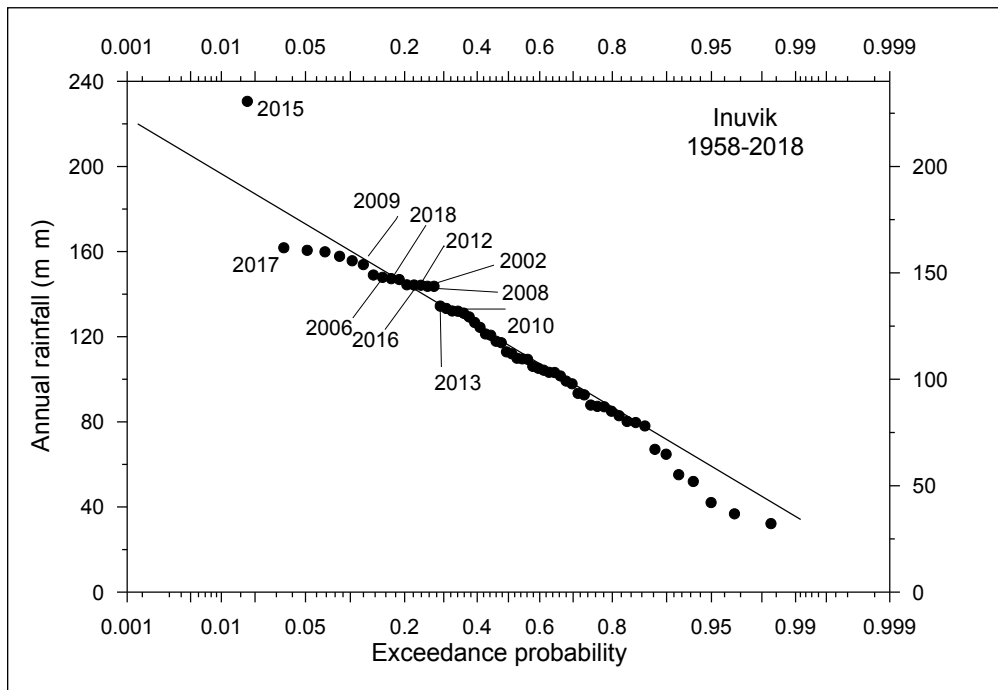


Note: Data for 1925–1957 are based on records from Aklavik and subsequently from Inuvik Airport. The line is the running mean of the previous 10 years.

Rainfall has increased since 2000 throughout the North. Figure 3.2 is a plot of annual rainfall at Inuvik since 1958. The data are presented in rank order from highest, on the left, to lowest, to the right. The diagram shows the abundance of recent years at the high end of the distribution. Eleven of the 20 highest total annual rainfalls have been recorded since 2002, including the two highest on record (2015, 2017). In an even distribution, only six of the highest totals would be in 2002–2018. Most of the additional rainfall has arrived in August and September. The increase in annual rainfall between 1970 and 1988 and 2000

and 2018 has been 25 percent at Inuvik, but is higher elsewhere, for instance, 47 percent at Resolute, Nunavut. Warming of climate is a well-known attribute of recent climate change, but wetting is now also prevalent in the North.

Figure 3.2: Annual Rainfall at Inuvik, 1958–2018 (58 years in the record)



Note: The data are presented as a probability plot, where the straight line indicates consistency with a normal distribution. The plot indicates the probability total rainfall will be higher than its corresponding value in any year. Eleven of the years since 2000 are in the top 20.

Permafrost and Climate Change

In the western Arctic, almost 50 years of surface warming have affected permafrost to a depth of over 100 metres. Measurements available to 50 metres' depth near the coast of Richards Island in the Inuvialuit Settlement Region indicate warming at this level by 0.6°C since 1970, increasing to 3.3°C at five metres from the surface. In the uppermost 15 metres of the ground, mean annual temperatures that were –8°C to –9°C in 1970 are now –5°C to –6°C or higher. If the climate stopped changing in 2019 and remained at present conditions, ground warming would continue for centuries while the surface disturbance propagates into the ground. A new equilibrium would be approached at 50 metres' depth in about a millennium, but ground temperatures in the upper five metres would stabilize at about –2°C in 30–60 years' time. If the climate trajectory is maintained, ground temperature stability will not occur, and in 30 years the near-surface ground temperatures will exceed –2°C. Once the ground reaches such a state, further disturbance will lead to thawing of permafrost. Widespread recent warming of permafrost in northern Canada has been presented in detail in a recent report dealing with infrastructure foundations by the Canadian Standards Association (2019, 31–32) and also in Environment and Climate Change Canada's report (2019, 234–38).

The principal effects on permafrost of past climate warming have included deepening of seasonally thawed ground in summer. Widespread disappearance of permafrost has not been observed. Indeed, where the ground is ice-rich and the permafrost more than 10 metres thick, it should not be anticipated in the short term, because the energy required to thaw permafrost must penetrate an increasing thickness of thawed ground above the frozen soil, hence reducing the rate of permafrost degradation. As a result, permafrost terrain will retain its poor capacity to absorb rainfall for decades and, in many places, centuries. Nevertheless, warming of the ground will proceed and affect the strength of the soil as it approaches 0°C and incrementally thaws. There are three classes of terrain behaviour for which we need to develop policy.

Steady, Incremental Change

Warming of permafrost has two principal consequences for governments responsible for land management and infrastructure. First, in the years 1960–2008, there was considerable hydrocarbon exploration in northern Canada, in particular in the western Arctic and the Arctic islands. Exploration wells were drilled to test potential reservoirs, and in every case, drilling waste was disposed in large pits. These sumps were sealed with a soil cap. Permafrost, relatively impermeable at its previous temperatures, was used to prevent waste products dispersing into the surrounding ground or nearby waterbodies. There have been a few failures of these sumps, but so far the design has been generally viable. Warming of permafrost alters the basis of these contaminated sites in many places, in particular, the western Arctic. The sumps were built by industry and permitted by the federal government, then the land manager for the region. Deterioration of the bounding permafrost will require a policy response, perhaps within the Northern Contaminants Program, that was established in response to concerns about human exposure to elevated levels of contaminants in wildlife species important to the traditional diets of northern Indigenous peoples. Estimates of the time available before the sumps fail are needed immediately to guide management strategies for these contaminated sites.

A second key issue is the prospect for infrastructure that is proposed to be built on frozen ground and that requires minimal foundation deformation (subsidence) for structural integrity. Warming and thawing of permafrost reduce the bearing capacity of the ground and, where permafrost contains abundant ice, lead to ground settlement. Infrastructure can rarely accommodate significant change in foundation conditions, and danger of structural failure increases. To date, foundation design has been predicated upon maintaining permafrost below structures. The National Building Code is evolving to recognize the need for climate assessment in foundation design, but climate projections suggest widespread near-surface permafrost thaw over the next 50 years, which is the intended service life of many new buildings. In this sense, climate change poses an existential threat to the construction industry in the North. A policy response for public buildings may involve increased attention to site selection, so that the future structural integrity of a site, perhaps due to its lack of ground ice, overrides public convenience as a factor in location decisions. The Canadian Standards Association (2019) has published the second edition of a guideline that addresses these points. A further policy response for all public infrastructure is to require more than one year of performance guarantee (warranty) for new construction, so

that when bids are awarded on a least-cost basis, governments carry less liability for climate change effects on infrastructure and encourage responsible developments.

Enhancement of Recurring Effects

Some effects on northern infrastructure are associated with well-understood processes that have intensified as a result of climate change. Erosion of permafrost coasts threatens community infrastructure, in particular in the western Arctic. The process has been known and measured for nearly 60 years, but it is accelerating, due to a longer open-water season and an increased extent of open water. Coastal infrastructure, such as at Tuktoyaktuk, requires enhanced defence from these effects, or relocation away from the ocean. Both actions involve significant investment after consideration of economic strategy. No relocation strategy will be successful without community preparation and consent.

Similarly, transportation infrastructure faces increased costs derived from water management in winter. Higher precipitation in autumn and warmer winter conditions mean that seasonal freezing of the ground above permafrost has been delayed, and drainage continues into the winter months. Water is a hazard on driving surfaces in winter and freezing of drainage structures may lead to washouts in spring, so groundwater management is critical for safety. The activities required for water management in winter occur at locations that become known to maintenance personnel, but these in time will require infrastructure investment for permanent solutions. Continual monitoring and maintenance alone are not sustainable solutions in the long run, unless the appropriate agencies accept the risk of, and responsibility for, events whose occurrence can now be anticipated.

Increasing Frequency of Large-magnitude Events

Rainstorms over permafrost terrain lead to a relatively rapid hydrologic response within drainage basins because frozen ground has a low infiltration capacity. Consequently, after comparable storms, river flows may respond more quickly and reach higher stages than in regions without permafrost. These processes are further accentuated in mountainous terrain. Over the last 10 years, the Dempster Highway has had large numbers of washouts in some years, as a result of summer rainstorms, for example, 14 washouts in 2016. Similarly, it has been blocked frequently due to landslides, also initiated by the reduced infiltration capacity in permafrost terrain. Most transportation infrastructure in mountainous areas is built along valley floors, and so it is close to rivers and at the bottom of slopes, increasing the frequency of washouts and the magnitude of landside debris that may cover the road. The cost of maintenance activities due to landslides and washouts along this highway increased from \$130,000 per year in 2005–2008 to \$1.75 million per year in 2013–2016, while the cost of all climate-related maintenance increased from \$1.66 million per year to \$5.31 million per year (all in constant 2016 dollars). The long-term sustainability of the Dempster Highway is not yet questioned, but new investments along the route, for example, the fibre-optic link between Dawson in Yukon and Inuvik, being designed in 2019 and scheduled for installation in 2020, will require analysis of climate-change risks, as will the operating basis and design costs of new parts of the Mackenzie Highway in the Northwest Territories. Both of these projects are being built by the respective territorial governments.

A second consequence of higher rainfall in permafrost regions is the increased occurrence of retrogressive thaw slumps. These are disturbances to permafrost that expose ice-rich ground to the atmosphere and lead to rapid production of mud slurry downslope from the permafrost face. These features have increased in size and occurrence in the western Arctic in the last two decades, as a result of increased rainfall keeping the mud flowing and preventing accumulation over the thawing permafrost. At present, rapid thawing of ice-rich ground at one site is progressing toward the Alaska Highway about 30 kilometres west of Whitehorse in Yukon (Figure 3.3), while the mud slurry moving downhill from another is approaching the Dempster Highway at Northwest Territories kilometre 30 near the territorial border. In both cases the integrity of the highway is threatened, and novel approaches will be required to either protect it or rebuild it after failure. The required policy response to these active landslides is, first, to schedule aerial monitoring of ground adjacent to highways and other infrastructure in forested terrain, where the features may be hidden as they initiate and grow, and, second, to develop innovative engineering methods to arrest large-scale permafrost thaw in these features before they lead to highway closure. A key element of risk assessment regarding these failures is the poor availability of alternative routes for traffic in northern Canada, should a highway be closed.

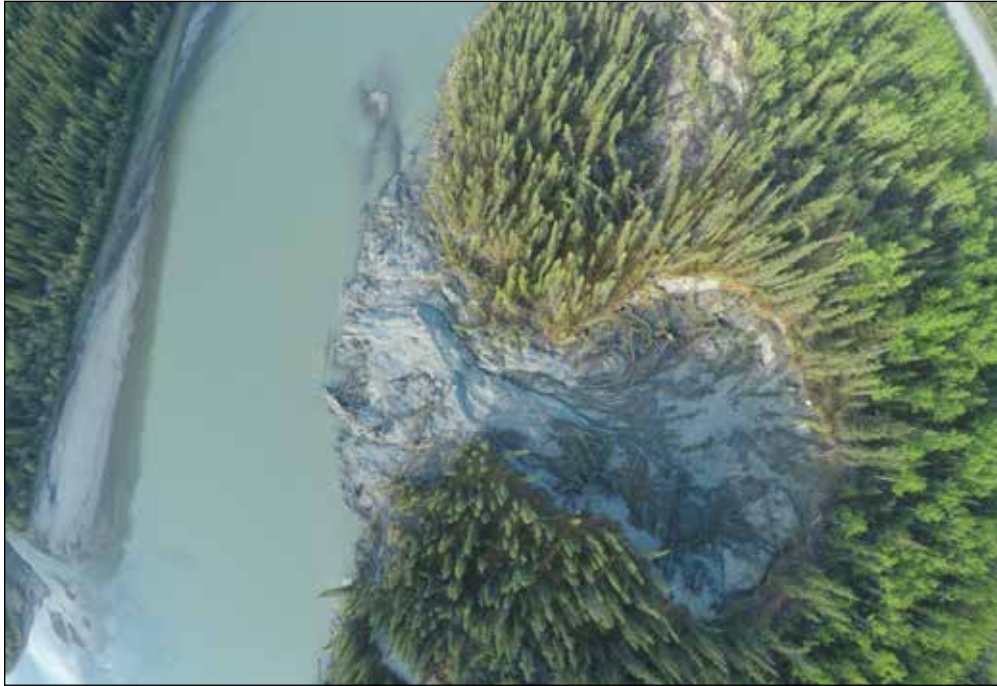
Recommendations

The ecological consequences of climate warming in northern Canada are widely studied but not emphasized here because there is little governments can do to manage them, with the exception, perhaps, of forest fires. The following recommendations relate to changes in permafrost conditions wrought by climate change.

- Monitoring is required of conditions adjacent to drilling-waste sumps as permafrost warms and loses its ability to contain contaminants at these sites.
- Policy should be developed to ensure climate change effects are considered in design and construction of all public infrastructure, and periods of liability for designers should be extended to hold them to account, as, for example, with the Dawson-Inuvik fibre-optic line to be designed and built along the Dempster Highway in 2019–2020.
- Financial consequences of climate change, as evident from the last 15 years, should be determined to prepare governments for cost implications of continuing climate change. Policy development should consider the prospect of lowering service standards as well as maintaining current service levels at higher cost.
- Analysis of the sustainability of infrastructure requires collaboration and cooperation with affected communities, as, for example, in the case of Tuktoyaktuk, and inter-territory collaboration, as in the case of the Dempster Highway.
- Monitoring of landslides developing in ice-rich permafrost is needed in highway corridors.

Figure 3.3: Retrogressive Thaw Slump Due to Thawing Permafrost in Takhini River Valley, Southern Yukon, Adjacent to the Alaska Highway

(a)



(b)



Notes: Photographs were taken approximately 30 kilometres west of Whitehorse, Yukon. The head of the thaw slump is about 50 metres from the Alaska Highway, visible to the right in (a). (a) Aerial photo taken by Peter von Gaza with GoPro camera attached to a quadcopter, May 2019. (b) Ground view, showing a six-metre-high headwall of exposed permafrost, taken by Christopher Burn, June 2019.

Christopher Burn held the Natural Sciences and Engineering Research Council of Canada Northern Research Chair in Permafrost in the Yukon and Northwest Territories at the Department of Geography and Environmental Studies, Carleton University, 2002–2012. His research program is distinctive in the extent of collaboration with northern agencies. At present, the emphasis is with the Transportation Engineering Branch, Government of Yukon, and Department of Infrastructure, Government of the Northwest Territories. He led development of an interdisciplinary master's program in Northern Studies that began at Carleton in 2017.

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Permafrost in Yamal Peninsula, Russia



An old icebreaker Krasin (foreground) and the new icebreaker Ural (background), Saint Petersburg, Russia

The Russian Northern Sea Route and a Canadian Arctic Seaway

Kells Boland

This essay contrasts Arctic marine infrastructure planning, investment and administration for the Northeast Passage (NEP) along the Russian Arctic coast with that for the Northwest Passage (NWP) along the Canadian Arctic coast. The Russian Northern Sea Route (NSR) administration is a unified, whole-of-government approach to advancing and commercializing an NEP user-pay seaway. The NWP remains a Canadian Arctic Seaway in waiting.

A Common Context

Historically, Arctic shipping interest in the NEP and NWP has been with a shortcut between Northern Europe and North Asia — a focus that has sharpened as Arctic ice melts in a warming North. While in that regard the NEP offers a significantly shorter shortcut for international transit shipping, for both the NEP and the NWP it is domestic, “destinational” shipping that is pushing Arctic marine traffic to new highs.

On the Western Siberian Coast, during phase one of Novatek’s liquefied natural gas (LNG) project at Sabetta port on the Yamal Peninsula, three million tonnes of LNG were exported by mid 2018. At full production in 2019, the project will be increasing exports to 16 million tonnes. By 2024, with completion of its second large-scale project, Arctic LNG 2, in the Gydan Peninsula, Novatek (Russia’s largest independent natural gas producer) projects yearly exports approaching 40 million tonnes.¹

In the Canadian Eastern Arctic, Baffinland Iron Mines Corporation’s phase-one

1 See www.novatek.ru/en/business.

Mary River Mine operation exported more than four million tonnes from its Milne Inlet Port in 2018. It plans to triple this volume to 12 million tonnes annually, with its phase-two expansion and year-round shipments. Baffinland projects that with its phase-three development at Steensby Port, exports will rise to 30 million tonnes annually (Baffinland 2019).

In the Russian case, a fleet of 15 new “Yamalmax” LNG carriers — a new vessel class of icebreaking tankers not normally requiring icebreaker escorts — will offer an alternative to the Suez Canal route by allowing year-round full transits through the NSR shortcut east to Asia. In the Canadian case, after meeting European iron ore demand, it would seem equally attractive to shortcut Panama Canal transits by using NWP full transits west to Asia.

Both the NEP and the NWP are on the frontier of a warming Arctic that is stimulating new levels of shipping activity (Table 4.1).

Table 4.1: Increased Shipping Activity in the Warming Arctic

International	Domestic Destinalional	Non-Commercial
Cargo ships: Panama/Suez Canal alternative	Tankers/bulkers: Oil and gas/mineral exports	Nefarious traffic: Potentially lurking below the radar
Cruise ships: Small expeditions/large-scale cruise	Resupply vessels: Arctic coastal fuel and provisions	Naval patrols: Defence, surveillance, spill response, search and rescue
Recreational boating: Arctic adventure travel	Fishing boats: Emerging Arctic fisheries	Icebreaker operations: Research, reconnaissance, ice escort and assistance

Source: Author.

Canada and Russia are surprisingly similar when it comes to domestic “destinational” cargo that overwhelms any foreseeable potential for international transit traffic. International NSR full transits slid from a peak of 71 sailings (1,355,897 tonnes) in 2013 to just 21 sailings (300,000 tonnes) in 2018, and there have only been two NWP commercial cargo full transits ever.²

The similarity can be extended to Arctic LNG, with the combination of Canadian Beaufort Sea-Mackenzie Delta and Alaska North Slope gas reserves (approximately two trillion cubic metres in total) approaching Yamal LNG developer Novatek’s estimated 3.3 trillion cubic metres of natural gas reserves.

Although Russia and Canada have not dissimilar Arctic marine activity, their Arctic shipping strategies have proceeded on vastly different tracks.

2 NSR Information Office transit statistics at www.arctic-llo.com/transit-statistics.

Canadian Arctic Shipping Strategy

A Canadian Arctic shipping strategy has evolved to embrace an extended navigation season with increasing NWP transits and destination shipping driven by exploration cruises, research voyages and resource exports, as well as ongoing coastal community resupply. The Canadian Coast Guard's ice regime³ and traffic advisory services, provided under the Northern Canada Vessel Traffic Services Zone Regulations, or NORDREG, have been made compulsory. Icebreaking support, currently inconsistently available, and Arctic domain awareness will be enhanced through the National Shipbuilding Strategy that will:

- commission six Canadian Navy and two Canadian Coast Guard Arctic/offshore patrol ships;
- refit three Norwegian icebreakers as an interim upgrade to Canadian Coast Guard capability; and
- construct the new Canadian Coast Guard heavy icebreaker *John G. Diefenbaker*.

