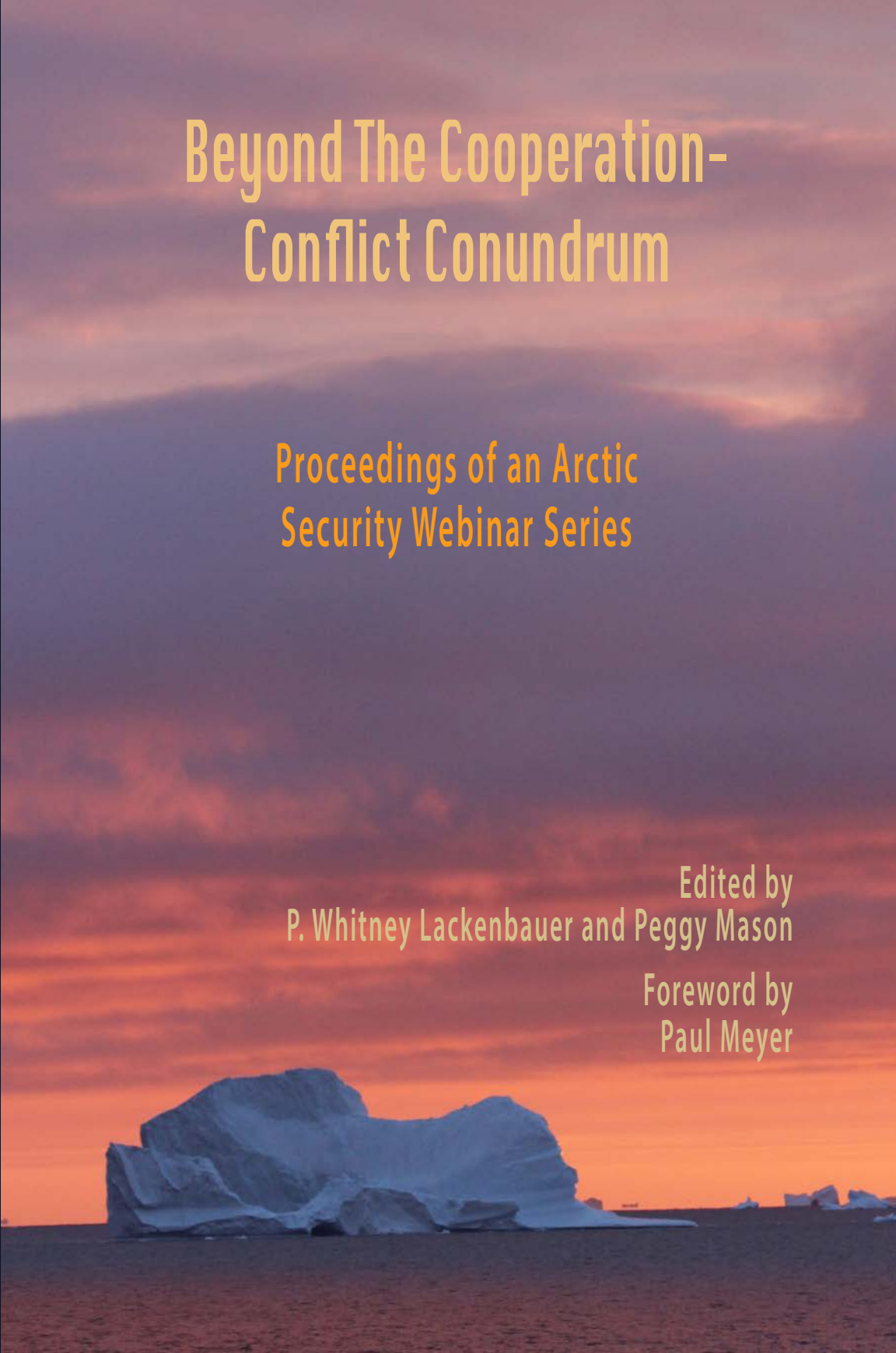
Beyond The Cooperation-Conflict Conundrum

Proceedings of an Arctic Security Webinar Series

Edited by
P. Whitney Lackenbauer and Peggy Mason

Foreword by
Paul Meyer



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Proceedings of an Arctic Security Webinar Series

North American and Arctic Defence and Security Network (NAADSN) / Réseau sur la défense et la sécurité nord-américanes et arctiques (RDSNAA)
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Foreword

The origins of the conference, for which this volume is the published record, go back to the fall of 2019 and the Canadian Pugwash Group's (CPG's) annual general meeting. Having just held a major policy conference at the University of Ottawa on "Speeding Towards the Abyss: Contemporary Arms Racing and Global Security," the CPG was considering what should be the subject of its next policy conference. Arctic security, in all its dimensions, quickly was identified as the theme to pursue. Planning got underway with a view to holding the event in the fall of 2020 and finding suitable partners.

The latter were soon identified in the person of Canada's foremost Arctic expert, Professor Whitney Lackenbauer, and Trent University as the institutional base. Then COVID-19 intervened to put the kibosh to our tentative timing and our original vision of an in-person gathering.

With considerable resourcefulness, the CPG lead, Peggy Mason, and her team, in close collaboration with Whitney Lackenbauer, pivoted to a virtual format, and partnered with the North American and Arctic Defence and Security Network (NAADSN), which Whitney Lackenbauer leads. The Rideau Institute also joined as the third co-sponsor. The organizers recruited a stellar line-up of Canadian Arctic expertise to participate in the conference. In its final form, the conference consisted of six panels featuring two speakers each, covering the full spectrum of Arctic-related issues from climate change to maritime security, and much in between.

After an opening scene-setting pair of keynote presentations featuring Whitney Lackenbauer and Ernie Regehr, panel one focused on the immense changes being wreaked on the Arctic by climate change, with Douglas Causey and Will Greaves as the speakers. The panel on "Northern Perspectives" in a changing Arctic, featuring Bridget Larocque and Sergeant John Mitchell of the Canadian Rangers, made a compelling case for meaningful Northerner engagement. The complex world of the political/legal regime relevant to the Arctic was rendered crystal clear in the third panel with Elizabeth Riddell-Dixon and Aldo Chircop. The implications of "Resurgent Great Power Competition" for the Arctic were masterfully outlined in the fifth panel by Andrea Charron and Nancy Teeple, who flagged actions that could prove destabilizing for Arctic security and suggested ways in which cooperation could be reinforced. The final panel, featuring Whitney Lackenbauer and Peggy Mason, had the daunting challenge of bringing together all the various strands of the conference into a coherent assessment of the current realities and future prospects for Arctic security. They reminded us of the continued need for diplomacy and the development of cooperative measures if the security and well-being of the Arctic and its inhabitants are to be safeguarded.

As one of the speakers remarked, "Arctic policy is marked by elements of competition alongside cooperation," and one might formulate the underlying message of the conference as how we can minimize the former and maximize the latter. While the conference had a security theme, it took an interdisciplinary approach in recognition of the interdependencies among the various factors that help shape the "human security" of the Arctic.

Personally, I learned a great deal from this series of webinars, and I am confident that the readers of this collection of presentations and discussions will similarly come away with a sense of enlightenment as well as awe for a realm of this planet that poses unique challenges for humankind.

Paul Meyer, Chair, Canadian Pugwash Group
Adjunct Professor of International Studies and Fellow in
International Security, Simon Fraser University
March 2021

Acknowledgments

This volume publishes the proceedings from a series of virtual sessions co-organized by the Canadian Pugwash Group, the Rideau Institute, the North American and Arctic Defence and Security Network (NAADSN), and Trent University in February 2021.