However, a seaway system of deep-water ports for foul weather refuge, fleet replenishment, salvage services, spill response and search-and-rescue capabilities is fitfully emerging, more by default than by design. On northern Baffin Island, not far from the new, privately financed Baffinland iron ore terminal and port at Milne Inlet, excessive public funds for a Canadian naval refuelling facility have been expended to repurpose a small quay and install a couple of fuel tanks at the former Nanisivik Mine site. Further south, also on Baffin Island, there is construction of a new deep-water port at Iqaluit.

These three deep-water ports are all on Baffin Island in the Canadian eastern Arctic. They are the only deep-water ports in the Canadian Arctic. There are no deep-water ports in the central or western Canadian Arctic. The closest deep-water port west of Baffin Island is at Dutch Harbor in the North Pacific Aleutian Islands.

It is hard to see this as any part of a rational approach to strategically position deep-water ports across the North American Arctic coast, much less as part of a comprehensive Canadian Arctic Seaway development plan.

Russian Arctic Shipping Strategy

In contrast, Russian NSR planning, investment and commercialization have been consolidated under ROSATOM, the Russian atomic energy agency responsible for its nuclear icebreaker fleet, to optimally position the NSR for both international transit and resource development shipping. The strategy includes:

- providing “on-demand” ice navigation, convoy escort, salvage and search-and-rescue capability;

3 The Arctic Shipping Pollution Prevention Regulations contain the Zone/Date System, which is a system dividing the Arctic into 16 Safety Control Zones, each with fixed opening and closing dates for ships of various ice capabilities. The Arctic Ice Regime Shipping System was introduced as a more flexible system that uses the actual ice conditions to determine whether entry is allowed in an ice regime.

- expanding the largest icebreaker fleet to include six NSR-dedicated nuclear icebreakers; and
- constructing a super-heavy nuclear icebreaker that can break 10 feet of ice at 10 knots.

NSR administration includes clearing vessels into the NSR according to seasonal ice conditions and applying a user-pay tonnage-based tariff for all NSR support services and facilities.

Russian President Vladimir Putin has proclaimed the NSR a national priority and has targeted infrastructure investment to facilitate 80 million tonnes of NSR traffic annually by 2024.⁴ That immense cargo volume cannot come from international transit traffic, and like Canada, Russia is dependent upon infrastructure investment to incent resource development. Accordingly, the Russian strategy includes not only investing in Arctic marine infrastructure but also connecting inland links — northbound pipelines and railways — to feed into a new commercial Arctic trade route for resource exports.

Russian resource companies are responding to Putin's 80 million tonne target. Oil and gas producer Rosneft shifted to a northbound pipeline project connecting the oil field in Vankor to a new NSR tanker port at Dikson on the Taymyr Peninsula. On the Yamal Peninsula, Gazprom will extend the rail line it has built to Bovanenkovo all the way to the port in Sabetta, and it is currently constructing another 350 kilometres of new railway that ultimately will connect the Northern and Sverdlovsk lines between Nadym and Tyumen.

The Northern Latitudinal Passage (a railway project) is now seeing strategic segments begin to link up with NSR connections for resource exports. Other port, rail and pipeline projects are under way to connect coal, mineral, and oil and gas reserves with the NSR — including massive anthracite coal resources at Vostok on the Taymyr Peninsula as well as the Payakha oil field in the Yenisey River delta.

Not only has Putin commanded attention (and investment) from Russian resource companies, he has also directed the Russian military to (re)develop “dual-use” naval facilities along the Arctic coast, which will significantly augment the NSR's reliability as a shipping route. And, although full financing for the grand vision of NSR-based Arctic development could be problematic, China is stepping in to fill the gap.

The China Card

China has Arctic aspirations for polar resource development as well as for Arctic trade route alternatives to the Panama and Suez Canals and the Strait of Malacca.⁵ As a self-proclaimed “near-Arctic” state with two polar research icebreakers, China is seeking to lever its Arctic aspirations with infrastructure investment. The “Polar Silk Road” is part of an Arctic policy released in 2018 that seeks to integrate Arctic trade routes with the

4 As set out in Putin's five-year plan for Arctic development, issued as the May Decrees following his re-election in March 2018.

5 As set out in the government's 2018 white paper “China's Arctic Policy” at http://english.gov.cn/archive/white_paper/2018/01/26/content_281476026660336.htm. For a more complete discussion of Chinese involvement in the Arctic, see Michael Byers and Emma Lodge's essay “China and the Canadian Arctic” later in this report.

Belt and Road Initiative for transportation infrastructure investment in global trade routes emanating from China. China is supporting its Arctic ambitions with offers of infrastructure investment to circumpolar nations. The apparent goal of this largesse, applied around the world via financing from the Silk Road Fund, is to build a better business footing for Chinese enterprises seeking expansion outside of China.

Polar Silk Road infrastructure investment proposals, not without geopolitical concerns, have been contemplated in the following countries:

- **Iceland:** potential Arctic transshipment port (in abeyance, as the United States raises concerns);
- **Greenland:** air and seaport investment (rebuffed by Denmark at US behest);
- **Canada:** Grays Bay Road and Port Project (pending Canadian partnering with China's Mineral and Metals Group [MMG]⁶); and
- **Russia:** investment in Arctic ports and railways (under way with Novatek and Gazprom).

Russia's focus on NSR development for its own resource exports, and its need for additional cash to accomplish that, aligns neatly with Chinese strategic planning for investment in both a Polar Silk Road and a long-term supply of resource imports. Russia is the first circumpolar nation to accept Chinese investment in Arctic ports (Sabetta and Arkhangelsk) and railways (\$3.2 billion⁷ for Northern Latitudinal Passage rail extensions).

Along with these Silk Road Fund infrastructure investments, China National Petroleum Corporation has also invested in the Yamal LNG Project, holding a total 30 percent share of Novatek, the Russian owner of the project. This investment is facilitated by \$12 billion in financing provided from the Export-Import Bank of China and the China Development Bank.

NEP versus NWP Commercialization

The NSR is a centrepiece of the Russian priority for Arctic development. It is now domestic, "destinational" resource traffic that is proving the value of a new Arctic trade route, rather than the full transit international traffic that offered the original value proposition.

Russia has long intended to monetize that value. Its NSR administration seeks to recoup all costs of NSR traffic (icebreaker services, hydrographic data, weather reporting and so on) through tariff applications that have increased to an average of approximately \$250,000 per full transit in 2018.

Canada, on the other hand, offers free NWP transit with no attempt to match needed support services with any cost recovery or funding mechanism. This approach may lead

6 MMG is a 25 percent Chinese state-owned enterprise with Izok Lake and High Lake base metal mineral projects that cannot be accessed without investment in the Grays Bay Road and Port Corridor. For those mineral development projects to proceed, some combination of MMG investment in partnership with Government of Nunavut and/or Canadian federal government funding will inevitably be required.

7 All dollars refer to US currency, unless otherwise indicated.

to the unintended consequence of diverting traffic from the shorter NEP shortcut while leaving the NWP no better off financially (see Table 4.2).

Table 4.2: NSR vs. NWP Savings (in CDN\$): Will a No-fee NWP Divert Ships from NSR?

	NSR	NWP
Canal fees saved	\$154,000	\$154,000
Sailing days saved	\$220,000 (11 days)	\$180,000 (9 days)
Subtotal	\$374,000	\$334,000
Less NSR/NWP fees	-\$250,000	0
Total savings	\$124,000	\$334,000

Source: Author.

Note: Hamburg to Yokohama route, applying Suez and NSR toll calculators and assuming ship costs at \$20,000/day (fuel, crewing and miscellaneous) for a Polar Class 4 handysize bulk carrier.

Recognizing that NSR commercial success requires more traffic, the command economy that appears to remain in Russia has responded to Putin's decrees for more destination resource traffic to be routed over the NSR. Conventional connections to southern pipelines and railways are being reoriented to NSR terminal facilities despite initially higher capital and operating costs.

However, the Russian long view is that a combination of NSR investment and Arctic resource development will reduce the costs and increase the investment return for both. At the same time, the long-term prospect of an alternate international Arctic trade route and a sustained, new LNG supply chain have attracted China to both finance the infrastructure and purchase the resource — actions Russia could not afford to undertake on its own.

Similar shared interests in NWP commercialization and resource development offer Canada opportunities for collaboration with China, not unlike the opportunities now being developed by Russia and China in the NEP. However, Chinese investment partnerships in the Russian Arctic are offset by a parallel buildup of Russian military bases along the NSR. The increasing Russian military activity in the Arctic, along with potential Chinese investment partnerships with other circumpolar nations, is attracting attention from the United States.

The United States and Canada have common security concerns that could spur them to jointly fund the North American Arctic infrastructure required by both countries, without Canada contemplating potential offers of Chinese investment. The St. Lawrence Seaway offers an alternate NWP commercialization model for joint Canada-US planning, investment and management.

Conclusions for Canada

The Russian NSR comparison highlights a comprehensive whole-of-government Arctic development strategy in multiple dimensions, an approach that Canada has yet to embrace in not dissimilar circumstances. Synergistic Arctic resource and seaway development becomes more viable with multi-user, deep-water ports and corridors strategically developed along an Arctic coastal trade route. That course, already set for the Russian NSR, is potentially available for a Canadian Arctic Seaway as well.

Initial Development of Deep-water Ports

- **In the Western Arctic**, the only deep water close to shore in the Beaufort Sea, about halfway between the Alaskan North Slope and the Canadian Mackenzie Delta gas reserves, is at King Point on the Yukon coast.
- **In the Central Arctic**, the potential Grays Bay Road and Port Project from Coronation Gulf to Yellowknife could access Slave Geological Province mineral prospects, including China-owned MMG Izok/High Lake projects.
- **In the Eastern Arctic**, Baffinland Iron Mines is already developing rail and port infrastructure that accesses the NWP from Milne Inlet and Hudson Bay from Steensby Inlet.

Integration with Nascent Inland Corridors

- **A Mid-continent Corridor** to the Arctic through Hudson Bay has been re-established with the reopening of the Hudson Bay Railway connection to Churchill, Manitoba.
- **The Mackenzie Valley Corridor**, including the ongoing build-out of highway, marine, pipeline and fibre-optic links, connects the Hay River railhead to a shallow-draft Arctic coastal barge port at Tuktoyaktuk.
- **A Dempster/Klondike corridor** between Tuktoyaktuk and the Inside Passage port of Skagway, Alaska, has rail and fibre-optic segments, as well as road access to the Arctic coast and the Alaska Highway.
- **A Trans-Canada Northern Latitudinal Corridor** is proposed to link up future transportation and transmission systems with connections to Canadian Arctic, British Columbian and Alaska Pacific ports.⁸

Addressing Strategic Arctic Seaway Considerations

- **An NWP shipping influx** will increasingly come from Arctic resource developments more than from historically anticipated international transits.
- **New navy and Coast Guard ships** are being commissioned for Arctic operations, but there are no Canadian deep-water replenishment ports west of Baffin Island.
- **The lack of any NWP user fees** may well incent traffic diversion from the NEP while leaving the NWP cash strapped.
- **American co-investment** may be attractive to address mutual Arctic security requirements and solutions in Canada.
- **Chinese co-investment** could complement or compromise Canadian Arctic Policy.

While the NWP remains stagnant and under-invested, the NSR sees systematic development dramatically expanding with Arctic resource shipping and Chinese money. A Canadian Arctic Seaway is waiting for the coordinated government, industry and community planning that can rationalize investments to meet multiple needs with common user facilities. However, in Canada, as with Russia, such strategic planning without money

⁸ For a conceptual proposal of how such a corridor may be developed, see Standing Senate Committee on Banking, Trade and Commerce (2017).

is meaningless. Despite near-term misgivings, the time may come for Canada to play the China card and obtain US investment support; otherwise solicit Chinese investment partnerships; or else continue to struggle with a shortchanged Arctic shipping strategy.

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Russian nuclear icebreaker at work

Common Ground for Canada and Quebec in the Arctic

Mathieu Landriault

Subnational governments can play active roles in regional and international organizations. This reality is particularly true in federal states. Cooperative relations between national and regional governments can act as a force multiplier by increasing the number of national stakeholders present in international initiatives. This essay argues that the Canadian government led by Prime Minister Justin Trudeau has been able to harness this potential by including provincial governments in Arctic governance, in particular the government of the province of Quebec. It also suggests that more potential exists for tapping into this opportunity.

Quebec is the only Canadian province with a specific Arctic policy and that regularly participates in fora such as the Arctic Circle Assembly (ACA) that is held every October in Reykjavik. The province's northern development plan, Plan Nord,¹ was presented to Arctic actors at the 2015 and 2016 ACAs. This plan focuses on the dual objectives of pursuing economic development while ensuring environmental protection, and has also been showcased at other Arctic venues. The plan devotes special attention to the environmental imperative, to present Plan Nord as an example of best practices. The province also made a point to include different stakeholders at the ACAs. Scientists, Indigenous leaders and corporate decision makers all played a part in ACA sessions organized by the Government of Quebec.

Since 2016, the province of Quebec further explicated its stance vis-à-vis the Arctic region: in 2017, the provincial government devoted attention in its latest international policy statement to the circumpolar region. In this document,

1 See <https://plannord.gouv.qc.ca/en/>.

titled *Québec on the World Stage*, sustainable development, respect for local communities, including Indigenous communities, and support for commercial ventures are presented as pillars of Quebec's Arctic policy. This last point includes the exchange of best practices with Northern partners and relevant stakeholders in the circumpolar region (Government of Quebec 2017, 50).

Quebec's activism is paying off economically as well. Exports from the province to Arctic states (excluding Russia and the United States) went from \$438 million in 2013, to \$885 million in 2015 and \$1.17 billion in 2017. Moreover, Quebec's participation in the ACA allowed the province to increase bilateral cooperation with Iceland and Nordic countries. In 2017, for the first time, foreign investments in Northern Quebec were higher than investments from Canadian investors (Institut de la statistique du Québec 2017).

So far, the new international policy of the new government elected in the fall of 2018, led by the Coalition Avenir Québec, has not radically changed this Arctic agenda. The will to orient Quebec's international policy toward economic and commercial objectives resonates in the Arctic region, with an emphasis on opening new exports markets, attracting foreign direct investments and promoting Quebec's green technology sector (Girault 2019). These priorities were already part of Quebec's Arctic policy as defined by the previous government.

Canada and Quebec in the Arctic: Areas of Common Interests

Significant converging interests are at play between Canada and Quebec in the Arctic region. At the circumpolar level, the Trudeau government has been adamant about including subnational entities in key regional organizations. The inclusive nature of Arctic governance, and of the Arctic Council in particular, facilitated this evolution. Hence, the Government of Canada allowed Quebec to participate in key Arctic Council working groups. The province has been active in the Council's Sustainable Development Working Group (SDWG). As the SDWG focuses on areas such as sustainable economic activities and infrastructure development, it is conceivable to predict a continuity in Quebec's multilateral involvement at the Council.

There is also potential to develop cooperative initiatives so that Canadian and Quebec companies can participate in the works of the Arctic Economic Council (AEC). Most of the AEC's working groups are collaborating to develop a guide of best practices for Arctic economic development. The multi-level Canadian diplomacy can find parallel avenues at the AEC. The working groups focusing on energy and responsible resource development matters represent venues carrying the greatest potential for Canada-Quebec Arctic cooperation.

Increasing interest in involving the private sector is likely, as the Icelandic chairmanship of the Arctic Council (2019–2021) lists economic development as an area of priority for Arctic cooperation (Thórdarson 2018). The Icelandic leadership also aims to build bridges between the AEC and the Arctic Council, in order to formalize the exchange of views and information between the two organizations. A memorandum of understanding has already been signed between the two organizations to facilitate coordination.

Finally, trade diversification is a shared objective of the Canadian and Quebec governments. The Arctic region represents an opportunity to further economic diversification. On this note, it is striking to consider that the Government of Quebec has 32 offices abroad but none in the Arctic region.² The Government of Canada and the Government of Quebec could collaborate to open a bureau of the Government of Quebec within the Canadian embassy in Norway. Such arrangements are already in place elsewhere, with Quebec bureaus in Beijing, Havana and Shanghai, for example. Bureaus offer a limited number of services in comparison to delegations and general delegations; hence, this type of representation would constitute a modest start to test the waters; more resources could be mobilized at a later date if the experiment is conclusive.

Norway would represent an ideal location for this endeavour, for two reasons. First, it would allow an easy access to key multilateral Arctic forums (the Arctic Council, AEC and Arctic Frontiers), facilitating Quebec's role in Arctic governance. Second, such a bureau could act as a springboard to further commercial ties between Quebec, Canada and Nordic countries. Norway, Denmark, Finland and Sweden have numerous affinities with Quebec, namely on green technologies and resource development. Economic opportunities with Denmark, Sweden and Finland would be of particular interest, given that they are members of the European Union: the Canada/EU free trade agreement is set to enter into force in the near future.

As of 2018, Quebec's exports to the Arctic countries (except the United States and Russia) amounted to \$879 million. These exports have significantly increased in the past five years and represent a significant percentage of overall Canadian exports to these countries (see Table 5.1). Affinities in their democratic values also militate for a deeper engagement with Nordic countries. It is unlikely that Quebec's presence in these countries will be removed as it was with the closure of Quebec's bureau in Moscow, after Western sanctions were imposed on Russia following the Ukrainian conflict. Nordic countries represent a safer investment, as destabilizing events are unlikely to close the bureau.

Closer to home, potential exists to increase cooperative federal-provincial ties, in the North American Arctic (NAA). Here, the Government of Quebec could act, in concert with the Government of Canada, to increase the coordination between subnational entities in their immediate Arctic backyard.

The NAA is still at a stage of experimentation. Some nascent initiatives have been undertaken but much remains to be done.

2 For a full list, see www.mrif.gouv.qc.ca/en/ministere/representation-etranger.

Table 5.1: Quebec Exports to Arctic Countries in Millions of Dollars

	Quebec's Exports to Arctic States (except the United States and Russia)	Percentage of all Canadian Exports to Arctic States (except the United States and Russia)
2013	438	14%
2014	623	17%
2015	885	26%
2016	949	30%
2017	1,172	30%
2018	879	20%

Data source: Institut de la statistique du Québec, 2018.

The NAA in Construction

The NAA represents a glaring gap in Arctic governance and cooperation. There is enormous potential for the federal, territorial and provincial governments to develop cross-border regional cooperation in the NAA.

On this front, momentum can be initiated by conceptualizing the NAA as a whole, as in the initiative led by John Higginbotham and Jennifer Spence (2018). The project managed to mobilize NAA regional governments, with Alaska, Greenland, Nunavut, Yukon and the Northwest Territories agreeing that infrastructure planning could act as a pathway to further cooperative endeavours (ibid.).

As an outcome of this project, subnational governments affirmed their “desire to continue to work together to identify areas for collaboration, to leverage associated expertise and to craft strategies” (ibid., 5) — a positive development. Leaders, however, expressed the clear limitations of this type of process: “Leaders were...clear that they face many pressures on their time and limited resources. Consequently, they emphasized the importance of identifying practical activities for collaboration” (ibid.).

Cross-border arrangements would meet the need for pragmatic cooperation, but only by focusing efforts at the subregional levels. The Barents cooperation in the European Arctic is a good illustration of such necessity. The Barents Regional Council has involved subnational governments since the early 1990s and fosters cooperative endeavours on cross-boundary issues among themselves. Cross-border cooperation is well developed in North America, both on the East and West coasts. Taking the subregional approach would not subsume the NAA into one unified region but rather into two distinct ones: one centred around the Western NAA (Yukon, Alaska and the Northwest Territories) and one centred on the Eastern NAA (Nunavut, Greenland, Quebec, and Newfoundland and Labrador).

The Western NAA has already developed key initiatives to discuss and manage common issues. For example, the Pacific NorthWest Economic Region has an Arctic caucus (comprised of the governor of Alaska and the premiers of Yukon Territory and the Northwest Territories), which has as its central objective “to provide a forum to share information, discuss issues of mutual concern, [and] identify areas for collaboration

between the three jurisdictions.”³ The Beaufort Sea Partnership (BSP) is another example of such initiatives, bringing diverse Canadian stakeholders together (federal agencies, territorial administrations, municipalities, Indigenous groups and so on) to develop inclusive mechanisms to manage the Beaufort Sea area.⁴

In contrast, the Eastern NAA does not have an equivalent cooperative mechanism. Creating a coordination body for the subregion to facilitate cooperation between administrative units and act as a forum to manage subnational governments holds potential. The shared interests of Nunavut, Quebec, Newfoundland and Labrador, and Greenland could be furthered in such an initiative.

The NAA and the Government of Canada

The Government of Canada could facilitate NAA cooperation. The Government of Canada should capitalize on the good working relationships established during the co-development of Canada’s new Arctic policy. The precedent set by this policy could go a long way toward convincing Northern leaders that such fora can be inclusive of and responsive to Northerners.

The Eastern NAA will require more significant cross-jurisdictional cooperation, particularly as Greenland is pushing to assume more self-government and a greater international role (Ackrén 2019). Canadian exports to Greenland have also increased by 66 percent since 2015,⁵ and occasional disputes on fisheries only highlight the necessity for further engagement with this subnational entity.

This Eastern NAA forum could resemble the BSP, with participation from diverse stakeholders. A multi-level forum involving Indigenous organizations could have the added benefit of helping to reduce historically tense relations between Quebec and Newfoundland and Labrador. Such a forum would be served by being modest in scope and would begin a much-needed dialogue and exchange in the Eastern NAA. As such, the initiative would act as a springboard for further cooperative endeavours.

On this note, the Government of Canada should mobilize efforts to support the Government of Quebec’s engagement with its North in a more meaningful way. The Government of Quebec has resources unmatched by other subnational governments in the Eastern NAA.

3 See the Pacific NorthWest Economic Region’s Arctic caucus website at www.pnwer.org/arctic-caucus.html.

4 See the BSP website for further details: www.beaufortseapartnership.ca/. On this note, the BSP would gain by including Alaska in its work, as the state is a crucial partner in the subregion.

5 According to the Institut de la statistique du Québec at www.stat.gouv.qc.ca/commerce-international/#/scian-naics.

Conclusion

The diplomacy of subnational governments or paradiplomacy inspired numerous concerns when it started to emerge, mostly centred on the fear that sovereign states would lose precious prerogatives in the international realm. Canada and Quebec Arctic policies prove that paradiplomacy can act as a force multiplier rather than a zero-sum game. Three recommendations emerge out of this short analysis. First, the federal government should continue to invite and encourage participation of provincial governments in the work of the Arctic Council and other meaningful regional fora. Second, the federal government and the Government of Quebec should explore the possibility to open a Quebec bureau within the Canadian embassy in Norway. Finally, the Government of Canada and the Government of Quebec should join forces in order to encourage and foster a forum to share areas of cross-border cooperation in the Eastern NAA. This latter initiative would necessarily be conceptualized as a first step toward further cross-border exchange.

Cooperative federalism encourages partnerships between different levels of government. Areas of cooperation and shared interests between these administrations prove, in many cases, to surpass issues of fundamental disagreements. Such partnership should be fostered and encouraged.

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Residential street in Iqaluit, Nunavut



Interviews with Jane Glassco Northern Fellows

Jennifer Spence

Introduction

Sheila-Siila Watt-Cloutier

Two summers ago, I was invited by the Gordon Foundation¹ to attend the Jane Glassco Northern Fellows seminar in Iqaluit, Nunavut, as a mentor. I arrived from my hometown of Kuujuaq, Nunavik, where I had recently moved after having lived in Iqaluit for 15 years.

Still reeling from several recent community and family losses, I was grieving and, perhaps for the first time in my life, losing some hope for the future of our youth. I was overwhelmed with emotions, but I was ready to give what I could to these young people from across our north. By the end of the four-day event, I felt I had been able to play my part, but more than that, I received the gift of inspiration and my life was enriched by spending four days with this mature, deep-thinking and wise group of young people.

As I read through the following three interviews with Angela Nuliyok Rudolph on education, Kristen Tanche on mental health and Melaina Sheldon on policing and judicial systems, I am reminded of some of my past work attempting to change policies and systems to better reflect our cultures.

¹ The Jane Glassco Northern Fellowship is a policy and leadership development program of The Gordon Foundation (www.gordonfoundation.ca). The fellowship recognizes the leadership potential among young northern Canadians who want to address the emerging policy challenges facing the North. The program offers skills training, mentorship and networking opportunities and is intended for Northerners between 25 and 35 years of age who want to build a strong North that benefits all Northerners.

A key strategic advantage of Indigenous peoples is that we have to think about how to combine the best of our heritage with the best of what can be found outside our traditions. This can be difficult, but it allows many of us to think deeply about cultural design and development.

In 1993, I was involved with the Royal Commission on Aboriginal Peoples and I met and heard Professor Joseph Kalt from the Kennedy School of Government at Harvard University. They had just finished an intensive study on the sustainability of American Indian bands and reservations to see what was working, what wasn't working and why.

The ultimate conclusion of this study was that the key to economic development is not necessarily resources, it is effective self-government. Furthermore, they found that the design of the institutions of government have to match the cultural norms of what is legitimate or real to its people. This cultural match is critical for effective self-government and it appears to be the issue all around the world where colonialism has occurred with Indigenous peoples.

As an Inuk, I have been part of the tumultuous change of our Inuit world. I have experienced the shift from traditional life to this modern high-tech life in a very short period of time. I have had my own struggles and witnessed the monumental struggles of fellow Inuit, including colleagues, friends and family. I have been part of research that looked deeply into issues of individual and community empowerment, and I agree fully there must be a cultural match in all of our training, institutions, policies and programs.

All the more, this cultural match is important to have in times of rapid change amid the growing complexity of the things that people must be able to deal with if they are to survive. It is critical for our communities to know as much as possible about what lies ahead in order to keep control of our changing lives, not only to be able to survive the change, but to be slightly ahead of the game.

As a people living the negative effects of tumultuous change that has impacted our lives, we believe any new organizations, institutions and governance systems and their policies must have as their focus human development — allowing people to understand freedom and living with freedom. As a people, we have been groomed to certain dependencies and many of our new institutions sometimes unknowingly have fostered this dependency. I believe we need to relook at all our policies, programs, agencies, organizations and governance systems to be sure they are being effective in how they deal with the issues at hand. We need to refocus and restructure our existing learning, education, judicial and health institutions. Well meaning as they may be, unfortunately many of what we took on as the “new ways” have helped to create dependencies; we must now work hard at making our even “newer” programs and institutions liberate us from dependency rather than at producing further dependency.

The larger issues of healing, coping and life skills, being in control of one's life and destiny, creating strong healthy boundaries, and living with freedom from addictions and violence must be dealt with in order to effectively begin the process of change from dependence to independence.

One of the important ways forward is to ensure that all programs and institutions incorporate Indigenous culture and wisdom throughout the process of change. Often we have taken on already existing institutions and then attempted to “add on” to these structures our Inuit culture, language, values and principles. It truly has been like trying to put a round peg into a square hole. It has not worked well, if at all.

Angela, Kristen and Melaina certainly address these very issues in their interviews, and we must be open to listening to these younger voices of the North. They live the realities and they speak from the heart and soul of our northern communities. They are the hope, as well as the solutions, we seek.

Sheila-Siila Watt-Cloutier, a senior fellow at CIGI and a mentor for the Jane Glassco Northern Fellowship, is an Inuit environmental and human rights advocate and the author of *The Right to Be Cold* (Penguin, 2015). Sheila was born in Kuujuaq, Nunavik (northern Quebec), later living in Iqaluit, Nunavut, for 15 years, and was raised traditionally before attending school in southern Canada and in Churchill, Manitoba. Sheila is the past chair of the Inuit Circumpolar Council (ICC), an organization that represents 155,000 Inuit in Canada, Greenland, Alaska and Russia. She contributed significantly to ICC Canada’s Institution Building for Northern Russian Indigenous Peoples’ Project, which focused on economic development and training in remote northern communities. In 2007, Sheila was nominated for the Nobel Peace Prize for her advocacy work in showing the impact global climate change has on human rights. In 2015, she was one of four laureates awarded the international Right Livelihood Award, considered the alternate Nobel Peace Prize, which “honours and supports courageous people and organisations that have found practical solutions to the root causes of global problems.” Among her many other awards, she received the Climate Change Award from the Prince Albert of Monaco Foundation in 2017.

Education Policy in the North

Angela Nuliyok Rudolph, interviewed by Jennifer Spence

As a former teacher, you have been on the front lines of education in the North. What made you decide to take an interest in education policy?

Before I talk about my interest in education policy, I would like to preface that by speaking about my interest in going into teaching in the first place. When I graduated from high school, I went into the Nunavut Sivuniksavut program and I learned really amazing things there about who I am as an Inuk, the history of Nunavut and my own Inuk history.² I thought it was really important information that teaches Inuit how to be valuable Inuit within their own communities and I was really disappointed that I didn’t learn this in high school. That was the reason I went into teaching, so I could take what I had learned and teach that in my home community as a teacher.

2 See www.nunavutsivuniksavut.ca.

But I only did a year of teaching, because I realized that as a teacher you don't have the power to make the changes to curriculum that are necessary and important for Inuit. I had to teach the curriculum I was given, and an important puzzle piece to changing the way education is done is through policy. This is how I gained an interest in education policy.

I knew from my experience as an undergraduate student in Southern Canada (I graduated with a bachelor of arts and a bachelor of education) that there weren't many programs in Canada that offered post-secondary programs relevant to Arctic Canadian students, specifically Indigenous and Inuit students. There are very few programs that are available and, if they are available, they are in a Southern context. I really felt out of place going to school in a Southern university in a Southern town. Often I was the only Inuk, or maybe there were one or two other Inuit or students from Nunavut or the Northwest Territories, so I really felt out of place.

When I knew I wanted to pursue education policy, I started exploring Arctic policy programs that were offered by Arctic universities. I learned that Canada was the only Arctic nation that doesn't have an Arctic university. I began pursuing programs at Arctic universities in Alaska, Russia and Norway. I applied to a few graduate programs at the University of Alaska Fairbanks, which has an Arctic and Northern Studies Department with an Arctic policy program. I applied to that and I got in. While I was there, I focused on Arctic Indigenous policy, specifically policy related to Inuit youth and educational programs. Luckily, at the same time, I also learned about the Jane Glassco Northern Fellowship and I thought those two programs would complement each other well.

From your perspective, what are two or three key factors that make delivering education in the North distinctive?

There are two factors that I think are very important to consider when looking at education in the North. First, there are a lot of social factors that make it difficult for youth to really focus on education. For example, living in overcrowded housing, often without having enough space to sleep, and that affects their performance in the classroom. I think it's really important to understand where youth are coming from and how it affects their education.

Often, I would have kids come to school to have a quiet place to rest and to sleep and, because I was from the community and I understood the living conditions that some of my students lived in, I would allow students to sleep in class. This was really frowned upon by other teachers, who might not have understood where these students were coming from. I understood the value of rest and how it affected student performance and so I made space for that in the classroom. I think it's really important to understand the social factors that affect students' performance in the classroom. Currently, in Nunavut, we have such low graduation rates, and I think it's partly because of issues or conflicts that happen in the classroom because teachers don't understand where students are coming from, and they don't make the necessary changes in their classroom to accommodate the students and the social factors they are experiencing at home.

The second factor is that Inuit have a different culture and way of doing things, but we don't have our own curriculum. We've taken Alberta curriculum objectives and we deliver

programs to meet Alberta curriculum. I don't think that allows for Inuit students to be successful, because it's expecting Inuit students to meet the objectives of a curriculum that doesn't account for unique Inuit cultural practices and traditions. In our culture, students come to class and are prepared to listen. They come from an oral culture where listening is a really important trait. Curriculum brought up from the South will often ask students to generate discussion. Inuit students may not be able to generate discussion because they come from a different cultural way of doing things. It's a real disservice to our Inuit youth to use Alberta curriculum. It's really important to use curriculum that is developed for Inuit, so it allows them to be successful within their unique cultural context.

In recent years, a growing number of leaders and experts have suggested that improving education in the North is a cornerstone for addressing many of the social and economic challenges that Northern communities face. What policies or initiatives have you seen put in place as a result of this recognition of the importance of education?

This is one of the most exciting questions for me. When I was a teacher, I taught Aulajaaqtut — a Nunavut-specific course. It's similar to career and life skills courses that are offered throughout Canada. Nunavut was able to create their own career and life management course — Aulajaaqtut.³ A key focus to developing it was addressing the high suicide rates in Nunavut. This course had to consider the social issues that Inuit face that may lead to high suicide rates in Nunavut and address those social issues, while also teaching really important career and life management lessons.

I think this course is one cornerstone of addressing many of the social and economic challenges that face Northern communities; however, I don't think many teachers are prepared to teach this course. They don't understand its importance, so it's often not taught to its potential. I think it comes from a place of not understanding the social factors that impact Inuit youth and their lives — and not being trained to fully teach this course because there is no program at Southern universities that prepares Southern teachers to teach Aulajaaqtut. So I don't think it comes from a negative place of not trying to understand how to teach the course. I feel like a lot of teachers see this course as a writeoff, but I think it's one of the most important courses to be offered in Nunavut schools. It really has a lot of potential in harnessing Inuit skills, knowledge and understanding.

When I taught this course, one of the learning objectives was that students understand how to be meaningful contributors to society. I gave my students free rein to decide how this course objective would be applied for them. I asked them to go into the community to ask their friends and family how they could be meaningful contributors to society. The topic that came from their research was on the importance of language revitalization. So I developed a unit to meet this objective that focused on language revitalization in Gjoa Haven and the students absolutely shined. They did further research in school to really understand the issues around language revitalization and what they can do to address it. Then they developed this plan to work with a local grocery store. They developed Inuktitut language translation for products, because in their research they learned that a lot of elders

3 See <https://nunavutnews.com/nunavut-news/curriculum-seeks-to-produce-healthy-whole-students-by-graduation/>.

were buying the wrong products at the store because there was no translation or they didn't know how to read expiration dates on food. They worked with the local grocery store and interpreters in our community to develop these signs that they could hang up on the shelves at the grocery store with language translation and also taught people in the community where food and items could be found in the store. That's why I think this course is so important because it has so much potential to harness the amazing skills and knowledge that our youth have in the community.

If you could propose two or three policy changes that would contribute to improving education in the North, what would they be?

First, I would strongly recommend that we do away with the Alberta curriculum. It is really not the best curriculum to be teaching Inuit youth in Nunavut how to be meaningful contributors to society as Inuit. It's just very frustrating and confusing and I think it should be replaced with culturally relevant education. From my time at the University of Alaska Fairbanks, where there is a huge Inuit population in the university — and not just the students, but professors, who do the course content and the material, who go out in the communities and do research and development — I learned that it is possible to create curriculum based on culturally relevant teachings. And I've seen the amazing transformative power of it. Nunavut and Inuit should be focusing on culturally relevant teaching materials. It would truly change the education landscape in the Inuit homeland.

Second, we have a really big need for an Arctic university. When I was teaching the Aulajaaqtut course, there was one lesson where students had to plan five years in advance and understand how to set up their life to reach those goals. I found a lot of students were frustrated with the lack of opportunities to pursue further education. A lot of youth didn't want to pursue education in Southern Canada and they often look to programs at the Nunavut Arctic College, but [the college has] limited capacity to deliver programs. A lot of the youth wanted to pursue university programs, but they wanted to pursue them in their homeland, and I think it's really important to have an Arctic university so our Inuit youth can stay at home and pursue further education. When they graduate high school, a lot of our Inuit youth don't necessarily see why their education is important because there are no stepping stones for their education to progress. They need a sense of purpose outside of high school.

It's important for Inuit to have a university that accepts their experiences as an Inuk. Nunavut has a low high school graduation rate, but that doesn't mean that we don't have Inuit that aren't educated in other ways. We have so many Inuit that have not pursued formal education, but they received really wonderful education from their community, from their elders, from their hunting experiences and from their cultural experiences. I think it's really important to have a space where those Inuit can further develop their skills. That's why I think it's important to have a university in an Inuit homeland that would recognize those Inuit youth as valuable and meaningful resources within our community. We should go further in developing their skills and knowledge.

From your perspective, who are the key “actors” that need to be involved to ensure that changes to the education systems in the North are a success?

It’s important to include people of the North. If we are addressing education in Nunavut, it should be Inuit. If we are addressing education in a part of the Northwest Territories that are Dene homelands, the Dene should be the key players driving the changes because they know what needs to happen. Indigenous peoples in the North know what needs to happen to see positive change, but we don’t often have the resources or the space to be able to make those changes. So I think it’s important to be the driving actors.

Governments should play a supporting role. Indigenous people in the North know the changes that need to happen, but they lack the resources, the space, capacity or power to make those changes. The governments often don’t know what changes need to be made to make a positive impact, but they have all the resources, all the capacity, all the space and all the power to do it. They should play a supporting role in the back seat where the Indigenous peoples are the drivers.

Angela Nuliayok Rudolph is an Inuk from Gjoa Haven, Nunavut. She is a graduate of Nunavut Sivuniksavut, where she gained her passion and interest in Inuit education. Angela then completed her bachelor of arts and education degrees to become the first certified Inuk high school teacher in Nunavut. She realized that the issues in education would best be addressed through a policy approach and pursued a master of arts degree in Arctic policy from the University of Alaska Fairbanks. She is an alumna of the Jane Glassco Northern Fellowship and the Arctic Summer College Fellowship. Angela now works for the Department of Education, Culture and Employment in the Northwest Territories, where she works on redeveloping the NWT high school Northern Studies course.

Angela’s policy brief “Breaking Down Colonial Borders in Inuit Nunaat Through Education” (May 2017) is published online at <http://gordonfoundation.ca/resources/>.

Mental Health and Well-being Policies in the North

Kristen Tanche, interviewed by Jennifer Spence

What makes you interested in health and mental health policy in the North?

Really, my personal story: my education and my experiences living in the Northwest Territories (NWT) in smaller communities in the North. I grew up all over the NWT.

I really started to become interested in mental health and wellness policy when I started taking the social work program in Yellowknife through Aurora College. I was always interested in the betterment and health of the people of the NWT, but after taking this program, I began to see more and more how mental health policy affects everybody’s lives on a day-to-day basis.

I've also had the personal experience of growing up in a small community and trying to access health services that were not accessible to me or weren't really culturally appropriate. I wasn't able to find a counsellor that I could speak with when I was struggling with addiction. I was really trying to seek some additional help and I couldn't find that in my community. It wasn't until I moved to Yellowknife that I was able to access a psychologist and access group programming on a regular basis. I really thought that shouldn't be the case. I should be able to access services that are culturally appropriate and applicable to me in my own community. I shouldn't have to travel six hours by road to access services.

I've also worked in my community at a local leadership level in different capacities. I was formerly a council member of Liidlii Kue First Nation and a member of the Fort Simpson District Education Authority. Through those experiences, I was able to see the impact that policy can have on community members. I was also able to see where communities were and I saw that we needed to go a long way in terms of mental health and wellness policy to really help improve our community. There is still quite a bit of work to be done.

Many Southerners have a hard time understanding the challenges that communities in the North face when trying to access health and mental health services. What are two or three messages you would like to share with them to help them understand?

The reality of living in the North is quite different than living in the South. Not only do we have a very unique culture, we also have a lack of access to services. Many of our communities are remote and fly-in only. People have to travel long distances to access health services. Our access to health services is quite different from Southern places.