The North American and Arctic Defence and Security Network (NAADSN) undertakes research, convenes conferences and workshops, and supports the next generation of policy thinkers and analysts on core Arctic defence and security policy challenges. We are particularly grateful to Dr. Shannon Nash, NAADSN's Postdoctoral Network Manager, for her instrumental work in coordinating with presenters, managing registration, and posting online recordings of the sessions on the NAADSN website.

The second co-sponsor, the Canadian Pugwash Group, is the Canadian affiliate of the Pugwash International Conferences on Science and World Affairs, of Russell-Einstein Manifesto fame, recipient in 1995 of the Nobel Prize. Fostering informed discussion, generating policy proposals on global security, including nuclear and conventional arms control, control of the arms trade, and environmental security, is the mandate of the Canadian Pugwash Group through organizing and supporting events such as this series. It owes its name and origins to the village of Pugwash, Nova Scotia. Paul Meyer, a former Canadian Ambassador for disarmament turned university professor, is Chair of the Canadian Pugwash Group. He also generously served as the moderator of the fifth panel on Conclusions and Recommendations for Canadian Action.

The third co-sponsor, the Rideau Institute, of which Peggy Mason is President, is an independent think tank with a mandate to help revitalize Canada's peacekeeping, diplomatic peacemaking, and peacebuilding role in the world through inclusive multilateralism, strengthening the UN capacity for conflict prevention and peaceful conflict resolution, and the progressive enhancement of international law. The Institute engages in independent, policy-relevant research and analysis, advocacy, and social media engagement on Canadian international security policy.

The various presenters have had an opportunity to correct the transcripts of the discussions expertly produced by Jill Barclay, a NAADSN Post-Graduate Fellow, who served as the webinar series' rapporteur. Thanks to her and copy-editor Corah Hodgson for their professional contributions to this product.

P. Whitney Lackenbauer and Peggy Mason
March 2021

Acronyms

ABM	Anti-Ballistic Missile
AC	Arctic Council
AHHEG	Arctic Human Health Expert Group
Art.	Article
ASWG	Arctic Security Working Group
BC	British Columbia
BMD	ballistic missile defence
CAF	Canadian Armed Forces
CAO	Central Arctic Ocean
CCGS	Canadian Coast Guard Ship
CDA Institute	Conference of Defence Associations Institute
CDS	Chief of the Defence Staff
CEMC	Community Emergency Measures Committee
CF	Canadian Forces
CGAI	Canadian Global Affairs Institute
CIRNAC	Crown-Indigenous Relations and Northern Affairs Canada
CLCS	Commission on the Limits of the Continental Shelf
COP26	26th United Nations Climate Change Conference (2021)
COVID	coronavirus disease
CPG	Canadian Pugwash Group
CUES	Code for Unplanned Encounters at Sea
DC	District of Columbia
DCASS	Documents on Canadian Arctic Sovereignty and Security
DEW Line	Distant Early Warning Line
DHS	Department of Homeland Security (United States)
DM	Deputy Minister

DND	Department of National Defence (Canada)
DoD	Department of Defense (United States)
DPRK	Democratic People's Republic of Korea
EUCOM	European Command (United States)
FYI	for your information
GBA+	Gender-based Analysis Plus
GCI	Gwich'in Council International
GIUK	Greenland-Iceland-United Kingdom
GNWT	Government of Northwest Territories
GPS	Global Positioning System
HADR	Humanitarian Assistance and Disaster Relief
IACS	International Association of Classification Societies
IMO	International Maritime Organization
INDOPACOM	Indo-Pacific Command (United States)
INF	Intermediate-Range Nuclear Forces
km(s)	kilometre(s)
LNG	liquefied natural gas
MAJAID	Major Air Disaster
MARPOL	International Convention for the Prevention of Pollution from Ships
NAADSN	North American and Arctic Defence and Security Network
NATO	North Atlantic Treaty Organization
NDVI	Normalized Difference Vegetation Index
NGO	non-governmental organization
nm(s)	nautical miles
NORAD	North American Aerospace Defence Command
NORDREG	Northern Canada Vessel Traffic Services Zone Regulations
NWFZ	nuclear-weapon-free zone
NWT	Northwest Territories

OSCE	Organization for Security and Co-operation in Europe
PACOM	Pacific Command (United States)
PC	Polar Code
P5	Permanent Five of the United Nations Security Council
SACLANT	Supreme Allied Commander Atlantic
SALT I	Strategic Arms Limitation Talks I
SAR	search and rescue
SDI	Strategic Defense Initiative
SECEG	Social, Economic and Cultural Expert Group (Arctic Council Working Group)
SHIELD	Strategic Homeland Integrated Ecosystem for Layered Defence
SOLAS	International Convention for the Safety of Life at Sea
SSBN	ballistic missile submarine
START	Strategic Arms Reduction Treaty
STEM	science, technology, engineering, and mathematics
UBC	University of British Columbia
UK	United Kingdom
UN	United Nations
UNCLOS	United Nations Convention on the Law of the Sea
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
US	United States
USCENTCOM	United States Central Command
USEUCOM	United States European Command
USNATO	United States Mission to the North Atlantic Treaty Organization
USNORTHCOM	United States Northern Command
UVic	University of Victoria

1. Reconceptualizing Arctic Security

Tuesday, 2 February 2021

Peggy Mason

Welcome, everyone. My name is Peggy Mason, and I have the privilege to introduce today's keynote presentations, which will launch our February 2021 six-session webinar series on Arctic security. Taking place against the backdrop of a new American administration, where the first conversation between President Biden and Prime Minister Trudeau included, we are told, agreement on expanded cooperation in the Arctic, the series is co-hosted by three organizations: the North American and Arctic Defence and Security Network (NAADSN), the Canadian Pugwash Group, and the Rideau Institute on International Affairs. …

Let me turn now to the format of our keynote session. Dr. Whitney Lackenbauer will spend 15 minutes setting the context. Ernie Regehr will then discuss defence and military issues for 15 minutes. We will then return to Whitney, who will focus on the broader dimensions of Arctic security for 10-15 minutes. Finally, if time permits, our speakers have agreed to field a few questions, bearing in mind that they will just have highlighted some key themes

to be addressed in greater depth in the ensuing five webinar panels. Questions will be via the Zoom chat function.

Now for the introductions. Dr. Whitney Lackenbauer is Canada Research Chair in the Study of the Canadian North and a Professor in the School for the Study of Canada at Trent University, Ontario, Canada. He also serves as Honorary Lieutenant-Colonel of the 1st Canadian Ranger Patrol Group and is the Network Lead of the North American and Arctic Defence and Security Network. He has co-written or co-edited more than 50 books and more than 100 academic articles and book chapters. His most recent books include *Breaking Through? Understanding Sovereignty and Security in the Circumpolar Arctic* (co-edited 2021), *Canada and the Maritime Arctic: Boundaries, Shelves, and Waters* (co-authored 2020), *Custos Borealis: Military in the Canadian North* (edited 2020), *Governing Complexity in the Arctic Region* (co-authored 2019), *Breaking the Ice Curtain? Russia, Canada, and Arctic Security in a Changing Circumpolar World* (co-edited 2019), and *China's Arctic Ambitions and What They Mean for Canada* (co-authored 2018). Good grief, I'm exhausted just reading that list of *recent* publications!