We also have very unique cultures. The NWT has small communities and, within those communities, cultures and traditions vary. There are different cultural practices and dialects just within my region. And when you look at it at a territorial level, there are several different regions — there's the Inuvialuit, the Gwich'in, the Sahtu Dene and Métis, the Dehcho people, the Tłı̄ch'o and the Akaitcho — and each community is so unique.

Many of our mental health professionals come from Southern Canada and they are placed in communities. They don't understand how our communities work and this can be really difficult. People need to be immersed in the community more and try to really understand the place they are working in.

There are also issues with high turnover with health care staff in communities. Health care professionals come, they are there for a very short period of time, and then they leave and new people come. That in itself is very problematic.

Are health care professionals working in the NWT provided with training and education so they can understand the communities they are arriving in?

Yes, they are. The Government of the NWT has been doing quite a bit of work on changing how this training is delivered. Previously, there would be a video that was shown to new government employees about Indigenous cultures and communities in the NWT. I know they are working on changes to this training.

In the work I have done speaking with my community members, they have said that they also feel there is a need for more Indigenous health care professionals. There are challenges with hiring staff. I think we need to have more local and Indigenous service providers in communities.

Over the last several years, there has been increasing attention on mental health issues in the North. Why do you think that is?

Certain things that have been happening at the national level have helped. The Missing and Murdered Indigenous Women and Girls inquiry travelling around Canada and the Truth and Reconciliation Commission have definitely helped bring attention to mental health issues. There are certain organizations, like the Arctic Indigenous Wellness Foundation, that have really helped highlight some of the issues that we're facing in the North.

Different news sources and social media have also played a key role. They have helped bring some of the issues in the North to the forefront for people across Canada.

It's also the strength and resilience of the people in the North speaking out about the issues that they are facing — there's suicide and issues with drugs and addiction — and often you will see a lot of that being talked about. People are brave...they are really starting to talk about these issues. The Truth and Reconciliation Commission has done a great job of linking a lot of issues to colonization and the effects of residential schools, and people are really starting to link those things with addictions and social determinants of health.

Do you think this increased attention on mental health has helped?

Yes, it has helped because it's bringing attention to the issue. People don't always want to talk about the elephant in the room, but when people do start, we can start talking about solutions. If everything is pushed under the rug, to me that really signifies that there is shame. I don't think that there should be shame when it comes to mental health and addiction issues. If people don't start changing the social stigma around those words, how are we ever going to heal — as communities, as a territory, as a country? People really need to speak about these issues, so we can move on and move forward and continuously work on them.

Are there particular health and/or mental health policies, programs or initiatives that you think are having the biggest impact right now?

There is still a lot of work to be done, but in the NWT there has been a lot of work done to support land-based programming in healing. This has had an important impact. I also work for Dehcho First Nations, which is a regional Indigenous government. They do a lot of work with on-the-land programming. On a personal level, I have experienced the benefits of on-the-land programming. I've seen the impact on other people, in my day job. Programs that involve better supporting and providing resources for local Indigenous governments and communities to deliver programming have had really great impacts. Getting people back to the land, no matter what your cultural background, is healing. These types of policies and programs have a really great impact on communities.

For far too long, and it's still happening, there is often a top-down approach to health services. People in regional centres and Ottawa make decisions for communities on mental health and well-being issues. I completely understand that for health services we need professionals, like psychologists, to help inform policy. But I also strongly believe that policies will never work for communities if policy makers are not speaking to communities. Part of the reason on-the-land programs are effective is because they are delivered by communities. People know their community best and they know the land best. We know our territory and we know what's best for our community.

I'm also very interested in addiction programming in the NWT. Right now, there is no residential addiction treatment facility. All of our people are sent to Southern Canada if they want to seek help. People are calling for residential treatment facilities in the North, but that hasn't really come to fruition. People in the NWT are saying we need more services for addiction, but services that are applicable to us. In an era when we are talking about our decolonization, it's a really great time to talk about decolonizing mental health and wellness services.

There is still a lot of work to be done. There are limitations to the type of programming being delivered. It's often short-term funding and there is a lot of administrative work involved with accessing funds for on-the-land programming.

From your perspective, what more can the federal government do to support Northerners' well-being and mental health?

A top-down approach doesn't work. There need to be a lot of changes with mental health and well-being policies, especially as related to Indigenous communities in the North. For the most part, communities in the NWT are largely Indigenous, but there are only a few reserves like the ones in Southern Canada. And yet, a lot of the policies and funding at the federal level are organized around on-reserve and off-reserve Indigenous peoples. Often federal policies are created without really knowing about our communities, but these policies have a big impact on our communities and peoples' lives.

We still have a long way to go, but it's very promising. Indigenous communities have taken care of their mental health since time immemorial and if they are given the right resources, they can continue to do that. After so much power being taken away from Indigenous peoples, that power needs to be given back. The government system has so much power over our mental health and wellness because they are the institutions that deliver our services. They need to work more with communities to create services that are not top-down.

We often have to create programs to fit the funding pot and it's such a big challenge. We may have an idea for a program, but then we have to navigate the system. We have to know — which department might fund this? Do we have to write a proposal? We have to make sure we are hitting these points or that our program fits in this box that the government department funds. And there is so much administration that goes along with that. We are continuously having to create programming that fits in the box.

There are some agencies that are really trying to change that, like the NWT On The Land Collaborative.⁴ They are an organization that has all different funding sources, so behind the scenes they figure out how your project fits different funding.

Kristen Tanche is Łı́ıdlı́ı Kų First Nation, Dehcho Dene. She is also of Icelandic and Settler Canadian ancestry. She was raised in the Northwest Territories for the majority of her life. Through Dechinta, Kristen attended three semesters of post-secondary land-based education. She recently graduated with a social work diploma program in Yellowknife and hopes to continue her education either in post-secondary education or from Elders and Cultural Knowledge Holders on the land. Kristen currently works for Dehcho First Nations on regional on-the-land programming and with the Dehcho K'ehodi Guardian and Stewardship Program. She is passionate about the people in her community and about the well-being of the people of the North.

Kristen's forthcoming policy paper looking at addictions programming in Fort Simpson, NWT, will be published on the Gordon Foundation website in the fall of 2019.

Canadian Policing and Judicial Systems in the North

Melaina Sheldon, interviewed by Jennifer Spence

What first sparked your interest in the Canadian policing and judicial systems and how they work in the North?

What sparked my interest was personal experience and it was extremely eye-opening.

Based on that experience, I felt I needed to learn more about how policing and courts work in Northern communities.

I wrote a policy paper⁵ that was published in 2017, and I still nod my head in understanding and empathy when new stories of the use of excessive force by officers continue to come out. My experience was not unique or rare, and little has changed in the five years since many of the barriers I faced continue to exist. The tensions in the relationship between First Nations individuals and the RCMP [Royal Canadian Mounted Police] are still there and still need work.

Are there one or two aspects of the Northern experience with the policing and judicial systems that you think are particularly interesting?

There are many interesting issues here. I feel that we [The Gordon Foundation] are continually trying to address them by bringing forth Northern voices and acknowledging that the North of Canada is different than the South of Canada. There are changes that could be made to the policing and judicial systems within the territory that I believe would

4 See www.nwtontheland.ca/.

5 See <http://gordonfoundation.ca/resource/department-of-justice-yukon-policy-memo/>.

make a huge difference to the over-incarceration rates of Indigenous peoples. For example, the Yukon and the North recruit and hire a majority of “new” officers, individuals who have recently graduated high school and are sent North to “cut their teeth”; whereas, I believe, more experienced officers fare better in the North, as they have more experience in the field. Our communities are smaller and tightly knit, and officers have an opportunity to be a part of communities, unlike [in] larger urban centres in the South. In the North, officers are generally based in a community for a two- to three-year term and if they want to stay longer, they have to apply and provide a reason for wanting to stay; otherwise, they are relocated to a new northern community or to the South. So even where an officer may have gained trust and understanding within a community, those established relationships are disrupted when the officer leaves.

Something else that is interesting is, in the North, a lot of petty crimes are taken very seriously and sent to trial, whereas in Southern Canada there might be more of an acknowledgment of a first offence by a judge and a “slap on the hand.” The policing and judicial systems in the South maybe have bigger fish to fry and an excess of cases. In the North, we’re not as big as the South when it comes to crime. Another interesting thing is our communities are smaller, more connected; therefore, the effects on our communities are more deeply felt.

The North and the South are different, but in the North we are facing Southern issues. All throughout the North we have hard drugs, we have the criminal and gang activity that accompanies hard drugs, the sex trafficking, overdoses and violent crime. And we are a small place! We are not big cities — a single incident has widespread effects. We need different ways of thinking to address those Southern issues through a Northern lens.

We need to acknowledge that new officers are very eager to start their jobs. In the Yukon, we are trying to have all officers arriving to the territory trained in a two-day Yukon First Nations 101 training session where they get a historic view of the relationship between the Yukon and the RCMP and an understanding of the evolution of Yukon First Nations and self-government, so they have a greater awareness of the Yukon’s cultural milieu. Officers are also introduced to Yukon First Nations’ cultures and governance systems because new officers might have experiences with Southern First Nations, whose historical experience varies from that of Northern First Nations. We do not live on reservations in the North. We are empowered with self-government rights and authorities that are made in agreement with the territorial and federal governments. New officers must be aware of these intrinsic differences, as it may influence their individual approaches to policing.

I was able to deliver this training to a group of police officers and alcohol and drug addiction service providers. The change was actually immediate. One officer in the room leaned back in his chair, arms folded across his chest, with a perturbed look on his face for, I presume, having to take two days off for the training. At the end of the two days, this same officer was expressively excited and enthusiastic about what he had learned, and in the feedback said he wished he’d had the information before arriving in the territory.

The RCMP has had a long presence in the North. From your perspective, how have the relationships between the RCMP and Northern Indigenous communities changed over time?

It's challenging. The historic relationship has led to a lot of systemic issues. The RCMP first arrived in the Yukon during the gold rush and were later involved in aiding in the enforcement of the Indian Act. Yukon-based RCMP were a part of enforcing the law: physically taking First Nations children into residential schools, threatening arrest should parents not willingly "give" their children up and enforcing segregation laws. And that is the start of the First Nations relationship with the RCMP. At the same time, there are positive historical stories of RCMP officers who would help during times of sickness, transporting medicine in horrific weather conditions, delivering mail and babies and saving lives on rescue missions.

Now, especially in the Yukon, I feel that we are making huge advances in building partnerships with the RCMP. There are partnerships with victim services and the relationship with First Nations communities is really improving. Things are more about openness and how we can work with each other to build safer communities.

Is there more that can be done to improve the relationships between the RCMP and these communities?

From my view, at the policy level in the North, we should have the option for an officer to stay in a community for more than two or three years at a time. I think there could be more done in the way of RCMP de-escalation training and practices. Because we are a small population, there could be more interaction between plainclothes officers and community members, as well as directed public education about individual rights under the law and the role of the RCMP in our communities.

We have these historical trauma-related stereotypes from both sides of the table. First Nations hold stereotypes of RCMP and RCMP hold stereotypes of First Nations. We need to build trust. I currently sit on the Yukon Police Council and have the opportunity to travel to communities and speak with officers, service providers, community members and First Nations leadership. From these conversations, I recognize a lot does come down to the individual. There are officers that are really enthusiastic and engaged, interacting with the local schools and going out on the land with Elders; and there are officers who keep more to themselves. Where I hear success being noted in the territory is within those communities with the officers who are interactive, have established relationships and are thus able to make judgment calls when an incident is serious and/or when it could be de-escalated.

In recent years, the media has placed increasing attention on the high incarceration rates of Indigenous peoples in Canada. Does this story fit the Northern experience?

Yes, just as in the South, Indigenous peoples make up a majority of the incarcerated population in the North.

When the judicial system is incarcerating people for non-violent, petty crimes, it's often a downward spiral for the accused. Let's say a young man is arrested and charged with a

petty theft, and one of his conditions is that he remain sober for 30 days. But the individual suffers with alcoholism, he is an alcoholic. In all likelihood he will break this condition and the cycle of re-incarceration will perpetuate. This is only one example, and does not reflect that now the young man will also go forward in his life with a permanent record.

This brings us to the public education piece.

If I go back to my personal experience with the system, it's recognizing that I have a university degree, a full-time job, I have a regular income, a safe home, access to the internet and resources, not to mention access to community and people who are in positions of power and knowledge, and with all of this "privilege" was still challenged to find the resources to assist me. Then I compare my privilege to that of a younger or more marginalized person who may not have access to any of those same resources. If an individual lacks a support network, does not have access to resources and lacks the appropriate education, it is almost a guarantee they will be lost in the system.

What story or stories would you tell to help policy makers understand the Northern experience?

There needs to be a greater recognition of each other on a basic human level.

A step toward breaking the cycle of mistrust is educating each other and being open to collaborative and new ways of approaching policy issues.

When it comes to policy, I think we all need to acknowledge the history in the North, as told through a Northern lens and what stems from that. It is the foundation that we stand on. This is our shared history whether we like it or not. It is through education and through the South physically experiencing the North that we can debunk stereotypes we hold of each other and be inclusive of dual world views in making our policy solutions.

What changes have you seen in recent years to government policies and programs that serve to improve the Canadian judiciary system for Northerners?

There is often a separation made between the RCMP and the judicial system, but there is a link there that we fail to acknowledge. For the judicial system in the Yukon, Gladue report writing is now common knowledge and being utilized.

First Nations court workers are available to assist those within the court system, and self-governing nations are taking steps to manage their own laws, sentencing and court systems. Circle sentencing was being utilized in the 1990s with great success and could play a larger part in reducing current incarceration rates, especially in the North, where it's really hard to dismiss how things are interconnected — mental health, addiction, being caught in the court system — these are all part of the same cycle. If we look at things more holistically, there might be a chance that things can improve.

When it comes to policing in recent years, Yukon RCMP have had more of a community face and have demonstrated flexibility in their policies through partnering with Victim Services and working with a third-party reporting process, so individuals who have experienced sexual assault do not have to report their assault directly to the RCMP. Recently, Yukon RCMP have also partnered with local First Nations, like Kwanlin Dün

First Nations in Whitehorse, who have trained their own community safety officers. Whitehorse RCMP have placed two of their members in the First Nation to work in parallel with the community safety officers. Efforts are being made.

We also have the Yukon Police Council, which I am a member of and that is representative of community voices. The council recommends policing priorities for the year, which are gathered from community visits. There is a community advisory board, which is an independent body that reviews and makes recommendations on the administration of the Corrections Act, regulations and programs, as well as an Elders advisory group, which meets once a month with the Whitehorse Correctional Centre management to provide counsel on aspects of programming and operations. We need to continue to build on those things and continues to be flexible in our policies to better serve communities.

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Melaina's policy brief "Department of Justice Yukon Policy Memo" (May 2017) is published online at <http://gordonfoundation.ca/resources/>.



Arctic Council Chair Leona Aglukkaq of Canada passes a ceremonial gavel to US Secretary of State John Kerry (2015)



Global Arctic Leadership in an Era of Cooperation and Competition

P. Whitney Lackenbauer

Canada's intent to play a leadership role in circumpolar affairs is, at its core, about advancing domestic priorities related to social and economic development, environmental protection, scientific and traditional Indigenous knowledge, and cultural diversity. Upholding a rules-based international order in the Arctic, with due respect for Arctic state sovereignty and sovereign rights, is essential to this outcome. Accordingly, discerning ways to proactively engage Arctic and non-Arctic states that are expressing commercial, scientific and military interest in the region — and balancing new economic opportunities with impacts that activities have on Northerners and Arctic ecosystems — remain central international considerations to any Arctic policy. The dedicated efforts of Prime Minister Justin Trudeau's government to engage Northerners (in particular, Indigenous peoples) as co-creators of a policy vision that reflects their lived realities and desires confirms a people-centric strategy that places human and environmental security at the forefront.

To realize its aspirations of “global Arctic leadership” (LeClaire 2018; Government of Canada 2019), Canada continues to turn to existing multilateral organizations to promote its interests in the circumpolar world. It also should enhance its efforts in highlighting and promoting bilateral relationships that advance its interests, in particular those with the United States, the Kingdom of Denmark/Greenland, Norway, Russia and China. While other essays in this report also examine these relationships, the intent here is to situate these opportunities in a broader context that moves beyond the limiting “conflict or cooperation” binary and seeks to carve out an Arctic leadership role for Canada in an era of increasing competition and opportunity for constructive international engagement.

Although the election of Justin Trudeau to form a Liberal government in October 2015 marked a significant political departure from the tenure of Prime Minister Stephen Harper's Conservatives, the main substantive elements of Canada's Arctic policy, which have remained remarkably consistent since the 1970s, have not fundamentally changed. A domestic focus on Indigenous rights, conservation, and the health and resiliency of Northern communities has been complemented by a renewed commitment to global climate change mitigation and the benefits of co-developing policy (or, at least, legitimizing existing policy trajectories) through deep consultation with Northern stakeholders. In bilateral statements with President Barack Obama, Trudeau offered a model for Arctic leadership that placed a clear priority on Indigenous and "soft security" issues and abandoned the classic sovereignty-focused messaging of his predecessor (Trudeau 2016a; 2016b). Similarly, his government's commitment to produce a new Arctic and Northern Policy Framework indicates a concerted emphasis on environmental conservation and improving the socio-cultural health of Indigenous peoples.

The U.S.-Canada Joint Statement on Environment, Climate Change, and Arctic Leadership of March 2016 articulated "a common vision of a prosperous and sustainable North American economy, and the opportunities afforded by advancing clean growth" (Trudeau 2016a). Trudeau and Obama cited the Paris Agreement as a pivotal moment and committed to advance climate change action globally and "foster sustainable energy development and economic growth" (ibid.). Both countries also promised to "continue to respect and promote the rights of Indigenous peoples in all climate change decision making" (ibid.).

In May 2016, Canada officially lifted the qualifications to its endorsement of the United Nations Declaration on the Rights of Indigenous Peoples, affirming its strong commitment to welcome "Indigenous peoples into the co-production of policy and joint priority-setting" (Coates and Favel 2016). The appointment in July 2016 of Inuit leader Mary Simon as Minister of Indigenous and Northern Affairs Carolyn Bennett's special representative on Arctic leadership reflected this philosophy. In turn, Simon's proposed shared Arctic leadership model, first outlined in October 2016, emphasized environmental and human security considerations, reiterating the need for Canada to tackle a sweeping array of Northern (and particularly Inuit) cultural, socio-economic and political challenges (Simon 2017).

The decision to link the domestic and international dimensions of Canada's Arctic and Northern strategy in a single policy framework document reaffirms the interconnectivity between national, regional and global dynamics. "The Arctic is also becoming more relevant to the international community," Canada's 2017 defence policy *Strong, Secure, Engaged* observes (Department of National Defence 2017, 79). With climate change opening new access to the region, "Arctic and non-Arctic states alike are looking to benefit from the potential economic opportunities associated with new resource development and transportation routes" (ibid.). Rather than promoting a narrative of inherent competition or impending conflict, however, the narrative points out that "Arctic states have long cooperated on economic, environmental, and safety issues, particularly through the Arctic Council, the premier body for cooperation in the region. All Arctic states have an enduring

interest in continuing this productive collaboration” (ibid., 50). This last sentence suggests that Russia — described in the document as a state that has “proven its willingness to test the international security environment,” contributing to the return to the system of “a degree of major power competition” (ibid.) — does not inherently threaten Arctic stability, given its vested regional interests. Accordingly, the drivers of Arctic change cited in *Strong, Secure, Engaged* emphasize the rise of security and safety challenges rather than conventional defence threats, thus confirming the comprehensive approach to Arctic defence and security developed over the last decade.

Scholars have well established how a robust array of rules, norms and institutions guide international interactions in the circumpolar north. This rules-based order not only advances Canada’s national interests but its global ones as well, offering opportunities to shape international agendas on climate change, contaminants and other environmental threats with a global scope that has a disproportionate impact on the Arctic. Canada continues to leverage existing multilateral organizations — such as the Arctic Council, the Arctic Economic Council (AEC), the United Nations Commission on the Limits of the Continental Shelf, the International Maritime Organization (IMO), the North Atlantic Treaty Organization (NATO), the Arctic Coast Guard Forum and the Arctic “5+5” dialogue on Central Arctic Ocean fisheries¹ — to promote its interests in the circumpolar world. These multilateral tools have proven resilient even with the downturn in relations between the West and Russia since 2014, with enduring regional cooperation on search and rescue, transboundary fisheries, extended continental shelves, shipping and science.

Since 1996, Canada has consistently referred to the Arctic Council as the leading body for regional cooperation in the region. Preserving this role is a Canadian priority. While there is no need or appetite for wholesale “reform” of the council, Canada should continue to support general efforts to enhance its work, particularly through its working groups and task forces, as well as with resources to enhance the capacity of the council’s Permanent Participants. These efforts include promoting best practices of how stakeholders can more broadly and respectfully incorporate Indigenous science and traditional knowledge; communicating the results and findings from projects back to knowledge holders, communities and contributors; and facilitating access to resources that allow the Permanent Participants to mobilize, review and verify Indigenous knowledge. Initiatives aimed at strengthening Indigenous cultures and languages, health and resiliency, and renewable energy have an obvious resonance with Canada’s domestic priorities, and Canada is well placed to encourage collaborative opportunities between researchers, policy makers and community leaders to discern and promote best practices. Given its efforts to create the AEC, Canada should continue to encourage and support it in conceiving and implementing specific research and in relationship-building and capacity-building initiatives, particularly in terms of facilitating knowledge and data exchange between industry and academia, creating stable and predictable regulatory frameworks and promoting Indigenous knowledge and small-business opportunities.

As climate change heightens international commercial interest and activity in the Arctic, Canadians have raised important questions about maritime environmental protection and

1 See www.dfo-mpo.gc.ca/international/arctic-arctique-eng.htm.

response, safe regional transportation, and search and rescue. Canada spearheaded efforts to create a mandatory International Code for Ships Operating in Polar Waters (Polar Code) through the IMO,² and can play a leading role in addressing some of the contentious issues deliberately left out of the current code (such as the use of heavy fuel oil and its impact on short-lived climate forcers such as black carbon, mandatory invasive species protections, greywater restrictions and underwater noise abatement requirements). Furthermore, it can ensure that subsequent negotiations correct the lack of consultation with Indigenous and coastal communities that marked the previous IMO process. Other international bodies, such as the Arctic Coast Guard Forum, launched in 2015, also offer important venues to advance practical maritime cooperation at the operational level.

Since the Ukrainian crisis of 2014, Western concerns about Russian intentions and behaviour on the international stage have reinforced a popular image of that country as the wild card in the Arctic strategic equation. Over the last decade, Canada has typically opposed appeals to have NATO assume a more explicit Arctic role because this would unnecessarily antagonize Russia, draw non-Arctic European states more directly into Arctic affairs writ large or amplify the misconception that Arctic regional dynamics are likely to precipitate conflict between Arctic states. Others have pushed for stronger NATO involvement to meet a heightened Russian military threat, stand up to intimidation and show strong deterrence.

While careful to acknowledge Russia's rights and interests as an Arctic state, Canada's historic commitment to collective defence makes it unsurprising that it is working with its NATO allies to re-examine conventional deterrence. The statement in *Strong, Secure, Engaged* that "NATO has also increased its attention to Russia's ability to project force from its Arctic territory into the North Atlantic, and its potential to challenge NATO's collective defence posture" (Department of National Defence, 79-80), however, marks a measured shift in Canada's official position. Despite Canada's reticence to have NATO adopt an explicit Arctic role over the past decade, the inclusion of this reference — as well as the commitment to "support the strengthening of situational awareness and information sharing in the Arctic, including with NATO" (ibid., 113) — indicates a newfound openness to multilateral engagement on "hard security" with Northern European allies. NATO is the cornerstone of both Danish and Norwegian defence and security policy, which opens opportunities for bilateral relationships. How this newfound interest in NATO's Arctic posture interacts with Canada's long-standing preference to partner bilaterally with the United States on North American continental defence³ remains to be seen.

Canada's most important international relationship is with the United States, with bilateral announcements during the Trudeau-Obama period affirming that the neighbours would remain "premier partners" in the Arctic and would play a joint leadership role in regional (particularly North American Arctic) affairs. While the priorities articulated in the 2016 joint statements on the Arctic reflect Canadian political interests, they have found less enthusiastic support from the current US administration under President Donald Trump. Nevertheless, Canada stands to benefit from collaborative efforts on improved marine

2 See www.imo.org/en/MediaCentre/HotTopics/polar/Pages/default.aspx.

3 See Andrea Charron's essay "Canada, the United States and Arctic Security" in this report.

safety and security systems, transportation and resource infrastructure, and modernization of the North American Aerospace Defense Command. To bolster Canada's efforts to establish low-impact shipping corridors, a coordinated joint strategy to manage shipping activities in the North American Arctic and to promote safe and environmentally sensitive navigation would increase efficiencies for international operators and lend greater legitimacy to national regulations (Transport Canada 2017).

Denmark also shares a similar approach to Canada on many core Arctic issues. Support to the Inuit Circumpolar Council-led *Pikialasorsuaq* Commission — which is dedicated to safeguarding the North Water Polynya in northern Baffin Bay and Smith Sound — is well aligned with Canada's conservation and Indigenous interests. Although Norway is far removed from most Canadians' mental map of the Arctic, there is more common ground between the countries than might appear (as long as Canada's Arctic and Northern Policy Framework does not focus disproportionately on the Inuit homeland north of the treeline). Shared priorities include business development in isolated coastal communities, maritime infrastructure, marine and ocean management issues, environmental protection, emergency preparedness, research, education and Indigenous rights. Furthermore, Canada should enhance scientific and research and development cooperation or technology transfer options with Nordic countries (as well as the European Union and the United States/Alaska), which have considerable expertise in the renewable energy sector.

Bilateral relations with the Russian Federation are trickier, but the Arctic remains a natural area of common focus. "Perhaps more than any other country," *The Northern Dimension of Canada's Foreign Policy* declared, "Canada is uniquely positioned to build a strategic partnership with Russia for development of the Arctic" (Department of Foreign Affairs and International Trade 2000, 16). Both countries face similar challenges in terms of local adaptations to climate change and how they can best manage effects on ecosystems, food and water security, public health and infrastructure. They have historically shared best practices in sustainable development, particularly in terms of Indigenous peoples, capacity building and governance. Other areas where Canada and Russia might further their respective Arctic agendas collaboratively include strengthened partnerships in science and research, including cold weather construction, transportation technologies and measures to address air pollutants, prevent oil pollution and protect biodiversity. Excessively emphasizing divergent interests on the global level closes the door to these Arctic-oriented possibilities.

Similarly, Sino-Canadian relations have soured. While Canada must remain vigilant to ensure that China's Arctic activities do not undermine Canadian interests, there are benefits to collaborating with China on environmental science (focused on climate change), and on shared interests in shipping, mining, fisheries and regional governance. Discussions of Chinese grand strategic defence and security interests in the Arctic remain highly speculative. Security and safety issues that arise from the activities of China and other non-Arctic states in the Canadian Arctic (including the potential for espionage and intelligence-gathering activities, resource development and shipping activities that harm the environment, and the loss of Canadian economic sovereignty) are often best considered in the broader context of Canada's strategic relationship with China as an emerging global power rather than through a narrow Arctic sovereignty lens.

Canada has committed to assert its international leadership to ensure that the Arctic remains a region characterized by peace, stability and low tension where states can exercise their sovereign rights and responsibilities. While strategic competition outside of the Arctic is likely to continue to complicate relations between Russia and Canada, it does not preclude Arctic cooperation where this serves national and regional interests. Despite ideas expressed by the Trump administration that the Arctic is a conflict-ridden region, the reality is quite the opposite. Commentators often draw a false correlation by conflating Arctic issues emerging in and from the region itself with grand global strategic issues that may have an Arctic dimension but are best framed at a global level. Official Canadian policy must take care to make these distinctions or risk the policy itself contributing to the very misconceptions that build mistrust and sow the seeds of conflict. Dialogue and deterrence are compatible activities in a world of competition and cooperation. Setting up false binaries does not facilitate a mature, pragmatic approach to international affairs.

Accelerating environmental change and surging international interest reinforce, rather than undermine, Canada's well-established circumpolar strategies. Fortunately, the protracted consultation process leading to Canada's refreshed Arctic and Northern Policy Framework points to a validation rather than a repudiation of the course laid over the last three decades. Aspirations for assuming global Arctic leadership by co-creating policies led by Canadian Northerners (in particular, by Indigenous peoples) must be counterbalanced by a recognition that other states' priorities and interests are not always synonymous with Canada's. As the global order continues to evolve, however, Canada must remain attuned to the rising power and influence of non-state actors who are reshaping international affairs — and blurring the boundaries between what is safety, security and defence and what is trade, investment, development, economic and foreign policy.⁴

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⁴ Paraphrasing panellist and Global Affairs Canada's Director of Nordic and Polar Relations Jutta Wark, in Lackenbauer and Kikkert (2018, 12).

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Canadian Arctic Maritime Sovereignty During the Trudeau Years

Suzanne Lalonde

In an influential paper published over a decade ago, Donald McRae wrote that “Arctic sovereignty” is a touchstone in Canadian political debate,¹ and that it “strikes a chord that resonates powerfully” (McRae 2007, 1). Yet, as he emphasized, the word sovereignty has many different meanings: “it has political, legal, economic and social dimensions” (ibid.).

One of the best explanations of sovereignty under international law remains today Max Huber’s arbitral award in the 1928 *Island of Palmas* case. In what may be the most cited passage of the decision, the sole arbitrator declared: “Sovereignty in the relations between States signifies independence. Independence in regard to a portion of the globe is the right to exercise therein, to the exclusion of any other State, the functions of a State.”²

However, while state sovereignty has traditionally been associated with power and authority, Huber himself pleaded for a much more balanced understanding of sovereignty than is typically presented: “Territorial sovereignty, as has already been said, involves the exclusive right to display the activities of a State. This right has as corollary a duty... Territorial sovereignty cannot limit itself to its negative side, i.e. to excluding the activities of other States.”²

In a similar manner, Francis M. Deng and his associates at the Brookings Institution have argued that state sovereignty should be understood as “not merely the right to be undisturbed from without, but the responsibility to perform the tasks expected of an effective government” (Deng et al. 1996, xviii). James Crawford, for his part, defined state sovereignty as “a monopoly of governing authority within a bounded territorial space” (Crawford 2012, 120).

1 *Island of Palmas Case (Netherlands v United States)* (1928), 2 RIAA 829 at 838.

2 *Ibid* at 839.

Inspired by the above understandings of legal sovereignty, this essay will consider whether the government of Prime Minister Justin Trudeau has contributed to or strengthened Canada's Arctic maritime sovereignty by, first, more precisely defining Canada's Arctic maritime boundaries and, second, by exercising Canada's sovereign prerogatives over its Arctic waters responsibly and effectively.

Defining Canada's Arctic Maritime Territory

When the Liberals under Justin Trudeau were elected on October 19, 2015, one of the challenges awaiting them were a few well-managed but enduring boundary disputes.

In the Arctic, Canada's sovereignty over the land mass and islands has not been challenged since Denmark abandoned its claim to Ellesmere Island in 1920 and Norway its claim to the Sverdrup Islands in 1928–1930. The only exception has been an inconsequential dispute with Denmark over tiny Hans Island, a barren uninhabited islet located halfway between Ellesmere Island and northwest Greenland. In a joint statement issued on September 19, 2005, the Canadian and Danish foreign ministers, while acknowledging that they held “very different views on the question of the sovereignty of Hans Island,” pledged to continue their efforts to reach a long-term solution to the dispute (Government of Canada 2005). In the interim, they agreed to inform each other of any activities conducted on the island and to show restraint. Nearly 15 years on, an important step has been taken to reach a definitive solution. On May 23, 2018, Canada and Denmark announced the creation of a joint task force to try to resolve their boundary issues in the Arctic, including the question of sovereignty over Hans Island (Global Affairs Canada 2018).

The same task force is also expected to formalize a 2012 agreement concluded between the Canadian and Danish foreign ministries defining the Canada-Denmark boundary in the Lincoln Sea. In the western Arctic, however, while the joint Arctic leaders statements by President Barack Obama and Prime Minister Trudeau of March and December 2016 revealed their countries' shared vision for the North (Trudeau 2016a; 2016c), it appears any hope of resolving the long-standing boundary dispute between the two countries in the Beaufort Sea was dashed with the election of Donald Trump. Indeed, with President Trump's sustained efforts to overturn the Obama/Trudeau moratorium on drilling in the Beaufort, and with the bilateral relationship strained over trade and other issues, the Arctic has not featured prominently on the Canada-US agenda.

The Trudeau government inherited the Arctic continental shelf file as a result of Prime Minister Stephen Harper's decision not to submit Canada's scientific dossier on the Arctic to the UN Commission on the Limits of the Continental Shelf (CLCS) in December 2013. Media reports at the time indicated that the Harper government was concerned that the Canadian submission was not sufficiently expansive.

The 1982 UN Law of the Sea Convention (LOSC) describes the continental shelf in article 76(1) as the “natural prolongation of [a state's] land territory to the outer edge of

the continental margin.”³ If a state party claims that its continental shelf extends beyond 200 nautical miles, it is obligated under the Convention to submit scientific evidence of its claim to the CLCS.

In the summer of 2016, Canadian scientists were given the green light to conduct further research in support of Canada’s extended continental shelf (ECS) in the Arctic. After two years of analysis by government scientists and lawyers, Canada officially submitted its Arctic ECS claim to the CLCS on May 23, 2019. As anticipated, the map and the executive summary accompanying the Canadian submission reveal that some seabed and subsoil areas claimed by Canada overlap with the earlier Russian and Danish submissions.

Given the anticipation of many delays before the Commission can provide recommendations on the science supporting the Russian, Danish and Canadian submissions and the fact that both the Convention and the Commission’s own rules of procedure estop it from ruling on contested or disputed areas, the new Canada-Denmark boundary task force is a very positive development. Indeed, the joint task force will not only seek to resolve the disagreement over Hans Island, but also the question of the overlapping seabed claims between the two neighbours in the Labrador Sea. As for the eventual determination of the dividing line between the Canadian and the Russian ECS, this thorny issue will have to be resolved through diplomatic or political channels. In fact, given that the respective claims of Canada, Denmark and Russia will likely necessitate the determination of a trilateral meeting point, collaborative discussions between the three Arctic coastal states would likely be the most efficient course of action.

The most sensitive ongoing boundary disagreement concerns the legal status of the Northwest Passage (NWP). This contestation of Canada’s legal position is certainly not new and predates, by several decades, the arrival of the Trudeau Liberals in power. However, with media and scientific reports unrelentingly decrying the melting of the Arctic sea ice and announcing the opening up of new lucrative shipping routes, the issue may have gained in prominence since October 2015. Russian spending in the Arctic, in particular, the reopening and strengthening of Cold War bases along the Northern Sea Route, the construction of several powerful icebreakers and the adoption of strict unilateral regulations for transits along the Northern Sea Route have also served to raise the profile of the Arctic seaways.

The legal debate is well established. Canada claims all of the waters within its Arctic archipelago as Canadian historic internal waters over which it exercises full and exclusive authority, including the power to govern access by foreign ships. The United States has long held the view that the different routes through the NWP constitute an international strait in which the ships and aircraft of all nations, both civilian and military, enjoy a right of transit passage. Under the straits’ regime, the prerogatives of the state bordering the strait are severely curtailed (for instance, only international pollution and safety standards can apply), and it is prohibited from denying, hampering or impairing the right of transit passage.

3 UN General Assembly, *Convention on the Law of the Sea*, 10 December 1982, 1833 UNTS 397 (entered into force 1 November 1994).

The United States recently forcefully reaffirmed its position on the NWP when Secretary of State Michael Pompeo denounced Canada's claim as "illegitimate" during a speech at the Arctic Council Ministerial meeting in Finland early in May 2019 (Pompeo 2019a). Canada's Foreign Affairs Minister Chrystia Freeland was quick to respond, declaring that "Canada is very clear about the NWP being Canadian" and insisting that "there is both a very strong and geographic connection with Canada" (Pompeo 2019b). A strong rebuttal also came from Canadian Inuit who served notice on Pompeo and the US government that the NWP is part of Inuit Nunangat, their Arctic homeland, and who reminded all nations of their legally protected right to self-determination (George 2019).

To this date, the United States remains the only state to officially denounce the Canadian position and to categorically assert that the NWP is an international strait. China's admission to the Arctic Council as an observer nation in 2013 hinged on, among other conditions, its recognition of "Arctic States' sovereignty, sovereign rights and jurisdiction in the Arctic."⁴ This commitment is largely reflected in China's first official Arctic policy, a white paper released in January 2018 (State Council Information Office of the People's Republic of China 2018). However, in light of China's commitment to win-win partnerships, one passage in the white paper is to be regretted: "China maintains...that the *freedom of navigation* enjoyed by all countries in accordance with the law and their rights to use the Arctic shipping routes [explicitly defined as including the NWP] should be ensured" (ibid., pt. IV, s. 3(1); italics added). China also acted strategically in its own interest in regard to the transit of its government research vessel *Xue Long* through the NWP in 2017. Rather than ask Canada's permission for its vessel to enter and navigate through *Canadian internal waters*, which would have been a formal acknowledgment of the Canadian claim, China relied upon the provisions in the LOSC governing marine scientific research. As Part XIII of the Convention obligates a foreign vessel to obtain the permission of the coastal state *to conduct marine scientific research* in any maritime zone, China was able to sidestep the thorny question of the legal status of the NWP.

Exercising Canadian Sovereign Authority

Reconciliation with Canada's Indigenous peoples has been at the very heart of the Trudeau agenda and has also shaped the exercise of Canadian sovereignty in the Arctic.

Acknowledging the reality that "Canada's sovereignty over the waters of the Arctic archipelago is supported by Inuit use and occupancy" (article 15.1.1(c) of the Nunavut Land Claims Agreement),⁵ the Trudeau government announced in late December 2016 that a new "Arctic Policy Framework" for Canada would be co-developed in collaboration with Indigenous and territorial partners.

With the aim of creating a long-term vision of priorities and strategies for the Canadian Arctic, as well as promoting shared leadership and partnerships, a whole-of-government approach involving many federal departments and agencies has been pursued. National Indigenous organizations have been heavily involved and several regional round tables have

4 See <https://arctic-council.org/index.php/en/about-us/arctic-council/observers>.

5 *Nunavut Land Claims Agreement Act*, SC 1993, c 29. <https://laws-lois.justice.gc.ca/eng/acts/n-28.7/page-1.html>.

been organized to seek the input of local Indigenous groups. Gatherings of academics and industry experts have also been organized to ensure a broad spectrum of interests and ideas. This novel and widely inclusive process has been challenging to manage in practice, however, and at the time of writing (May 2019), the new framework has still not been released.

In the interim, the Trudeau government has invested considerable sums and launched a number of ambitious programs to effectively exercise Canada's sovereign authority over its Arctic waters and to discharge its duty to act as a responsible steward. On November 7, 2016, Trudeau launched the \$1.5 billion Oceans Protection Plan (OPP)⁶ to improve marine safety, promote responsible shipping and protect Canada's marine environment. The first paragraph of the official government announcement declares that Canada's ambitious "marine safety plan" is supported by "commitments to Indigenous co-management" (Trudeau 2016b). Indeed, one of the OPP's four main priority areas is defined as strengthening partnerships and launching co-management practices with Indigenous communities.