Ernie Regehr is a Senior Fellow in Defence Policy and Arctic Security with the Simons Foundation, Canada, and a Research Fellow at the Centre for Peace Advancement at Conrad Grebel University College at the University of Waterloo. He is the Co-Founder and former Executive Director of Project Ploughshares, with whom the Canadian Pugwash Group and the Rideau Institute often collaborate. His publications include books, monographs, journal articles, policy papers, parliamentary briefs, and op-eds. Ernie has served as an NGO (non-governmental organization) representative and expert advisor on Government of Canada delegations to multilateral disarmament forums, including review conferences of the Nuclear Non-Proliferation Treaty and UN conferences on small arms. In fact, I first met him while putting his name forward to the Minister of Foreign Affairs to serve on a UN expert group on small arms. In that context, he also served as an advisor to the Government of Kenya in the development of the regional small-arms initiative, the Nairobi Declaration. His travel to conflict zones has included contributions to track-two diplomacy, and he served on the board of the African Peace Forum of Nairobi. He is an officer of the Order of Canada. I turn now to Dr. Whitney Lackenbauer to set the context for us.

P. Whitney Lackenbauer

Thank you, Peggy, for that most generous introduction, and it is really an honour to be here with all of you. I welcome this opportunity to re-visit some of my ideas about how we might conceptualize Arctic security, and to set the

stage for our series of discussions unfolding throughout this month. To those of you who have heard elements of this before, I hope that I am more coherent than I have been in the past, or that this recap offers a touchstone for some of the things you might push back on, which of course I always welcome.

> *The Arctic region represents an important international crossroads where issues of climate change, international trade, and global security meet… 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… This rise in [commercial, research, and tourism] activity will also bring increased safety and security demands related to search and rescue and natural or man-made [humanitarian] disasters to which Canada must be ready to respond.*
>
> -Canada's defence policy, *Strong, Secure, Engaged* (2017)

I often start with this quote because I think it sets the table in terms of Canada's understandings of Arctic security and regional dynamics. It speaks about this region as an important international crossroads and encourages us to contemplate climate change as a major driver of global transformation facing humankind, obviously accelerating and changing the face of, and in many ways the social fabric of, the Arctic. As for international trade: maybe in the future—but not much in the current North American context. Then there is global security. The policy defence statement also reiterates an emphasis on longstanding cooperation amongst the Arctic states—all of the Arctic states, including Russia, "on economic, environmental, and safety issues, particularly through the Arctic Council, the premier body for cooperation in the region." And there is a recognition that "all Arctic states have an enduring interest in continuing with productive collaboration," and a vested interest in seeing things maintained in a peaceful way. But then there is a rise in commercial, research, and tourist activity that brings increasing safety and security demands, relating to search and rescue, humanitarian disasters, and the need for Canada to respond. At the same time, within the defence policy are worries about what is transpiring globally and also changing pressures that may ultimately undermine the spirit of peace and cooperation that has animated the Arctic region in recent decades.

I start with the idea that the question of Arctic cooperation *or* Arctic conflict (a simple binary) is a strawman argument. Maybe it is just my aversion to binaries in the world right now, where it seems like people are trying to force them everywhere. I think that in the case of the Arctic, we need to contemplate a region characterized by aspects of cooperation *and* of competition in a world

of similar dynamics. So really the discussion should be about how we can bolster those areas of regional cooperation against these forces of competition that drive wedges. If we accept inter-state competition as being a natural state of affairs, we do not want it to spill over into conflict—and I see this as the major priority for Arctic dialogue.

Accordingly, my operating assumption is that the competition between Arctic states is likely to continue, and certainly competition between Arctic states and non-Arctic states or non-state actors is likely to continue. But it does not mean that threats are equal across all domains, in all parts of the Arctic, or at all scales. Nor does it mean that conflict is inevitable. And I think what probably unifies most of us is the desire to try to avoid conflict, if that is possible, while staying true to our core values and interests as Canadians.

I also think it is important to remember the broader context in which these discussions occur: our desire is to preserve an international order, and to reinforce an international order in the Arctic that promotes human security and environmental security. We also expect best practices of meaningfully engaging with Arctic and Northern peoples and particularly Indigenous Peoples—a key part, of course, of the relationships that the Trudeau government has emphasized—and that we will advance Canadian leadership bilaterally and multilaterally through fora that exist to promote our values and interests. So, thinking about this in terms of a value-based and interest-based foreign and defence policy—and an explicit emphasis here on human and environmental security in our Arctic and Northern Policy Framework—we might consider, how does this come up against broader narratives that we continue to read about in the media that try to set up conflictual frames for the Arctic? The Arctic is too readily depicted as a region that hangs on the precipice—or is increasingly pushed towards a precipice—of conflict.

These drivers of concern and alarm can either suck all the oxygen out of the room, and therefore preclude opportunities to move forward on other security issues that are important, or they can be marginalized and dismissed out of hand, which could arguably set up particular Canadian vulnerabilities if we are unprepared to meet hostile attacks by non-like-minded states or actors (in or across several domains).

First, an almost meta-narrative that drives so much of the Arctic discourse, especially in Southern Canada, is the idea that Canadian sovereignty is on thinning ice. Some of you have heard my critiques of this ad nauseam, so I will go through this quickly. But I think we have to start with this because sovereignty and security are so intertwined in the Canadian psyche that it can lead us to displays of what might be seen as hyper-nationalism, or over-defensiveness. I think we need to start, first of all, by thinking about sovereignty

and whose sovereignty we are prioritizing. One of the reasons why Canada's sovereignty is so strong is that it has been based explicitly, since Joe Clark's 10 September 1985 speech, on the idea of an indivisible Arctic geography—of land and water (in both frozen or liquid state)—that Indigenous Peoples have used and occupied since time immemorial. This is front and centre to Canada's legal and political positions, and our sense of Arctic ownership.

But Canadians often perceive our Arctic to be insecure. This goes back to 1880, when Canada acquired whatever rights Britain had for the Arctic Archipelago. Britain handed them over to Canada. We were not even sure if we were ready to receive them, but we acquired what they had to offer us and subsequently had to clarify what exactly that sovereignty or that ownership actually was. In terms of the ownership of the islands, and the territory itself, we endured through Alaska boundary issues, which marked a sense that the Americans were against us and that Britain would not stand up and back us. We were innovative in asserting quite dubious international legal principles like the sector principle to try and enclose our Arctic territories north of mainland North America. We managed to solve most of those terrestrial sovereignty issues regarding the islands themselves by the 1920s, but questions of sovereignty returned to the forefront when the Americans began to look to Canada's North as a military theatre during the Second World War. Canada had no choice but to follow the American lead, stimulating lingering debates about whether U.S. security and continental defence priorities trump Canadian sovereignty and ownership.

In her 1989 book *Sovereignty or Security?*, my dear friend and mentor, the late Shelagh Grant, challenged and inspired me to read into these questions. It was published at a time when Canadians were deeply concerned about U.S. encroachment, with the Canada-U.S. free trade agreement being consolidated and the concomitant worries about whether American and Canadian interests were compatible. Since that time, other writings by colleagues and myself have been arguing that this "or" equation does not capture the tenor of the bilateral relationship. Canada and the U.S. figured out ways to achieve both security for the continent and respect for Canadian sovereignty during the Cold War and beyond. We did not agree on every issue, but we were able to resolve or put aside disagreements and work out compromises during the construction of the Distant Early Warning (DEW) Line, when operating the Joint Arctic Weather Stations in the High Arctic, and so on.

We often focus on the Northwest Passage as the prime example of when these issues could not be resolved in legal terms, and of the persistent tensions that result. The epic voyages of the *Manhattan* in 1969-70, and later the *Polar Sea* in 1985, really amplified the notion that Canada and the U.S. do not share

a common agreement on the status of the waters between Canada's Arctic islands. The United States suggests that there is an international strait through Canada's Arctic islands, and that everyone enjoys the right to transit them uninterrupted. By contrast, Canada suggests that owing to reasons of historic title, which are conveniently encapsulated in the strait baselines that were drawn effective 1 January 1986, these are Canadian historical internal waters, and we have full sovereignty over them and thus full jurisdiction to control what goes on within these waters. This is a core difference of opinion, but one that, as allies, friends, and neighbours, Canada and the U.S. have been able to solve without prejudicing our respective legal positions. This agreement to disagree, which we have had in place since 1988, has solved the issue of icebreakers, but the lingering question remains of whether this can continue into the future. In 1988, we certainly hoped so, and I still hope so now.

Everything seemed much more optimistic and rosier for those of us who were around in the 1990s. As an undergraduate student and then a graduate student, I watched the fall of the Berlin Wall and the Arctic's mobilization as the spearhead of Canada's efforts to draw Russia into the liberal international order, expanding upon relationship-building initiatives with Russia on areas of common interest that had already been started under Brian Mulroney before the Cold War had even ended. The Arctic states tried to discern ways of using the environment to bring together people on an issue of obvious common interest and needing collaboration. This led to the Arctic Council and eventually the publication of Canada's first Arctic foreign policy statement, the Northern Dimension of Canada's Foreign Policy, in 2000. This statement emphasized a very broad view of Canada's responsibilities, not only in the Circumpolar North, but within Canada's North itself. It promoted the human security of Northerners, while simultaneously thinking about systemic-level benefits that Arctic cooperation could bring by drawing Russia into patterns of what we in the West consider to be appropriate behaviour, while at the same time asserting Canada's enduring sovereignty over our part of the Arctic.

So, what happened? What killed the dove of Arctic peace? A growing recognition of global climate change in the early 2000s revealed that the region was changing at an accelerated rate, with temperatures rising much faster around the poles than in other parts of the world. Would we soon miss the Cold War, as my colleague at the University of Calgary, Rob Huebert, intimated? Was a perfect storm brewing in the Arctic now that the Cold War was over, and thus removing all of the controls that had brought stability and predictability into the region while it was frozen in the superpower embrace? What did this mean in terms of incentives for people to push through Canada's Arctic waters as if they were an international strait, to undertake a whole suite

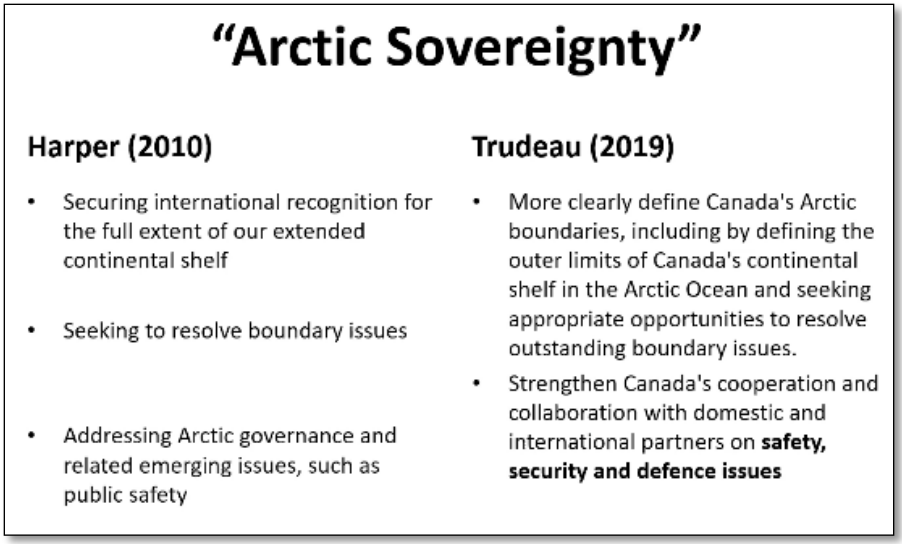
of maritime activities, including tourism, cruise ship, and fishing activities? How did this relate to the race for resources that was going on globally, partly to meet China's insatiable demand for raw materials? What did it mean for transnational crime that can flow alongside resource development? After 9/11, what would it mean in terms of emerging asymmetric threats such as terrorism? Did the melting ice and greater accessibility mean an increased probability of interstate conflict? Did undefined boundaries make this an acute threat to Canada?

At that time, commentators such as Huebert insisted that conflict (or at least tensions and vulnerabilities) was emerging *over* the Arctic and *in* the Arctic. The notion and prospect of an ice-free Northwest Passage was a main catalyst in inciting Canadians to look to the region with urgency, based on the notion that sovereignty was on thinning ice. Sovereignty mattered, because these ideas were tied to images of an Arctic rich in untapped resources—the ownership of which was not nailed down—that were now becoming accessible to the world and. There were lots of problems with these assumptions, but they formed the dominant narratives.

This intersected with the fact that Canada actually has some undefined or contested boundaries in the Arctic: Hans Island in Nares Strait with the Danes; the Beaufort Sea with the U.S., which is potentially oil- and gas-rich; the longstanding question of the Northwest Passage; and extended continental shelves, which Professor Riddell-Dixon will discuss in detail next week.

Under Stephen Harper, these ideas were compressed together, at least in his early years, with the Government of Canada's sovereignty strategy, which was tied closely to security issues and pointed to the need for a more robust defence presence for Canada in the region. Harper's suite of "sovereignty" initiatives introduced circa 2006/07 are a strong case in point. Yet by 2009 and 2010, we saw an alternate narrative emerging, one that was compatible with responsible, proportionate investments in national defence, but one that highlighted the goal of maintaining a stable rules-based region, that encouraged dynamic economic growth and trade, vibrant Northern communities, and healthy and productive ecosystems. Already, under Harper, we also saw an official acknowledgement that Canada does not anticipate military challenges in the Arctic.

Even within that short span of five years, between 2005 and 2010—and I am making a normative judgement here—Canadian politicians showed they were learning and starting to get it right and appreciate what was going on within the region. As this slide on Arctic sovereignty language reinforces, it is interesting that Prime Minister Harper's core messages and Prime Minister



Justin Trudeau's messaging are almost verbatim. And we might contemplate how, if we are talking sovereignty, it is not about lines on a map—it is about everything that goes on within those lines. All of the governance work that Canada continues to invest in within our federal system, including the direct involvement of Indigenous rightsholders within our system, is an expression and part of our sovereignty.

But that is not enough in terms of thinking about security. We have seen a dramatic broadening since the 1990s of how we conceptualize security—the fact that it does not just encompass national security within the mandate of the Department of National Defence, but also includes non-military threats. In addition to being broadened as a concept, security is also being deepened down to the level of people, down to the level of communities. This means we need to look at a complex security environment that involves a whole range of stakeholders and rightsholders. Without getting into details, we also need to think about different sectors of security. If the classic notion of security prioritizes the need to defend the territorial integrity of the state, it also involves defending state sovereignty in terms of the integrity of core political institutions—something that is probably at the top of mind for many of us given what we've seen unfold over the last few months in the United States. What does defending political security—aka sovereignty—mean in a Canadian Arctic context? Maybe different things than it does in other parts of the world. What does it mean in terms of economic security, environmental security, and societal security? Is there space within our frameworks to accommodate all of these dynamics?