Many of the initiatives launched under the OPP have Arctic components. Three programs in particular have provided meaningful participation for local communities, land claims rights holders and territorial partners, and the opportunity to shape the emerging governance regime.

Under the impetus of the OPP, Transport Canada and the Canadian Coast Guard have revitalized their marine transportation corridors initiative. The goal is to identify specific shipping routes throughout the Arctic and prioritize spending for infrastructure and services for transportation and emergency response (for example, hydrography, navigational aides, icebreaking and patrolling). Broad consultations with Inuit organizations and local communities have been conducted to ensure that ships do not senselessly disrupt wildlife and traditional, cultural, social and economic Indigenous activities.

With funding under the OPP, Transport Canada has also established the Proactive Vessel Management Initiative, a new approach to managing vessel traffic in Canadian waterways. Cambridge Bay, along the NWP, has been selected as a host location for a pilot project. With partners in the community, Transport Canada is testing various concepts and practices for the efficient resolution of vessel traffic management issues that are respectful of the needs and priorities of local residents.

Finally, and as mandated by the Nunavut Land Claims Agreement, Indigenous Northerners have been heavily involved in the creation of Canada's largest marine protected area, Tallurutiup Imanga (Lancaster Sound), at the eastern entrance of the NWP. After lengthy negotiations between the federal and Nunavut governments and the Qikiqtani Inuit Association, an agreement in principle was reached in December 2018 that includes a new collaborative federal-Inuit governance model and an Inuit advisory body. According to Oceans North, the agreement represents a new approach to protecting sensitive ocean environments: "a recognition that the people in the best position to manage this wonderful ecosystem are the people who have been managing it for centuries."⁷

6 See www.tc.gc.ca/eng/oceans-protection-plan.html.

7 Oceans North Vice-President, Policy Development and Counsel Christopher Debicki quoted in Sevunts (2018).

Recommendations

As a federal election approaches, lessons can be gleaned from the Trudeau years and a few key “sovereignty” priorities identified.

- The determination of Canada's Arctic maritime boundaries, including its extended continental shelf, must remain a clear priority. To resolve these enduring disputes and disagreements, open channels of dialogue must be maintained even in the face of strained relationships.
- On the question of the NWP, Canada must continue to assert and exercise its sovereignty confidently. Efforts should, however, be expended to sensitize our Arctic neighbours and the world at large as to the historical and cultural bond that exists between the waters of the Arctic archipelago and Canada's Indigenous peoples, a unique bond protected under international law.
- Co-partnerships and co-management initiatives with Northerners to responsibly manage Canada's Arctic waters must be maintained and adequately funded. However, considerable efforts should be invested in devising effective implementation strategies for such initiatives. A useful approach might be to investigate how co-management of marine areas between governmental authorities and local Indigenous peoples has been operationalized in other parts of the world.
- In addition to close collaboration with Northerners, meaningful partnerships with American agencies and other international partners must be pursued to effectively address such daunting challenges as search and rescue, pollution prevention and the safety of navigation in the Arctic region.

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Canadian Coast Guard in support of Operation Nanook





Canada and NATO in the Arctic

Responding to Russia?

Rob Huebert

Canadian policy toward the North Atlantic Treaty Organization (NATO) has always been extremely supportive. Canada was one of the founding members of the alliance and remains committed to it. However, when it comes to NATO's role in the Arctic region, the Canadian position has been much more ambiguous. Since the end of the Cold War, there has been reluctance on the part of Canada to embrace any NATO expansion into the North. This has been further complicated by Canada's commitment to the North American Aerospace Defense Command (NORAD) Alliance, which divided Canada's attention between defending North America and defending Western Europe against threats from the Soviet Union. While both NATO and NORAD were designed to deal with the same threat, the two alliances' different geographic focuses created two distinct stovepipes in Canadian approaches toward its Arctic security.¹

From its creation, NATO's focus has been on responding to the Soviet Union, and now the Russian, threat. The end of the Cold War had convinced some observers that the need to respond to an aggressive Russia was over. It was not anticipated that the former members of the Warsaw Pact, as well as many of the newly independent former soviets, as soon as they had the freedom to do so, would make joining the alliance their principal security policy. When this occurred, NATO gained a renewed significance. Coupled with Russia's growing aggressiveness toward its neighbours, this expansion of membership has meant that there is now a reconsideration of NATO, in particular its role in the Arctic. This essay addresses how Canada is responding to the increasing and renewed importance of NATO and the Arctic.

¹ See Andrea Charron's essay titled "Canada, the United States and Arctic Security" in this report for a discussion on NORAD.

It is important to note that Canada does not have a specific Arctic NATO policy. Rather, Canada has always incorporated NATO into its overall defence policy. To determine the nexus between Canadian Arctic security and NATO, it is necessary to examine four specific elements: policy statements, training, deterrence, and issues surrounding NATO membership. Each of these provide insights into Canadian Arctic NATO policy.

The Norwegian Relationship

First, it is important to recognize the centrality of the Canadian-Norwegian relationship within these four different elements. Similarities between the two member states mean that much of what Canada does is often connected to Norway. This relationship first manifested in the creation of the Canadian Air-Sea Transportable Brigade Group, which existed between 1968 and 1989. The group was formed so that if there was a threat of land war in Europe with the Soviet Union, with one month's notice 3,500 to 4,000 Canadian troops could be deployed to Norway as reinforcement. The only time in which this commitment was exercised demonstrated its great difficulties; there were delays and significant problems in moving the Canadian troops from Canada to Norway (Maloney 2002, 62–64); the ships needed to bring the troops to Norway were either late or unavailable. In a period of hostilities or near hostilities, such a move would be very difficult to successfully accomplish. This experience demonstrated the political commitment of Canada to the northern defence of NATO but also the barriers to actual success in this defence.

In the post-Cold War era, when Norway attempted to expand NATO's focus on the northern flank, it was a surprise to many observers when it was learned that it was the Canadian government of the time, under Prime Minister Stephen Harper, that opposed the effort (Østhagen, Sharp and Hilde 2018, 166). It is not known why Harper was opposed to such a policy refocusing within NATO, given his increasingly hostile rhetoric against Russian actions in the region.

The current Canadian government under Prime Minister Justin Trudeau has softened Canadian resistance to an expanded NATO role in the Arctic region. There has been a change in policy pronouncements and an increased cooperation with regard to Norwegian-based exercises. As will be discussed, the major manifestation of Canadian willingness to see an expanded role of NATO in the Arctic region was Canada's large-scale participation in the Norwegian Cold Response exercise, as well as participation in NATO's Trident Junction exercise.

The Canadian Policy, NATO and the Arctic

Canada does not have a specific policy on its relationship with NATO regarding the Arctic region. However, with the release of the Trudeau defence policy *Strong, Secure, Engaged*, there has been for the first time in the post-Cold War era an actual statement regarding NATO and the Arctic (Department of National Defence 2017). Recommendation 110 of the policy states that Canada will “conduct joint exercises with Arctic allies and partners and support the strengthening of situational awareness and information sharing in the Arctic, including with NATO” (Department of National Defence 2017, 80). Even more

recently, the Standing Committee on Foreign Affairs and International Development released its report *Nation-Building at Home, Vigilance Beyond: Preparing for the Coming Decades in the Arctic* (House of Commons 2019). The committee's first recommendation states: "As part of deterring and defending against any threat to the members of the North Atlantic Treaty Organization, the government of Canada should work with its partners in the North Atlantic Council to deepen the Alliance's understanding of Russia's military intentions in the Arctic and to consider the most appropriate and measured response" (ibid., 31).

Both of these documents indicate a greater willingness to identify the need for a NATO response to a growing Russian militarization of the Arctic region. There is less sensitivity about targeting and identifying Russia as a threat in this region. Both of these documents also illustrate a growing willingness to accept the role of NATO in the region.

Training

Canada had been resistant to providing troops to NATO northern exercises throughout much of the post-Cold War era. This is now changing, and Canada is increasingly committing a much more significant element of its forces to participate in these exercises. In February 2016, Canada deployed the 2 Canadian Mechanized Brigade Group and the 3rd Battalion of the Royal Canadian Regiment to participate in the large-scale Norwegian Cold Response exercise. Cold Response involved over 15,000 troops and included a large number of NATO and Swedish troops (Department of National Defence 2016).

Late in June of the same year, Canada sent the submarine HMCS *Windsor* to participate in the 10-day NATO anti-submarine exercise Dynamic Mongoose. This exercise took place off Norwegian waters and toward the area of the Atlantic Ocean bounded by Greenland, Iceland and the United Kingdom — known as the GIUK Gap — and involved eight NATO members. At the end of the exercise, NATO asked the *Windsor* to remain in the area to cover increased Russian submarine activity in the region (Royal Canadian Navy 2016).

More recently (November 2018), Canada concluded its participation in Trident Juncture, one of the largest NATO exercises to take place in the Arctic region since the end of the Cold War. Canada's involvement included the deployment of eight CF-188 Hornets, an aerial refuelling tanker and 1,000 personnel from 5 Canadian Mechanized Brigade Group. The Royal Canadian Navy deployed two frigates and two Maritime Coastal Defence vessels to the exercise (Department of National Defence 2018).

Canada is also inviting and involving a wider range of NATO members to participate in Canadian exercises on Canadian northern soil. Most recently, in March 2019, France, Norway, Denmark, Sweden and Finland all sent divers to participate in Operation Nanook. This means that there is now an expansion beyond the normal Arctic NATO states to include France and two non-NATO countries — Sweden and Finland (Department of National Defence 2019).

Deterrence

As demonstrated by its willingness to participate in the Dynamic Mongoose anti-submarine exercises, Canada is now re-engaging in the protection of the GIUK Gap. In 2016, it deployed the submarine HMCS *Windsor* to engage in NATO. In 2017, Canada deployed the frigate HMCS *St. John's* for that year's exercise. NATO's decision to resume robust anti-submarine exercises are an effort to ultimately deter the Russians from their increasingly assertive use of their submarine force by demonstrating a renewed anti-submarine capability.

Following the withdrawal of the Americans from their air base in Iceland in 2006, other NATO countries stepped up to fill the gap by providing a cooperative effort to patrol the air spaces of Iceland. The Canadian response was to provide fighter patrols on a periodical basis under Operation Reassurance. Following the Russian military actions in Ukraine, this mission was expanded to include air patrols to central and eastern NATO members and to land forces to Latvia in 2017. This increased Canadian Forces presence is meant to deter future Russian aggression (Government of Canada 2018).

NATO Membership

Both Sweden and Finland are members of the Partnership for Peace program within NATO but are not full members. If they were to be attacked, they would not automatically enjoy the full protection of the alliance. However, both are increasingly participating in NATO activities as the Russians increase their military activity in the northern region near them. The issue of full membership of Sweden and Finland within NATO will be one of the most challenging issues facing Canada. Canada sees both countries as important partners in Arctic cooperation through such bodies as the Arctic Council. At the same time, Canada is increasingly engaging with both Swedish and Finnish troops in Arctic exercises conducted by NATO and Norway. The challenge facing Canada is that since 2007, the Russians have reacted to efforts to expand NATO membership with military force, which they demonstrated with their military intervention in Georgia in 2008 and Ukraine in 2014. It is difficult to see Canada not agreeing to Finnish and Swedish requests for full membership, which means that Canada needs to prepare for a strong Russian response.

Canada's NATO Policy: The Russia Question

In the post-Cold War era, the critical factor facing Canadian Arctic NATO policy centres on finding a position on whether Russia is a cooperative actor in the Arctic region who is reacting to NATO expansion, or whether NATO's expansion is in response to an increasingly aggressive and assertive Russia. For Canada, the issue is finding a way to negotiate its desire to avoid antagonizing Russia through NATO expansion into the Arctic region, on the one hand, and its intention to support its allies facing the actions of an increasingly aggressive Russia, on the other. This is the crux facing Canada. If Russia is only acting defensively in its Arctic region, NATO's efforts to become more active in the Arctic is creating a Russian perception of a rising threat to its security. Russia then responds, which creates a counter response on the part of NATO — and a security dilemma is

thus unleashed. Conversely, if the Russian actions represent a determination of President Vladimir Putin's regime to again achieve great-power status and to reclaim control of all of its "near abroad" (that is, its bordering neighbours), then there is a need for the Western nations to increase their military capabilities to counter Russian aggressive efforts. For Canada, the critical point for its NATO policy is the determination of Russian intentions as a means of evaluating the Russian threat. Is Russia only responding to Western actions, or are the Russians becoming an aggressor state?

The reluctance of the government under Stephen Harper's Conservatives to engage and develop an expanded NATO Arctic policy indicates that they must have believed that there was a security dilemma developing. Despite the rhetoric of that government following the Russian planting of a flag at the North Pole, it would appear that it was trying to avoid antagonizing the Russians. The changing policy of the current Liberal government, both in terms of its policy statements and its greater willingness to work with NATO in the Arctic, suggests that despite its rhetoric of cooperation with Russia, the present Canadian government actually sees the Russians as a growing threat.

Recommendations

As Canada further develops its Arctic policy with NATO, it needs to focus on three major areas: policy, training and membership.

- **Policy:** Canada will need to develop a more comprehensive understanding of Russian actions in the Arctic and along its borders with NATO countries. At present, contradictory Canadian positions exist toward Russia. As regards the Arctic Council, the Canadian position sees Russia as a constructive partner. There is also evidence (in both Canada's defence policy and within its intelligence services) that points to the government's understanding of a much more aggressive Russia. This contradiction may be a result of a sophisticated policy determination on the part of the Canadian government that it should approach Russia as both a cooperative partner and as an adversary, depending on the specific issue areas. However, it is more likely that the Canadian government has not taken the time to carefully examine how it actually understands Russia today and what Russia means for the Canadian Arctic and its general security.

Canada should also make an effort to work with Norway, which has been the leading nation on developing an expanded NATO Arctic policy. Canada has a tradition of working closely with Norway, and it is in Canada's interest to ensure that NATO policy includes Canadian interests. Working with Norway is the best way to ensure that Canada is not left behind.

- **Training:** Canada should also continue to expand its operations and training with its NATO partners, as stated in Recommendation 110 of *Strong, Secure, Engaged*. It should continue and maintain its high level of participation in Trident Juncture, Dynamic Mongoose and Cold Response. It would also be opportune for Canada to consider expanding and consolidating its cooperation with Iceland and Greenland under the terms of Operation Reassurance. While there has not been space in this

essay to discuss issues related to the expanding role of China in the Arctic region, closer defence cooperation with Iceland and Greenland could provide an effective counter to a rising effort of China to influence those two countries. Furthermore, should Greenland move toward independence, an existing and strengthened defence relationship would definitely be in Canada's interest in the future.

- **New Northern members in NATO:** Canada also needs to ensure that it has a policy framework prepared for the possibility of a Finnish and Swedish request for full membership in NATO. The government needs to think through what its response would be — which should be acceptance. At the same time, it should also be prepared for the inevitable Russian response. It is important that Canada not be caught off guard.

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10





Canada, the United States and Arctic Security

Andrea Charron

The partnership between Canada and the United States is storied. With shared geography and deep connections in nearly every government portfolio, especially in trade, the Canada-US relationship is the most important of state relations for Canada. Of late, these relations have been strained, but this is not new and is managed. What is new is that Canada needs to exert considerably more “oxygen” these days to ensure relations continue to be cooperative and productive. One of the most important areas that routinely receives far too little attention, however, is the North American Aerospace Defense Command (NORAD).

The Canada-US defence relationship is a complicated one. It is held together by hundreds of formal memoranda of understanding, agreements and caveats. Even more important, however, are the informal connections via shared service, experience and glue in the form of the sorority and fraternity of the uniform, forged mainly by fighting overseas. For all Canadian prime ministers since William Lyon Mackenzie King, this relationship has been paramount; after all, an attack on the United States via Canada as a throughway or backdoor would foment mistrust, entail unwanted help from the United States, and could damage cooperation and agreements in a host of other areas, including trade.

During the Cold War, Canada and the United States were in agreement on the source of the threat to North America and went to great lengths to ensure the defence of North America, especially through surveilling and defending the Arctic as the most likely transit way for a direct attack by the Soviet Union. Indeed, the signing of the binational agreement creating NORAD cemented one of the most significant partnerships in the world. When there is agreement between Canada and the United States on the threats they face and room for compromise and caveats, the Canada-US defence relationship is the envy of

allies. And when the United States is the hegemon of the world and forbears and appreciates Canada's modest military size and budget, the Canada-US defence relationship runs itself, with periodic check-ins by political decision makers.

Canada has always been more preoccupied with its Arctic than the United States has been with its "fourth coast" (Council on Foreign Relations 2017). The United States, however, has rediscovered the significance of the global Arctic and is refocusing on what homeland defence entails. "Near peer" competitors (read China and Russia), with opaque intentions vis-à-vis North America but growing military capabilities and worrisome activity elsewhere, have meant that the United States is seized of what it means to "defend" North America requiring concomitant attention and action by Canada. Difficult and expensive choices have to be made, and the Canada-US defence relationship must be managed adroitly.

The rate of warming in the Arctic, the return of great power politics and the ability of new weapons to reach deeper into North America from farther away mean that successive NORAD commanders have studied and wrestled with what is required to defend North America. More than a few studies have been launched (NORAD Next, EvoNAD)¹ and language has changed to describe the growing instability in the world resulting from Russia's resumption of long-range aviation patrols, annexation of Crimea, murky intentions vis-à-vis its near abroad, attacks in the United Kingdom and meddling in elections. The world has become a "global jungle" (Kagan 2018) and Russia is an "acute" threat to the West. But there are also more chronic threats — including China and its revisionist intentions and reinterpretations of international law, as well as the existential threat that is climate change. North America is no longer a "sanctuary," and the Arctic is once again a potential thoroughway of attack and the "front line in the defense of the United States and Canada" (O'Shaugnessy 2019; 2, 11).

This change in language that is thrusting the Arctic into prominence once again has developed over time but goes largely unnoticed by the Canadian public and many politicians. While US Congressional and Senate committees are used to questioning commanders on "kill chains" and "threats and avenues of approaches," in Canada, even terms such as "offensive" used to describe cyber operations — wording that appeared in Canada's 2017 defence policy *Strong, Secure, Engaged* (Department of National Defence 2017, 41) — raises a few eyebrows; Canadians are not accustomed to using such language. Canada prefers to use words such as "defence," "peacekeeping" and "ally." While Canada and the United States have the same objective — to defend North America — they use very different language to describe the means to that end.

The current commander of NORAD, Commander General Terrence J. O'Shaugnessy, is taking a particularly keen interest in what it means to be the US Department of Defense's "Arctic capabilities advocate" as commander of United States Northern Command (USNORTHCOM) — his other command position. As USNORTHCOM is part of a tricommand framework that includes NORAD and the Canadian Joint Operations Command (CJOC), changes to USNORTHCOM's understanding, role and intentions

1 Successive NORAD commanders and the Permanent Joint Board on Defense have required periodic in-depth reviews of NORAD and North America's defence readiness posture. The latest is EvoNAD; see Charron and Fergusson (2018).

vis-à-vis its part of the North American Arctic and the wider global Arctic (which USNORTHCOM “splits” with the United States European Command), could have implications for Canada — both benefits and challenges. The first question for Canada to ask is “what capabilities and to what ends”? Successive reports and think tanks have noted that the United States and Canada are the laggards of the Arctic states (and even some near Arctic states) when it comes to Arctic capabilities.² Measured in terms of domain awareness, capabilities, presence and ability to operate in the Arctic (be it on land, sea, underwater or in the air), Canada and the United States are agreed that improvements must be made and that acquiring Arctic-capable assets and hardware (in particular, sensors and better and secure communication assets) are the priority, but Canada’s ability to pay or contribute resources proportionally is constrained.

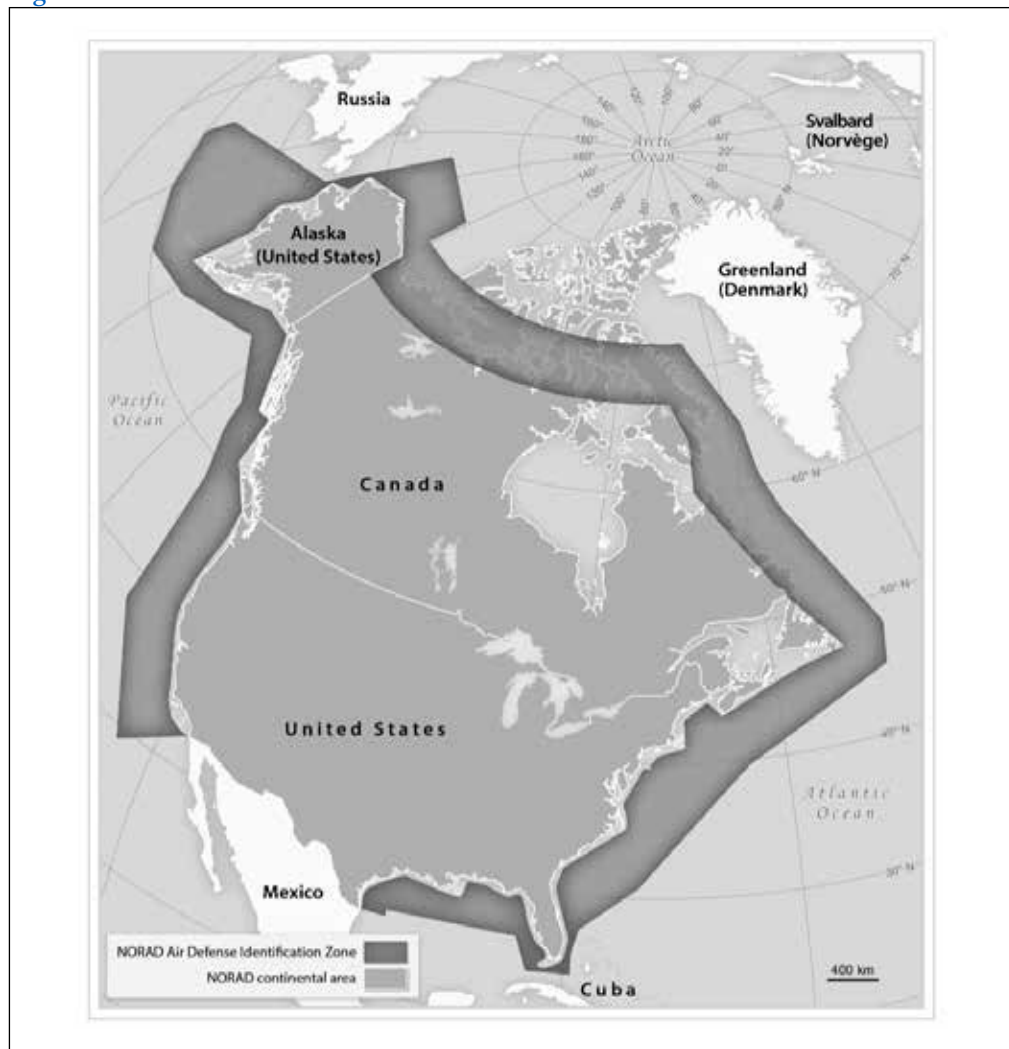
The North Warning System (NWS), which provides vital air domain awareness information (and is one of the very few NORAD, as opposed to national, assets), is reaching its end of life, and both Canada and the United States are researching options for its reimagination to provide greater and (ideally) all domain awareness. The price, however, will be substantial, in the billions of dollars. Canada has also “aligned” its Canadian Air Identification Zone (CADIZ). The CADIZ is an imaginary line on maps indicating airspace over land or water approaching Canada’s sovereign airspace where foreign aircraft are identified and measured for intent and capabilities (see Figures 10.1 and 10.2). Canada’s CADIZ prior to May 24, 2018, was deep into Canadian territory. It is now aligned to correspond with Canada’s sovereign air space and extends to the outer edge of Canada’s northern coast and includes its Arctic archipelago (Department of National Defence 2018). The old NWS could see as far as the “old” CADIZ alignment. Ensuring the “new” NWS can assist with the surveillance of the new CADIZ is but one example of considerations involved in reimagining the NWS, in addition to cleanup of the old sites, impact on land claims agreements, protection of the new infrastructure, and the system’s capability to outpace rapidly changing technology (for example, hypersonic weapons), which can render the best military systems obsolete quickly.

Of course, it is the maritime domain that is expected to see significantly more activity in the Arctic. While NORAD has a maritime warning mission, which means NORAD has access to a common Arctic operating picture from which to identify potential North American threats, the binational cooperation stops there. Canada is prickly about the idea of any US government vessels operating in the Northwest Passage (NWP), and Canada and the United States had been reluctant to heed Norway’s calls for more NATO exercises in the Arctic until 2018, when they participated in Trident Juncture. To date, NATO exercises in the North American Arctic have been out of the question. The functional logic that saw the need for the United States and Canada to defend North American airspace together, and jointly, does not seem to apply to the North American maritime approaches. While the Royal Canadian and US navies work together very closely and have many formal and informal bilateral agreements to allow for tactical integration in most scenarios, the Arctic is a separate scenario — the navies are best described as working in parallel in their respective sections of the North American Arctic. The same is true of the

2 Read in particular the *Northern Lights* report by the Special Senate Committee on the Arctic (Senate of Canada 2019).

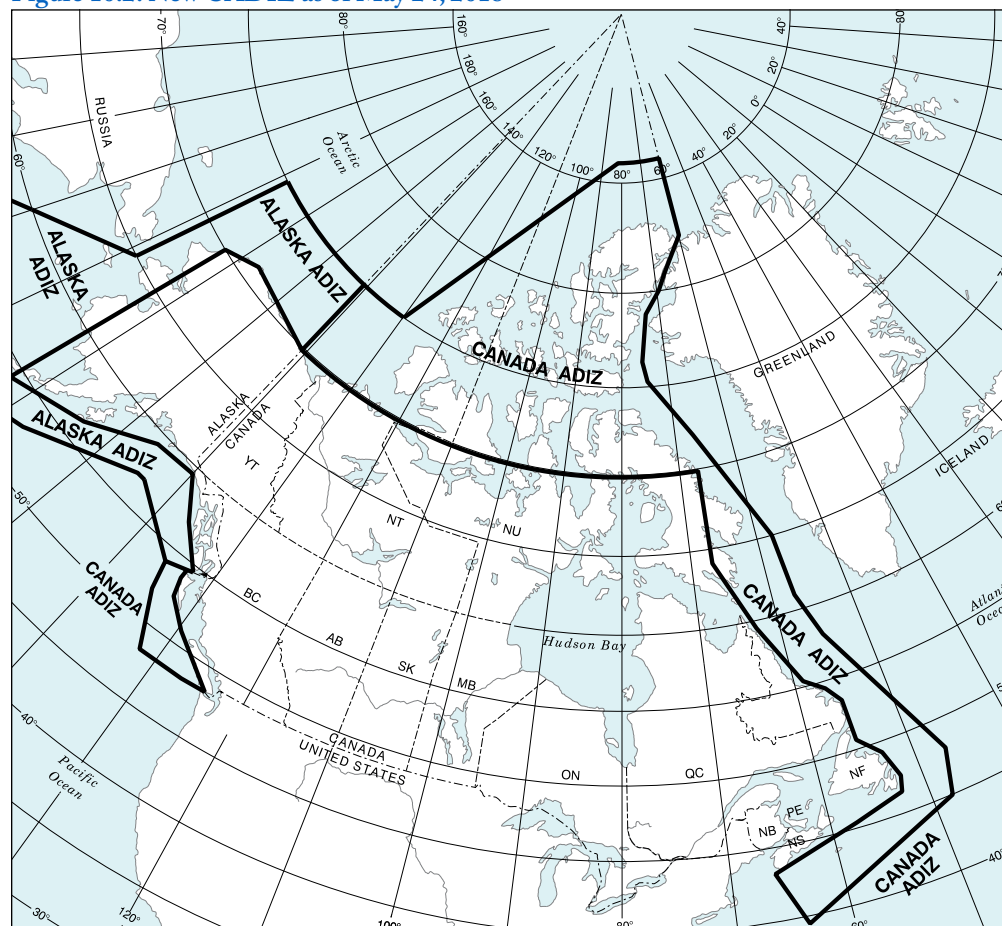
Coast Guards — they work together seamlessly in the Great Lakes and in the Pacific and Atlantic Oceans, but Canadian sensitivities to assumed sovereignty breaches any time a foreign vessel (especially an American one) is in the NWP means that the coast guards are quick to reference the terms of the 1988 Arctic Cooperation Agreement (Global Affairs Canada 2014) before engaging in activity in the other's Arctic. One could see a variant of the Shiprider program officially known as Integrated Cross-Border Maritime Law Enforcement Operations, a program that has US and Canadian law enforcement officers on board the same ship to patrol shared maritime borders, such as in the Great Lakes, to arrest drug smugglers or other violators of Canadian or US law (Royal Canadian Mounted Police 2016), naturally extend to Canada's Arctic Offshore Patrol Vessel, a new class of ship to monitor the Beaufort Sea with the United States, or the Lincoln Sea with the Danes, but this collaboration would require Canada to solve its maritime boundary disputes with both states.

Figure 10.1: Pre-2018 CADIZ Orientation



Source: Created by Pierre-Louis Têtu. Reprinted from Lasserre and Têtu (2016) with permission.

Figure 10.2: New CADIZ as of May 24, 2018



Source: Transport Canada (2019, 195).

The future may call for closer and coordinated Canada-US maritime activity in the North American Arctic, but this would require a major shift in the culture and thinking on the part of Canadians and the two navies, and it would require aggressive action on the part of state or non-state actors. To date, the major tests by, for example, Russia, have been to “buzz” the Canadian and American Air Identification Zones in the Arctic with bombers and fighter jets, which NORAD is already designed to detect, deter and defeat (NORAD 2019). To ensure NORAD can identify and intercept air threats, Canada and the United States are considering what new command and control arrangements and Forward Operating Locations and other infrastructure (in particular, deep-water ports) are needed to ensure Canada and the United States can operate effectively in the Arctic. To the credit of defence planners, all options are on the table, including incorporating Thule Air Force base, located in Greenland — the US Armed Forces’ northernmost installation — into the North American defence plan. Thule is home to one of NORAD’s three Ballistic Missile Early Warning System radars and it remains the only refuelling site for military vessels in the North American Arctic. Canada and the United States are considering what it means to share and develop dual-use infrastructure when it makes sense and is feasible, given the high costs to install and maintain infrastructure in the Arctic. They are thinking

about how to balance civilian and military needs and how to consult properly and work with local populations. Canada and the United States, however, have different histories and are at different stages in terms of Indigenous/state relations. Leveraging the close ties between Alaska and Yukon and learning from unique national arrangements (for example, the Ranger and Junior Ranger program in Canada and the National Guard system in the United States) as sources of strength and commonality in the Arctic are important.

The United States, Canada and NATO allies are also thinking about how the various militaries, commands and alliances should operate in concert and strategically to limit the ability of adversaries to exploit seams and gaps between, for example, the various geographic US combatant commands, NORAD and NATO areas of responsibility and even geographical choke points such as the Greenland-Iceland-UK gap in the North Atlantic. More exercises, while always welcomed by the Canadian Armed Forces, nevertheless place a resource burden on its much smaller force, which can have implications for support to other missions, burnout rates and equipment fatigue. The number of Canada's regular force complement (68,000 personnel) (Department of National Defence 2019, 49), for example, is nearly the same as the number of personnel (65,500) in the US Special Operations Command (2019). The personnel and resource "gap" between Canada and the United States needs to be remembered and managed.

Canada and the United States need each other and need to work with other Arctic states, in particular Russia. Search and rescue demands in the Arctic are projected to increase, requiring joint training and the sharing of lessons learned. All militaries also share "unlimited liability" and have an "aid to the civil authorities" role of various dimensions, which means militaries are often used as the last resort when all other policies and plans fail. The recent signing of the International Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean in October 2018 is proof that even potential adversaries can cooperate to create a pre-emptive agreement.³ China and Russia are essential partners if such an agreement is to work. Militaries, however, are likely to be involved in the monitoring of this moratorium because of their access to the satellite imagery necessary to monitor that the terms of the moratorium are respected and because of the militaries' physical reach into global commons areas. Mind you, the preamble of the agreement notes that commercial fishing is unlikely to become viable in the high seas portion of the central Arctic Ocean in the near future, and so the need for enforcement may be moot.

The Canada-US defence relationship, however, can be upset, especially when national interests are misaligned. For example, Canada's refusal to participate in the United States' ground-based midcourse defence system (which Canada refers to as "ballistic missile defence") has been a source of friction, as have recent suggestions by Secretary of State Mike Pompeo that the United States should pursue freedom of navigation exercises in the NWP because Canada's claim to it is "illegitimate" (Pompeo 2019). In the case of ballistic missile defence, the United States simply worked around Canada's "no"; NORAD will warn of an incoming ballistic missile, but USNORTHCOM has sole decision making

3 This agreement signed by Canada, China, Denmark, the European Union, Iceland, Japan, Norway, Russia, South Korea and the United States creates a 16-year moratorium on unregulated fishing in the central Arctic Ocean with optional five-year renewals thereafter. See Fisheries and Oceans Canada (2019).

in terms of defeating the missile with its intercept system. The United States' room to manoeuvre is far greater than Canada's, and generally, the United States accommodates Canadian concerns and challenges or develops its own, unilateral solution. The latter case is more problematic because Canada has less flexibility to compromise on this issue without prejudicing its case. The United States has always referenced Canada's categorization of the NWP as illegitimate — that is not new — but it has never threatened the freedom of navigation exercises to underline this difference of opinion. The limits of “agreeing to disagree” may have just been found. As well, responding to this current, mercurial US administration is fraught with unexpected backlashes that make Canada reticent to respond as it might wish to do.

The good news is that NORAD's terms of references, the background Canada-US defence architecture⁴ and 60-plus years of defending North America jointly are usually a buffer to contentious Canada-US political machinations. For example, NORAD continued operating undiminished during the contentious NAFTA negotiations. Indeed, NORAD is often out of sight and out of mind, which is perhaps more problematic. An undervalued or underappreciated NORAD is a NORAD that can be marginalized. And, for North America and its Arctic, NORAD is still the best and most functional solution to deter, detect and defeat air-breathing threats that use the northern approaches as a throughway to attack Canada or the United States.

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4 This architecture includes the Combined Defence Plan, the Military Cooperation Committee and so on; see Government of Canada (2014).

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China and the Canadian Arctic

Michael Byers and Emma Lodge

China's interest in the Arctic is a result of decisions, led by Deng Xiaoping in the late 1970s and 1980s, to move toward a market-based system and embrace international trade. As the economy surged, China became more engaged in the wider world.

China sent the *Xue Long* research icebreaker on its first Arctic voyage in 1995, joined the International Arctic Science Committee in 1996 and built a research station on Svalbard in 2004 (Jakobson 2010, 3). In 2007, it applied for observer status at the Arctic Council, receiving that status in 2013. In 2018, China joined the five Arctic Ocean states (Canada, Norway, Russia, Denmark and the United States) as well as Iceland, Japan, the Republic of Korea and the European Union in a treaty that precludes commercial fishing in the central Arctic Ocean until scientific research establishes that it can be sustainable.

China's 2018 Arctic Strategy describes China as a "Near-Arctic State" with a benign set of interests: to understand the Arctic through research, protect against global warming, contribute to social and economic development of the Arctic, and participate in its governance "on the basis of rules and mechanisms" (State Council Information Office of the People's Republic of China 2018, sections II and III, respectively).

China is developing its Arctic capabilities. The Chinese government will take delivery of a second icebreaker in 2019 and is now planning to build a larger, nuclear-powered third icebreaker. Chinese companies are building ice-strengthened cargo ships and sending them through the Northern Sea Route (NSR), with the permission of Russia. Even the Chinese navy is developing Arctic capabilities, in the form of nuclear-powered submarines that should be able to operate under sea ice (Sevunts 2019).

While China is cooperating with the Arctic states, its actions elsewhere in the world provide cause for concern. China is building artificial islands in the South China Sea in support of a “historic waters” claim. China continues to threaten Taiwan, which the Chinese government considers a rebel province, and to pressure other states to withdraw their recognition from it. China is lending developing states vast sums as part of its Belt and Road Initiative, creating debt traps that provide it with influence. China is in a standoff with Canada over the arrest and possible extradition of the chief financial officer of telecommunications giant Huawei to face allegations of bank fraud in the United States. In response to that arrest, China arrested a former Canadian diplomat and charged him with spying.

Yet, none of these actions preclude China-Canada cooperation in the Arctic, since it is well established that countries can maintain positive relations in some regions or issue areas while relations elsewhere have broken down. Russia has cooperated extensively with other Arctic countries, both during and after the Cold War as well as after the 2014 annexation of Crimea. China continued to cooperate with Norway in the Arctic after suspending other aspects of their relationship when Liu Xiaobo was awarded the Nobel Peace Prize in 2010. Indeed, the opportunity that the Arctic provides for continued cooperation could help to prevent international crises from spreading (Byers 2017).

Arctic Resources

Canada is the world's second-largest country, and 40 percent of its territory is located in the Arctic. It has the longest coastline of any country, with vast exclusive economic zones that extend 200 nautical miles from shore, as well as sovereign rights over seabed resources located further out, where geological and geomorphological data show the existence of an “extended continental shelf” (Byers 2013).

Canada's Arctic territory and maritime zones contain rich deposits of oil, gas and minerals. And much has been made of China's interest in Arctic resources, with some commentators suggesting that China might assert control over them — notwithstanding the rights of the Arctic states.

These suggestions have little foundation in reality. In Africa and Latin America, China has a well-established record of obtaining resources through trade and foreign investment. All the Arctic countries are open to doing business with China, as demonstrated by the Yamal liquefied natural gas project in Russia, the lapsed partnership between Chinese National Offshore Oil Corporation, Petoro AS (Norway) and Eykon Energy (Iceland) in Iceland, and the Kvanefjeld uranium mine in Greenland.

Chinese investments have also occurred in the Canadian Arctic. The Nunavik Nickel Mine, near Deception Bay, Quebec, is Chinese-owned, and in 2014, the first shipment of nickel concentrate from that mine was carried westward through the Northwest Passage to China — on a Canadian-owned ice-strengthened cargo ship (Farquhar 2014). Chinese companies are also involved in the proposed Lac Otehluk Mine in northern Quebec and the Izok Corridor Project in western Nunavut. There is no reason why resources on the extended continental shelf would be treated any differently since China has ratified

the United Nations Convention on the Law of the Sea¹ (UNCLOS) and confirmed its application to the Arctic as a condition of becoming an observer at the Arctic Council.

The “deep seabed” beyond the extended continental shelf is different, although not in any way that causes concern. Under UNCLOS, resources located there are the “common heritage of mankind”² and may be mined under the regulation of the International Seabed Authority, with some of the revenue being shared with least developed states.³ China has already followed these procedures before engaging in deep seabed mining elsewhere in the world.

Arctic Shipping

China is the world’s largest shipping state. As part of its Belt and Road Initiative, China has been developing shipping routes around the world, with one of these being the “Polar Silk Road” through the NSR along the coast of Russia. The NSR reduces the distance between China and northwestern Europe by 6,000 kilometres. China tested the route with the *Xue Long* in 2012 and began sending cargo ships through in 2013. It has done all this in partnership with Russia, which holds that the narrowest sections of the NSR constitute “internal waters” subject to its jurisdiction and control.⁴

On the Canadian side of the Arctic Ocean, the Northwest Passage offers a similar shortcut between China and the northeastern United States, and an even greater shortcut between China and the Eastern Canadian Arctic. Indeed, during good ice conditions, a vessel sailing from northern Quebec through the Northwest Passage to China would consume 40 percent less time and fuel than if it used the Panama Canal. This is what happened in 2014, when an ice-strengthened ship carried 23,000 tonnes of nickel concentrate to China.