I suggest to you that climate change, access to Arctic resources, and uncertainty over Arctic boundaries are not driving the *hard* security or defence agenda in the North American Arctic. We need to be clear about what are speculative or hypothetical threats versus the tangible material threats that we see before us right now. There is real analytic value in distinguishing between threats passing *through* or *over* the Arctic and threats *from*, *to*, or *in* the Arctic. Do these threats emanate from Arctic dynamics, or are they spilling over into the Arctic from elsewhere? As well, which Arctic are we speaking about? When we talk about the North American Arctic or the Canadian Arctic, how is the situation comparable to the Nordic Arctic or the Eurasian Arctic? In the North American Arctic, when Canada talks about its need for a defence presence, do we (or should we) adopt the same logic as the U.S. in terms of its need for a defence presence in Alaska, which is often about positioning assets to be able to respond to exigencies in the Pacific theatre? I would argue that, for Canada, our military footprint in the Arctic serves a different purpose.

Accordingly, I encourage us to refine our mental maps and ask ourselves the question, Are we talking about strategic threats that are driving a lot of this great power competition and drawing our attention to the Arctic within this broader global lens, or are we talking about threats *to* or *in* the Arctic, where the Arctic itself is threatened? COVID-19 is a prime example of a threat *to* the Arctic, in terms of transportation patterns and the vectors by which the pandemic entered the Arctic. What are the other assumptions about who or what poses threats to the Arctic? What are threats *within* the Arctic? What are threats that are being generated within that particular space that, in turn, threaten that space? I am going to suggest that a lot of those are not defence-oriented, but that the Canadian Armed Forces (CAF) bring particular capabilities that help in a whole-of-society response to those threats.

On this slide, I have included two quotes:

> *The [CAF] must have the capacity to observe and exercise control over Canada's air and maritime approaches in the Arctic. As activity in northern lands and waters accelerates, the military will play an increasingly vital role in demonstrating a visible Canadian presence in the potentially resource-rich region, and in assisting other government agencies when directed.*
>
> – Chief of the Defence Staff (CDS)/Deputy Minister (DM) directive for the DND/CF in Canada's North, 12 April 2011

> *To succeed in an unpredictable and complex security environment, defence will: …increase presence in the Arctic over long-term and work cooperatively with Arctic partners.*
>
> - *Strong, Secure, Engaged* (2017), p. 8

We see language about the need to demonstrate a Canadian military presence in the region. We should ask, a *presence* for what? A mere presence can be nothing more than a symbolic demonstration of something, just to show that we are interested. Or is it about a visible presence to be able to achieve specific effects? Does the fact that the Canadian Arctic is resource-rich have anything to do with the need for an enhanced military presence?

Since 2010, we have seen fairly consistent language from the federal government emphasizing that there is no direct, imminent threat to Canada's security—and particularly defence—in the Arctic in the short term. But climate change is changing things, portending new forms of development, and changing ways of life for Northern peoples. These changes require Canada to be more attentive, to be more responsive, to be more prepared. While the Department of National Defence and the Canadian Armed Forces may not be the lead department in responding to these challenges, they may have to "lead from behind" in concert with other partners. So, how do we sort out where defence fits? Where do we sort out where the Canadian Arctic fits within this broader Arctic security space? I turn to Ernie to lead us through reflections on that.

Ernie Regehr

Thanks very much, Whitney, and thanks to Shannon and Peggy for organizing this event. I'm very pleased to be a part of this.

I am going to talk about some military operations and am going to try to do that within the two fairly distinct streams that Whitney has already been talking about, and that is the distinction between the strategic great power operations and the local and domestic national defence operations. There are obviously linkages between those, but their functions and missions are actually quite distinct.

The strategic stream is oriented toward major power competition, and one manifestation of this type of military operation in the Arctic is obviously the dominating presence of Russian strategic forces based in the Kola Peninsula. We're all familiar with the Russian Northern Fleet and its extensive capacities, including strategic missile subs, attack submarines, and a wide range of surface combat ships with guided missile firing capabilities, anti-submarine warfare aircraft, and forward operating locations for strategic bombers and fighters. All of these represent a major power projection capacity in the region and beyond. The U.S. in Alaska obviously also hosts some power projecting capabilities through combat aircraft, which are oriented more to the Pacific but still represent capabilities to reach into the Arctic, as well as strategic missile defence facilities.

Another manifestation of great power competition operations is in the extent and pace of strategic patrols—long-range bombers of the U.S. and Russia operate on both sides of the divide in the European zone, Russian bombers and related aircraft operate off North America, and the U.S. conducts flights over the Okhotsk Sea. Added to that are the anti-submarine warfare patrols that we read a lot about—Russian patrols going further south towards and into the GIUK (Greenland-Iceland-United Kingdom) gap, and U.S./NATO vessels patrolling directly into the Barents Sea and the approaches to the Kola Peninsula. So that's the strategic forces stream.

In the second stream, national forces operate not so much in response to strategic imperatives, as Whitney has noted, but in response to local challenges, which are of course given new importance due to the increasing accessibility of the region. These are largely operations in support of civilian authorities carrying out their domestic mandates. These mandates include enhancing situational awareness on a more local level, reinforcing sovereignty, and monitoring and controlling air and sea approaches to national territory—remembering that, in day-to-day operations, this is monitoring civilian traffic, air and marine, not military. National forces also contribute to public safety and search and rescue. These aids to civil authorities can be thought of as essentially good governance types of operations.

In a later session, we will be hearing a lot more about great power dynamics, so I'll focus more on the domestic military and paramilitary forces and their contributions to national, regional, and thus ultimately strategic stability. And that's the main point I want to make—that domestic military operations in support of civilian authorities ultimately contribute to strategic stability. The focus of this military support to civilian authorities in the Arctic reflects a context in which there is a general consensus that the threat of armed conflict or aggression in the Arctic is currently very low. This is a discussion of the *in* part of Whitney's framework of "through-to-in" threats related to the Arctic.

This consensus on the low levels of threat in the region is shared by major powers and the U.S. in particular. The U.S. Air Force strategy in 2020 said that the immediate prospect of conflict in the Arctic is low. The U.S. Navy strategy blueprint, as they call it, sees the threat of armed conflict in the Arctic as coming from accidents, miscalculation, or spillover from other conflicts, not from Arctic-generated conflict. And the main point I want to make is that an important factor in keeping threat levels low is the way in which the region is governed, within individual states and among states. The post-Cold War reality is that stable states are remarkably protected from direct military attack or aggression. In the three decades of the post-Cold War world, major and lesser

powers have obviously attacked other states many times, but such attacks or interventions have been almost exclusively on states in serious disarray or crisis. I won't go into the full list, but we're familiar with many of the examples (including Afghanistan, Iraq, Serbia/Kosovo, and Syria).

What all of those states and others had in common was internal crisis—the point being that internally stable and competently governed states are at a much reduced risk of direct foreign military invention. That makes good governance a key defence and security strategy. Former U.S. Ambassador to Russia Michael McFaul, writing just recently in *Foreign Affairs* on containing Putin's Russia, makes this very point. About today's Ukraine he says, "building a secure and prosperous and democratic Ukraine is the best way to counter Moscow's military aggression in Europe."

The Arctic is a region of stable domestic governance (ironically, it's the two great powers in the region that these days seem to be the wobbliest from the point of view of internal stability). The point is that national armed forces in the Arctic, when focused on domestic chores for which civilian agencies generally have the lead responsibility, are nevertheless contributing to not only local and national security and well-being, but also to regional and strategic stability. Regional stability in the Arctic is obviously also bolstered by an impressive list of international agreements with which you're all familiar, all of which benefit from military forces aiding civilian authorities in their implementation, whether it's search and rescue, oil spill mitigation, the Coast Guard Forum, or so forth. The Ilulissat Declaration is a declaratory commitment to the rule of existing law in addressing boundary disputes and continental shelf rulings.