Although there is uncertainty as to when ice conditions will allow for reliable cargo shipping through the Northwest Passage, that time is coming — with the 12 lowest Arctic sea ice extents in the satellite age occurring in the last 12 years. But while the harder “multi-year” ice could disappear, the waterway will remain a dangerous location for shipping. For instance, the number of icebergs is increasing as climate change accelerates the movement of glaciers into the sea. Ice-free waters also bring an increased risk of icing, whereby a combination of strong winds and sub-zero temperatures cause spray to freeze on the superstructure of a vessel, creating a potentially catastrophic imbalance.

The picture is also clouded by a dispute between Canada and the United States over the legal status of the Northwest Passage. Canada holds that the waterway constitutes internal waters subject to its full jurisdiction and control, while the United States claims it is an international strait open to vessels from any country, with very few restrictions.

1 *United Nations Convention on the Law of the Sea*, 10 December 1982, 1833 UNTS 397, 21 ILM 1261 (entered into force 16 November 1994).

2 *Ibid.*, art 136.

3 *Agreement relating to the Implementation of Part XI of the United Nations Convention on the Law of the Sea of 10 December 1982*, 28 July 1994, 1836 UNTS 3.

4 *Aide-mémoire*, Government of the Soviet Union to the US embassy in Moscow, July 1964, cited in Bureau of Oceans and International Environmental and Scientific Affairs (1992, 71).

Journalists sometimes assume that China will adopt the same position as the United States. Headlines such as “China Could Be Preparing to Challenge Canada’s Sovereignty Over the Northwest Passage” (Jenkins 2016) and “China is wild card in US-Canada split over Northwest Passage” (Tsuruoka 2017) are not uncommon. In reality, China is more likely to support or acquiesce in Canada’s internal waters claim.

China has a record of working with Canadian authorities with regard to Chinese shipping in the Northwest Passage. In 2016, the China Maritime Safety Administration released a guidebook for ships using the Northwest Passage. It recommends that Chinese ships apply for permits from the Canadian government and “obey the Canada Shipping Act, 2001 and the Northern Canada Vessel Traffic Services Zone Regulations 2010” (quoted in Lajeunesse 2016).

A similar approach was taken in 2017, when China asked for permission for the *Xue Long* to conduct maritime scientific research in the Northwest Passage as part of a circumpolar voyage (Fife and Chase 2017). This request enabled China to sidestep the issue of the legal status of the waterway, since permission to conduct research is required from coastal states even in international straits. The Canadian government gave permission, writing that “Canada welcomes navigation in its Arctic waters, provided that ships comply with laws of safety, security and the protection of the environment” (quoted in *ibid.*). It also recommended that China hire a Canadian ice pilot. China not only hired the pilot; it invited Canadian scientists on board.

There are practical and legally strategic reasons for China to support or at least acquiesce in Canada’s internal waters claim. The Northwest Passage is remote, dangerous, and depending on the route taken, between 1,500 and 2,000 kilometres long. Canada, as the coastal state on both sides, is uniquely positioned to support shipping with maritime charts, aids to navigation, weather and ice forecasting, ports of refuge, search and rescue, and a police presence for deterring and dealing with pirates, terrorists and smugglers. In the absence of this support, commercial shipping would be quite dangerous, leading to accidents and higher insurance rates.

China’s legally strategic reason for supporting or acquiescing in Canada’s position comes in the form of a China-US dispute over the status of Qiongzhou Strait between the Chinese mainland and Hainan Island, west of Hong Kong toward the maritime boundary with Vietnam. Like Canada in the Northwest Passage, China has long maintained that the Qiongzhou Strait constitutes historic internal waters (Chiu 1975, 46). Like Canada, it has consolidated that claim through the drawing of “straight baselines” (*ibid.*). Like Canada, its sole explicit disputant is the United States, which argues that the Qiongzhou Strait is an international strait.⁵

This creates a situation where China would weaken its own legal position if it opposed Canada’s claim, as Nong Hong explains: “For China, and other non-Arctic states, one fundamental question is what their position is on the legal status of the north-west passage and the Northern Sea Route....Should China adopt the position of the United States and

5 For more, see Byers and Lodge (2019).

the EU, it will weaken China's own argument that Qiongzhou Strait, between Hainan and Continental China, lies in China's internal waters."⁶

China could, indeed, simply not take a position on the Northwest Passage dispute, while working with Canada to support commercial shipping. One could even envisage an Arctic cooperation agreement between China and Canada that set the legal status of the Northwest Passage aside and focused on the development of a safe and efficient shipping route, much as the 1988 Arctic Cooperation Agreement between the United States and Canada has done.

Alternatively, China could cooperate on Arctic shipping and bolster its legal position in the Qiongzhou Strait by recognizing Canada's claim.

Opportunities for Cooperation

For the next decade or two, the greatest opportunities for China in the Canadian Arctic likely concern the extraction of minerals and their shipment to China, westward through the Northwest Passage.

Foreign investment in mining in the Canadian Arctic is generally well accepted. The British-South African company De Beers has mines and projects in Nunavut and the Northwest Territories, an Indian company owns the Mary River iron ore mine in Nunavut and a Chinese company owns a nickel mine in northern Quebec.

The more difficult question concerns whether Canada would allow Chinese investments in coastal infrastructure and services to develop the Northwest Passage as a safe and efficient shipping route. Would the Canadian government allow a Chinese company to build an Arctic port, or a transshipment port in Newfoundland and Labrador that would allow containers to be transferred between ice-strengthened vessels and ocean-going vessels serving the eastern United States?

Any such proposal would raise national security questions, as did the proposed sale of Aecon, a large construction firm, to a massive Chinese state-owned company in 2018. That sale was blocked by the Canadian government. However, concerns about Chinese investment in Arctic-related ports might be diminished by the realization that such ports will probably not be built without Chinese investment, a quite different proposal than to purchase an existing port on the East or West Coast.

If national security concerns persisted, it is possible to imagine a public-private partnership between a Chinese company and the Canadian, Nunavut or Newfoundland and Labrador governments, with control over the port remaining in public hands. Alternatively, one could imagine a joint venture between a Chinese company and a Canadian company (or even an Inuit Indigenous title claims organization such as Nunavut Tunngavik Inc.), with majority ownership and control being vested in the Canadian partner and any sale or transfer of that control requiring a full national security review.

6 See Hong (2014, 277), citing Olga Alexeeva and Frédéric Lasserre's article "China and the Arctic" from the *Arctic Yearbook* 2012.

One could also imagine cooperation between China and Canada on improving services along the Northwest Passage. One approach would be for the two countries to agree that Chinese ships would pay fees that would be used to produce improved maritime charts, better weather and ice forecasting, the seasonal basing of search and rescue helicopters in the Arctic, and improved oil spill clean-up capabilities.

The bottom line is that China-Canada cooperation on Arctic resources and Northwest Passage shipping would be relatively easy to structure — if political will exists on both sides. Such cooperation could strengthen the internal waters positions of both countries, bolster their economies, and provide a safer and more efficient shipping route for Chinese, Canadian and other vessels.

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Resilience, Environment and Economic Development in the Canadian Arctic

Heather N. Nicol and Justin Barnes

Canada's Arctic Challenges

Global warming has transformed the way security and development are understood in the Canadian North. Communities face pressure to consider economic development as a way to address many of the climate-related issues they are facing. There is now considerable uncertainty about the capacity of communities to respond to local disasters ranging from coastal erosion and slumping, increasingly violent storms, toxic algae blooms, declining food species and changing migration patterns, existing infrastructure collapse and disasters at sea (including oil spills or other disturbances related to increasing marine traffic and resource extraction activities). For example, Canada's Department of National Defence report *Strong, Secure, Engaged* (2017) identified various environmental threats, including air and maritime pollution and melting of the polar ice in the Arctic region, among the various security threats and concerns facing the region. But this does not mean that additional defence capacity will be directed toward the prevention or resolution of these issues — in particular at the community level. Indeed, as one local Inuit politician noted in a 2018 workshop of regional security operators, communities will need to be trained, resourced and empowered to act in the event of critical incidents. Yet, how will this be accomplished? A lack of resourcing for conventional security challenges already characterizes the region. When that lack is coupled with no increase in resources or economic activity to offset limited capacity at the community level, problems can emerge or be exacerbated.

The first challenge for policy makers is finding additional resourcing for new and much-needed mitigation activities against increasingly volatile natural conditions that leave communities vulnerable, a fact that the recent report

of the House of Commons' Standing Committee on Foreign Affairs and International Development (2019) has underscored. That report recommended that Canada develop "critical programs and services to Canadians." This would be accomplished by ensuring that there are no future gaps in Canada's maritime security and domain awareness, scientific research, or search and rescue capabilities. This recommendation realizes that the roster of events that threaten national security has broadened so dramatically that demand for security responses to major incidents related to environmental change has become part of normative defence planning.

The second major policy challenge is related to optics. Due to the nature of Canadian environmental politics, large oil, liquefied natural gas (LNG) and other resource-extractive development projects have been counterpoised as a challenge to environmental integrity and therefore off limits for Arctic communities to pursue. Northern communities are increasingly informed that such projects are environmentally deleterious and unwanted. One perfect example is the oil and gas moratorium implemented by the 2016 United States-Canada Joint Arctic Leaders' Statement (Trudeau 2016). In December 2016, US President Barack Obama and Prime Minister Justin Trudeau released the statement prohibiting new offshore oil and gas licences in Canadian Arctic waters. The Canadian government's position was that Arctic waters have irreplaceable value and that any water-based oil extraction and spill response in the remote region would present unprecedented challenges. The statement's goal was to "ensur[e] a strong, sustainable and viable Arctic economy and ecosystem, with low-impact shipping, science based management of marine resources, and free from the risks of offshore oil and gas activity" (ibid.).

This positioning of economic development and environmental protection in the Canadian Arctic as polar opposites is not new. Early assessments of the impacts of oil spills on the Arctic environment, including a report from the CBC's *The Nature of Things* (1976), rightly identified the potential for large-scale environmental destruction and unalterable change to Indigenous lifestyles in the North. The southern perception of the Canadian North as a resource frontier, however, has pitted environmental protection against economic development, often causing frustration for Northerners who call the region home yet feel left out of the policy development process.

In 2019, this framing needs refreshment. The very intimate link between development capacity and human security is still relatively new in Canadian policy and strategy documents focused on the North. In 2009, *Canada's Northern Strategy* asked that the principles of responsible and sustainable development anchor all decision making and action (Government of Canada 2009). That same year, the new policy initiative Canadian Northern Economic Development Agency made developing Northern infrastructure a priority. In both cases, however, economic development was linked to strengthening sovereignty. It was during Canada's 2013–2015 chairmanship of the Arctic Council that economic development was positioned as a foundational pillar to benefit Northern peoples and communities.

Nonetheless, while there is now considerable talk regarding the need for economic infrastructure, its development is slow. As late as 2016, the National Aboriginal Economic Development Board emphasized the critical infrastructure deficit in its annual report,

indicating that it perpetuates major limitations in economic capacity and development for Northern communities (Northern Aboriginal Economic Development Board 2016). The Government of Canada's 2018 "Arctic Policy Framework Discussion Guide," which set the tone for consultative discussion on the yet-to-be-released policy framework, seems to signal that this message has been heard,¹ but so far, little has changed. As contributions to this volume of essays already suggest, economic dependency poses a real problem for Canada's North. The resulting infrastructure deficit, combined with a lack of opportunity for economic development that is curtailed in the absence of infrastructure, contributes to a general deficit in community well-being, including limited energy, potable drinking water and housing. Yet, for many Northern communities, economic development has become one of the most important tools for addressing the issues they face, including climate disaster and more general insecurity.

It would be safe to conclude, therefore, that the issues of the environmental impact of climate change and ongoing economic development in the Canadian North cannot be understood independent of one another. Climate change mandates new ways of understanding development for Arctic communities and policy makers. The goal of achieving "sustainable development" that characterized earlier documents now gives way to that of maintaining community well-being in an increasingly volatile and often unpredictable natural environment. Under conditions of such rapid environmental change, maintaining the status quo is simply unrealistic.

In the UN Sustainable Development Goals (UN SDGs) framework, for example, the concept of sustainable development is understood broadly. Within this literature, there is an acknowledgement that sustainable development in the North must be situated in the context of decolonization and reconciliation, economic development and social justice (for example, Poppel 2018). The UN SDGs promote place-specific social, environmental and economic justice outcomes, such as renewable energy and energy security, clean drinking water, meaningful employment, and responsible production and consumption. While a more general analysis of the UN SDGs and their relationship to broader notions of social, environmental and economic justice is impossible here, it is important to note that if the UN SDGs were developed with non-Arctic and less developed regions of the world in mind, there is, nonetheless, a literature that applies them to the Arctic context, acknowledging the developing economies of the region (for example, Forsyth 2014). The recently concluded Finnish Arctic Council Chairmanship, moreover, placed strong focus upon the UN SDGs in the Arctic in orienting their Arctic chairmanship policies (Finland 2013).

As such, the UN SDGs form a conceptual basis for linking sustainable development goals to broader social, environmental and climate justice objectives. But they also help to pinpoint the potential intersections among a number of processes currently underway in the Canadian North, such as human security needs, the challenge of a rapidly changing environment and the enduring need for sustainable, resilient forms of economic development. Sustainable development goals remind us that policy needs to be directed toward enhancing the resiliency of human and natural environments, mindful that these

1 See www.rcaanc-cirnac.gc.ca/eng/1503687877293/1537887905065.

two systems are connected. This means ensuring appropriate resourcing for communities and economies in the Arctic region as well as taking environmental conservation measures.

The Three-legged Stool

The concept of “resilience” has developed to address this increasingly dynamic interplay between social change, economic development and environmental change, encouraging adaptation to change, not the prevention of change. Economic development and adaptation strategies that improve resilience for communities facing existential threats have now become important tools for confronting environmental challenges in the North. Indeed, without them, where will community resources to counter the challenges of environmental change be found?

In this sense, the metaphor of a three-legged stool is useful in envisioning this relationship. The first two legs of the stool — environmental protection and economic development — are balanced by a third that reflects the resiliency that is found at the intersection of environment and economy. This third leg represents the degree of human security that is achieved by appropriate, interconnected and mutually supported responses to environmental and economic imperatives. The Canadian federal government approached its 2013–2015 Arctic Council Chairmanship agenda with this view in mind (Exner-Pirot 2016), and seems to be moving toward a similar idea in its near-complete Arctic Policy Framework (if the discussion guide is an accurate indicator). The former proposed an economic emphasis for northern policy, while the latter promises to discuss development through a co-management lens.

The Arctic Policy Framework Discussion Guide suggested that areas of concern will include “strengthened and diversified economies...central to sustainable community wellness and to Indigenous self-determination.” It will also emphasize “fostering healthy, vibrant and prosperous communities” through local skill-development investments; infrastructure including highways, harbours, ports and airports; and viable energy alternatives. The Arctic Policy Framework will thus need to ensure capacity for community involvement in economic development with reference to changing environmental conditions and should be assessed on this criteria. Without well-developed and consultative pathways leading to greater levels of economic and environmental security for Canada's Northern communities, the value of such consultation is weakened.

Economic Development and Environmental Security

Awareness of the fragility of Arctic natural environments is central to Arctic development policies. While Arctic actors do not always explicitly refer to the threats facing the Arctic environment and its people as a matter of environmental security, many of their policy statements and actions underline their assessment of the region's fragile environment. Environmental security is very much concerned with preventing the deleterious outcomes of development and environmental change. The oil and gas moratorium and the Joint Arctic Leaders' Statement that emerged under the US Arctic Council chairmanship (when climate change science dominated the policy agenda) adopted this approach. At the time, however, no oil or LNG development was underway in the offshore waters of the Arctic Ocean or Bering Sea.

However, the idea that the offshore Arctic oil ban would therefore reverberate positively among all Northerners — in particular Indigenous Northerners — was then, and still remains, deeply problematic. Many Inuit communities, for example, opposed the offshore oil and gas moratorium not only because of their complete lack of consultation but also because they struggle with limited economic opportunity to combat the effect of rapid environmental deterioration and changes to societal norms. Implementing sustainable development strategies is important, but so is building community well-being through economic resilience and diversification. Canadian territorial governments also responded critically to the Joint Arctic Leaders' Statement, arguing that removing oil and gas development as an option limited their ability toward self-governance within their own territories. While this did not lead to the general rejection of the Joint Arctic Leaders' Statement and the moratorium, due to their many shared environmental concerns, it did, however, highlight the degree to which consultation of Northern communities was neglected, and the fact that many such communities see sustainable development policies through a different lens. Over the past three years, for example, pipeline politics has divided Canadians in southern Canada. Support of oil projects has been associated with more populist and right-wing governments, and opposition associated with environmental, activist and Indigenous communities. There is, not surprisingly, a widespread belief among many southern Canadians, who extrapolate from some of the ongoing pipeline controversies, that the Arctic's Indigenous peoples are uniformly opposed to resource development such as offshore oil and gas, because its deleterious environmental effects endanger traditional economies and lifestyles.

If the Joint Arctic Leaders' Statement represented southern environmental sensibilities rather than northern imperatives, where and how are these sensibilities problematic? After all, who does not want to defend the Arctic ecosystem and its peoples? The answer is, of course, no one. But framing the question as a binary (environment versus economy) topples the three-legged stool that is essential to maintaining resilience and community well-being in the North. Binaries make Arctic communities more economically and socially vulnerable than ever because of climate change. These communities require more, not less, resources to offset significant challenges related to infrastructure, food security, health and safety. There is, as a result, clear recognition among Arctic community leaders that “sustainability” requires more choices for adaptations to changing conditions. Environmental security requires resilient, economically viable communities.

The resilience of local communities is closely influenced by state and global actors and their environmental and economic policies. Thus, policy makers must recognize that changing environments alter the dynamic of traditional security assessments within the Canadian North. Economic policies have, until recently, been developed with little regard to how they can build community capacity, the goal instead being to bolster economic development for “sovereignty” goals.

But “building communities” is a different project. The Canadian Northern Economic Development Agency has initiated a spate of programs that attempt to help remedy the problem. However, many of these policies do not always connect with the target in mind. In this regard, a better alignment of development initiatives is needed. The Gordon

Foundation's 2018 Northern Policy Hackathon, for example, looked at the way in which small and medium-sized enterprises, the backbone of the territorial economy in some instances, have been poorly served by federal economic development policies.² This disconnect is also echoed in the Arctic Policy Framework Discussion Guide in its appeal for the identification of private sector funding to leverage infrastructure and innovative technologies, in the belief that increasing the linkages between the Arctic with southern and international businesses will reduce the existing deficit in capacity.

Conclusions

Where does this leave policy makers? The as-yet-unreleased Arctic Policy Framework may indeed contain excellent advice about the need for co-managed security and development arrangements in the North. But, all the advice in the world will have little traction absent a serious contemplation of how environment and economic systems are interrelated. Recognizing those connections means aligning funding for development projects with changing community needs. It means enhancing security-oriented activity that seeks to build robust and resilient communities, rather than "securitizing" environments and demanding that communities adjust. It means determining the environmental security of communities with reference to local and regional conditions as well as with broad and environmentally popular political platforms. Such initiatives may, or may not, involve green economy initiatives. But, they will also likely involve LNG and offshore oil extraction. The problem will be to seek the balance between development and environmental security that ensures the most resiliency. Development incentives will need to be recrafted with specific targets and development communities in mind. But first, the Arctic oil and gas moratorium may need to be rethought in the absence of alternative development strategies.

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² See <http://gordonfoundation.ca/initiatives/northern-policy-hackathon/>.

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