Regional stability is also enhanced by states adopting demonstrably defensive, non-threatening military postures, and that of course raises the big question about Russian military expansion and its role in the region. But there is a measure of consensus here as well. The Russian Eastern and Central Arctic military installations are oriented primarily to protecting the Northern Sea Route and the resource base in the area, to patrolling borders, and to search and rescue facilities that are present throughout those bases along the entire North coast. The orientation of that string of northern bases is towards regional defence and stability. And that applies somewhat to Russia's Western Arctic as well, but there the focus shifts to the protection of Russian strategic forces against state-based threats, i.e., protecting the Kola Peninsula and the maritime bastion. These strategic defence operations are meant to protect those regions close to Russia, but also, of course, have major capacity for the projection of power into the North Atlantic. All of these operations are especially relevant to the warning in the U.S. Navy's blueprint of the threat of military conflict due

to accident or miscalculation. And it's worth noting and emphasizing that these concerns have also been accompanied by a marked increase in calls for the reinstatement of military-to-military and broader consultations in the Arctic, for these to be routine, and for them to include Russia.

The Navy's blueprint also warns, as have others, about the danger of spillover into the Arctic (this is the *to* element of Whitney's through-to-in framework). The spillover, or horizontal escalation, threat is linked to scenarios of extended East-West war in the European theatre. The West is especially aware of Russia's chief interest in spilling out of the Arctic and into the North Atlantic (I suppose we could thus add a "from" category to the through-to-in framework). The Russian interest is in spilling into the North Atlantic to disrupt NATO and American operations there. And Russia, of course, would also have an interest in spilling, not necessarily exclusively from the Arctic only, but into North America. And I'll refer a bit later to the North American SHIELD (Strategic Homeland Integrated Ecosystem for Layered Defence) mission, which is really a response to the threat of Russian or Chinese spillover into North America.

We also have to note that the U.S. and NATO forces have an interest in spilling operations into the Arctic to attack Kola Peninsula war-making capacity and to keep the Russian forces out of the North Atlantic. And so, we see indications of this intent to spill over into the Arctic in the heightened U.S. and NATO patrols in the waters close to the Kola Peninsula. It's interesting that the U.S. Navy worries about the spillover of major power competition into the Arctic while actually training to do exactly that.

The spillover problem does not have an Arctic solution. Preventing the spillover of armed conflict into the Arctic really means preventing great power war elsewhere. North American defence planners focus increasingly on defending against such spillover, calling it deterrence by denial. While nuclear deterrent forces are expected to deter nuclear attack, they are not regarded as similarly effective against conventional attack. Hence, the SHIELD seeks to deter conventional attacks by mounting a convincing defence against them (this is the *through* part of Whitney's framework inasmuch as strategic range systems are in some cases designed or dictated by geography to pass through the Arctic to North American targets). Traditionally, the focus in North America has been on the early warning of strategic-range attacks by peer powers, but without any credible defence capabilities—or "defeat mechanisms," as the SHIELD plan puts it—against attacks assumed to be nuclear. There has historically been limited capacity against bombers, but no capacity against intercontinental missiles. Ballistic missile defences now seek limited defence against such missiles, those of the Democratic People's Republic of Korea (DPRK) in

particular, but explicitly not against Russian or Chinese attacks. And if there is any expectation of further nuclear strategic arms control agreements by the way, then ballistic missile defence (BMD) will certainly have to remain at this limited level. The response to the threat of nuclear attack was and remains deterrence.

The SHIELD effort seeks an effective defence against strategic-range conventional weapons, but these threats will still be in the form of missiles—hypersonic missiles and various types of cruise missiles—all capable of carrying conventional or nuclear weapons. It is possible to envision limited capabilities against them, but a comprehensive defence against those kinds of threats is quite another thing. And, in fact, the SHIELD planners recognize the reality of those limited capabilities, admitting, for example, that there is unlikely to be any credible defence against conventionally-armed massed cruise missiles. The SHIELD operational plan thus proposes pre-emptive strikes on cruise missile platforms before the individual missiles are launched. And that, of course, is a military dynamic in which the advantage is perceived to go to the pre-emptive attacker. In other words, the advantage seems to go to the side that attacks first, and that's not a formula for stability in the context of a major crisis.

Finally, I think we have to face two basic realities. One, Arctic stability and security have a lot to do with governance and regional cooperation on local needs and issues. Those forces contribute substantially to the stability of the region and keeping threats at the current low levels. And secondly, I fear it is unlikely that major powers are going to arm or SHIELD their way into strategic stability, but strategic stability remains the urgent imperative. Strategic stability is obviously key to reliably keeping the threat of major hot war at bay, and thus the threat of spilling over into the Arctic at bay. And strategic stability is more likely to be the product of diplomacy, as experience has shown, than of an arms race. In that regard, and I'll conclude here, I noted that the White House readout of the recent Biden-Putin telephone conversation says in part that they "agreed to explore strategic stability discussions on a range of arms control and emerging security issues." I would say that if the U.S. and Russians did manage to undertake consistent and persistent talks on arms control and on emerging security issues as a means toward strategic stability, that could indeed be a genuinely significant development both for Arctic and global security.

P. Whitney Lackenbauer

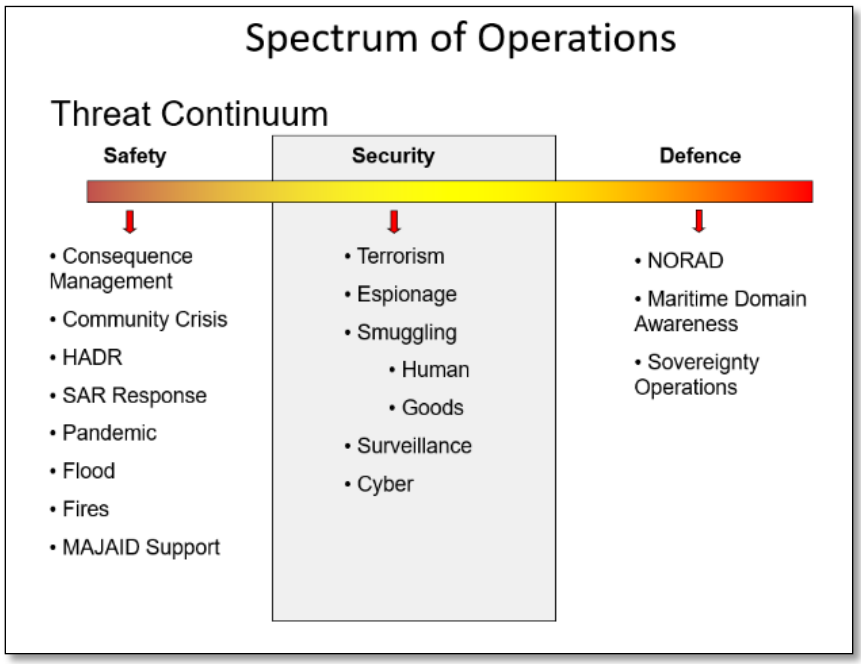
Ernie spoke in great detail about relationships with and expectations about Russia. There are vigorous debates and discussions about how we should envisage China as a threat as well, and we will talk about this in the great power competition session in a couple of weeks' time. There seems to be an emerging

consensus over the last couple of years, particularly in light of the fate of the two Michaels, that some previous assumptions about China acting benignly or practicing what we in the West would expect of good international citizenship are not reasonable to expect in light of ongoing Chinese behaviour.

Do we have to be adversaries? Is the frame that we should employ inherently a conflictual one? Do China's explicit plans for a Polar Silk Road (which I want to emphasize are generally directed towards the Russian Northern Sea Route or the Northern Sea Route running through, in some particular points, Russian jurisdiction) pose direct threats to *North American* Arctic interests? How do we make sense of Chinese investment and particularly of the eagerness of state-owned enterprises to acquire access to resources or buy up particular strategic sites? Is this really about access to resources, which we would expect from China (given that we have chosen to have it play the role of the industrial engine of the world, providing us with cheap access to consumer goods)? Or is this really about China becoming a political influencer and perhaps even pre-positioning itself as part of a long-term plan that could include military revisionism?

On the other hand, should we look at Asia's interest in the Arctic as something welcome because this might bring much-needed investment capital to actually advance projects that Canada has expressed an interest in promoting for decades? After all, economic development (often tied to non-renewable resources) is one of the three core pillars of Canada's half-century-long Northern strategy, alongside environmental protection (stewardship) and sovereignty. Is this foreign investment something we should look to embrace, to serve as a catalyst for Northern development? More generally, however, this requires that we discern what we think China's Arctic gambit actually entails and what it means for Canada. Can China's rising Arctic interests be balanced with our sovereignty, sovereign rights, and national interests and values? And what parts of that debate are distinctly *Arctic* that we should consider apart from more general strategic discussions about Canada's future vis-à-vis China?

Recently, we have seen these questions play out in the case of the Hope Bay mine in the Kitikmeot region of Nunavut, with Canada ultimately deciding, at the federal government level, to block a potential purchase by Shandong Gold of the mine at this strategic location in the central Canadian Arctic. Fortunately for the federal government, a Toronto-based company, Agnico Eagle Mines, came in and agreed to purchase the company at a higher rate than the Chinese had offered, so it made the issue go away. This averted a contentious debate about whether the federal government's intervention had denied Inuit from accruing full economic benefits—a big debate that I think is likely in the near future.



We have also talked about the importance of thinking about Arctic security across the operational mission spectrum or the threat continuum. Ernie gave us a really wonderful set of deep and rich insights into issues that fall within the bailiwick of national defence. What are the issues that are best seen through a national security lens? Which are best seen as safety issues? Where do these so-called silos blend together? Does the language of "all-domain threats" reinforce the limitations to this kind of siloed thinking?

And to build on my earlier framework, what are the security challenges *to* and *in* the Canadian Arctic? Pandemics have been elevated to the top of the list. How does all of this fit together within the Canadian Arctic and Northern Policy Framework's vision of strong, self-reliant people and communities working together, seeking prosperity, and wanting sustainability at home and abroad, while at the same time expressing Arctic sovereignty and enjoying security? Everyone should have security, but what form can or should that take?

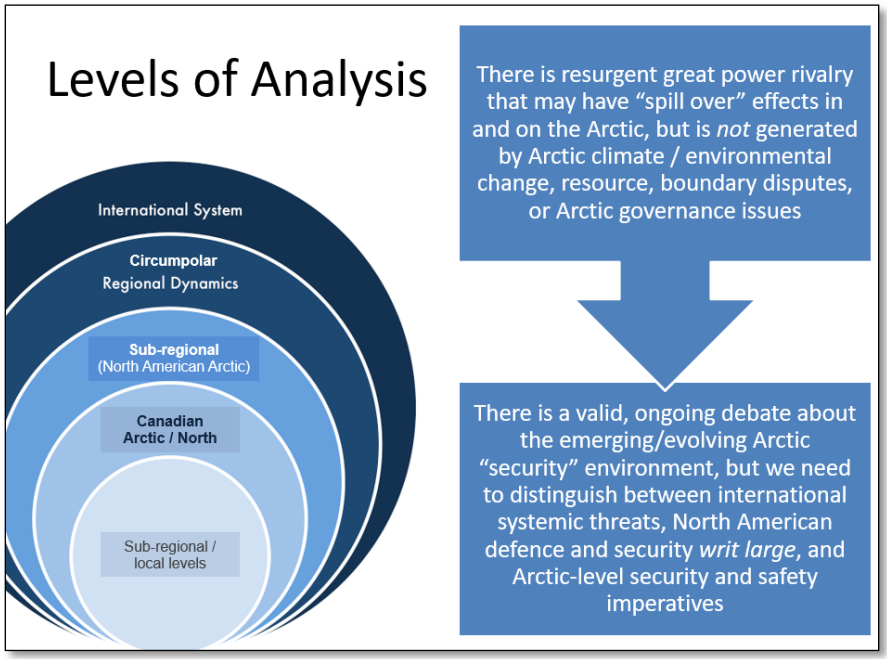
When we look at some of the polling that has been done going back to 2015, I think it is interesting to note Canadian expectations that security be broadly defined. While a majority of Canadians support defence investments in the Arctic, it is very clear that that cannot be done at the expense of addressing social and environmental imperatives that also exist. One of the driving questions I anticipate that we will continue to explore over the next three weeks is whether there is an inherent conflict between, on the one hand, national

defence investments in the Arctic, which incorporate the region into a layered ecosystem of sensors and defeat systems to deter and defend against great power threats (threats that may pass *through* the Arctic), and, on the other hand, threats and risks *in* the Arctic, which are typically environmental or human? I am biased towards the argument that we need both, but that we need to be clearer about what we are securing by making specific investments.

If you look to Northern voices, there is a clear sense of prioritization of addressing the effects of climate change. Climate change poses threats *to* and *in* the Arctic, affecting infrastructure, economic prospects, food sovereignty, and traditional lifestyles. There is a focus on meeting basic needs first, such as shelter, food, and safety. We might also note that there are potential synergies between building basic infrastructure and also investing in certain defence projects, if they can be synchronized and sequenced in a way that meets the needs of both the military and the civilian communities. NAADSN has released various studies and reports recently that highlight Northern voices, as do important studies released by Inuit Tapiriit Kanatami and other Northern organizations. We will certainly hear about Northerners' views next Tuesday when we hear from Bridget Larocque and John Mitchell.

As my thinking continues to evolve on these topics, I have come to embrace the idea of Arctic resilience more firmly as an overarching concept of our desired end-state. We are working towards security, so how do we make sure that we have a North where Northerners are prepared to work through challenges they face? Climate change, which most Northerners consider to be at the core of Arctic security threats, should serve as a catalyst to re-imagine resilience and figure out how we can empower and support communities to self-organize and prepare for change. When I say self-organize, I do not mean preparing at the exclusion of supports from elsewhere. Instead, I mean that we must ensure that this is not yet another situation where Northerners have solutions foisted upon them from outside. It should embrace an open dialogue where you can have both bottom-up and top-down solutions coming together.

In the coming sessions, I encourage you to think about where some of these strategic elements or drivers that we are discussing best fit. Which sectors of security are we talking about? Which sector of Canadian society is most affected and, therefore, from which sector of society does the primary response emanate, or should it emanate, to respond? Where should Canadians be investing our resources, both intellectual and material, to support these responses? And lastly, I would urge you to think about levels of analysis. Are we talking international systemic factors? Are we talking within the Arctic as a circumpolar region? Are we talking about the North American Arctic or specifi-



cally the Canadian Arctic? Are we talking about local or sub-regional challenges?

My last point is that we are seeing resurgent great power rivalry, and spillover effects in the Arctic are a real possibility. But this competition is not primarily generated by Arctic climate change or environmental change. It is not being driven by Arctic boundary disputes or Arctic governance issues. We have to be careful in how casually we associate these variables with one another and intimate causal relationships. So, I look forward to a vigorous discussion from a range of perspectives over the next few weeks, distinguishing between different aspects of, or dynamics within, the security environment. I also hope that my opening remarks help to encourage an ongoing discussion, with greater precision, of how we identify, and where we should be looking at, these threats. Then I look forward to your thoughts on how these different levels of analysis and dynamics intersect in a complex Arctic security environment.

Peggy Mason

Thank you very much to both of you, both of our keynote speakers who I think have really set us on a good course. I can just tell by looking at the questions that they have highlighted key issues that are going to be addressed in the coming webinars. For those who can stay another 15 minutes, I will put the questions to our keynote speakers to answer as they see fit.

Let's start with the first one, which is from Adele Buckley: "Please comment on cyber security issues that are specific to the Arctic."

P. Whitney Lackenbauer

This is a great question. I think the challenge is in discerning what is *Arctic specific* in terms of cyber security? We know there are cyber security threats out there, and it is useful to distinguish between what we package as cyber threats and what are being carried by those cyber networks: the information threats. I highlight this in terms of disinformation and misinformation. Are there particular vulnerabilities, say within the Canadian North, North American North, or Circumpolar North, that make Northern peoples potentially more vulnerable or more susceptible to some of these influence activities?

These are important questions to ponder. I think that in terms of cyber, the vulnerabilities and lack of redundancy in transportation systems and in power generation systems, particularly in the Canadian Arctic, pose particular risks to communities. It is not that the systems, and the software and hardware that run those systems, are going to be unique to the Arctic. Instead, the question is identifying what might make isolated Arctic communities uniquely vulnerable in dangerous situations if, say, a community's diesel-electric generator is taken down or certain communications associated with their airfield are compromised.

I hope that I have touched on where you were going with that question, Adele. Rather than packaging everything as an Arctic security threat or an Arctic cyber threat, I am trying to discern the *Arctic* threats with which *Arctic* subject matter experts should grapple, rather than general cyber threats to Canada as a whole—including the Arctic—that are best covered by the cyber experts. In the latter case, those cyber experts may turn to some people with Arctic expertise, and particularly Northerners, to discern how they might clarify what these threats mean to Northerners and particularly to build resilience at the community and regional levels.

Ernie Regehr

I thought I would go to Ed Kaufman's question: "Is it conceivable to believe that the Arctic will remain an area with a low probability of conflict for the foreseeable future? If so, how do we prepare for that possibility that may or may not arise?" I think this question is the major challenge that we face. The Arctic is a place of great power interest; internally generated conflict prospects are and remain significantly low, but part of the military's responsibility is to prepare for the unexpected, for the unpredictable. So, he asked, "how do we prepare for the future that may or may not arise?"

We need to understand that there are some things that we know very clearly that we have to do to avoid that more perilous future, and one of those things is to look after the domestic security and strong governance of all the individual states. That's the responsibility of each state in the Arctic: to remain a stable and secure presence in the region. We need to deal with the relations between those states in an orderly and Ilulissat fashion, relying on cooperation and rule of law in the region. We know that, in order to maintain strategic stability, there has to be an ongoing strategic dialogue to help all states understand each other regarding the requirements or conditions that promote strategic stability. Also important are military-to-military dialogues and discussions to reduce the risks of conflict due to accidents and miscalculation. Those discussions need to be central, top priorities and understood as being contributions to Arctic and international security. There are obviously going to be ongoing military efforts to anticipate and deal with emerging threats, but I think that, at the strategic level, for defence to trump offence is a very long haul—and military planners will know this better than I do. But, in the end, there are diplomatic and political initiatives that must be relied on and pursued to meet our strategic stability objectives.

Peggy Mason

The next one is, could you comment on Russia's Arctic Council Chairmanship? What are some of the key areas it focuses on, and how does it reconcile defence with cooperation?

P. Whitney Lackenbauer

First, to follow up on what Ernie said, no responsible defence planner or strategist is going to completely go all in on the narrative that the future is inherently going to be free of conflict. In the spirit of our conversations, we also need to be balanced and ensure that we do not get overzealous and expect conflict as the "inevitable" or even the most probable outcome. After all, you do not want to bank strategies on hope—even if I am glad that Obama did. More broadly, you want to ensure that you are prepared for any reasonable contingency, and I think Canada has taken responsible, appropriate, proportionate steps over the last 15 years to do so in terms of Arctic security. The Martin government's defence policy statement and international policy statement in 2004 were already flagging it as a priority. The Harper government really pushed that forward, and the Trudeau government has, in turn, extended it. I think a lot is going to hinge on North American defence modernization, and NORAD modernization more specifically. There should be serious discussions about how Canada situates itself and positions itself to be

part of planning for these modernization efforts. As Ernie brought up, depending on where NORAD modernization goes within the context of American grand strategic planning to meet great power competitors, this could potentially be destabilizing on a strategic global scale. Canadians will have to have some pretty frank discussions about where we are comfortable fitting within these broader U.S. plans, and how we might avoid setting conditions for a security dilemma that could actually increase the possibility of Arctic competition manifesting itself as conflict. Those are big discussions to which we might return in the last session.

Thanks, Dr. Katharina Koch, for that question on Russia's upcoming return to the Arctic Council chairship this May. Troy Bouffard and I co-authored a NAADSN Quick Impact a couple of weeks ago that reflects on the Russian Senior Arctic Official's comments. Neither of us expects that Russia will come out guns blazing, linking its Arctic Council chairship to bellicose discourse or trying to militarize the region—quite the opposite. In essence, we offer a very subtle reading that suggests why, within the auspices of their chair and all of the activities going on around it, we need to be very attuned to how Russia may be crafting, or slightly skewing, narratives that may actually undermine some of the interests of other Arctic states, such as Canada, and may seek to delegitimize some of the strong positions we have taken on things like sanctions. We just need to be very disciplined, and very deliberate, to first of all not become overzealous in dismissing everything that Russia is doing as if they are a monstrous enemy, and therefore counter everything they are saying. That is not helpful, and we run the risk of delegitimizing ourselves by doing so.

That said, it is important that we enter Russia's tenure as Arctic Council chair with our eyes wide open, given the importance vested by all the Arctic states and some non-Arctic states in that particular forum. Over the last year, Russia's development of its Northern strategy has revealed that country's sophisticated messaging. The strategy documents are progressive and forward-looking in a lot of their rhetoric, and endeavour to strike a balance between the positive, peaceful region, zone of peace narrative, and at the same time structuring its Arctic strategies to legitimize Russia's investments, not only in regional defence measures, but also in terms of strategic capabilities that serve broader deterrence and force projection missions globally.

The next two years represent a very interesting time for us to watch how Russia mobilizes various narratives around its chairship, and how the other Arctic states manage those narratives and, where appropriate or necessary, either affirm or counter them to make sure that the Circumpolar Arctic remains an environment that is consistent with Canadian values and interests.

2. Climate Change: Reshaping the Face of the Canadian and Circumpolar Arctic

Thursday, 4 February 2021

Peggy Mason

Welcome, everyone. My name is Peggy Mason, and I have the privilege to welcome you all again to the second of February 2021's six-session webinar series on Arctic security and to briefly introduce our event sponsors. ...

I am very pleased to turn it over now to our moderator, Heather Nicol, Professor in the Department of Geography, Director of the School for the Study of Canada at Trent University, and a NAADSN coordinator.

Heather Nicol

I am delighted to be here today and to welcome our two speakers for this panel. Our first speaker, Doug Causey, is the Arctic Fellow of the Harvard Kennedy School's Belfer Center Arctic Initiative. He's also the Global Fellow of the Wilson Center, Professor of Biological Sciences at the University of Alaska Anchorage, and the principal investigator of the DHS or the Department of Homeland Security's Arctic Domain Awareness Center of Excellence. An

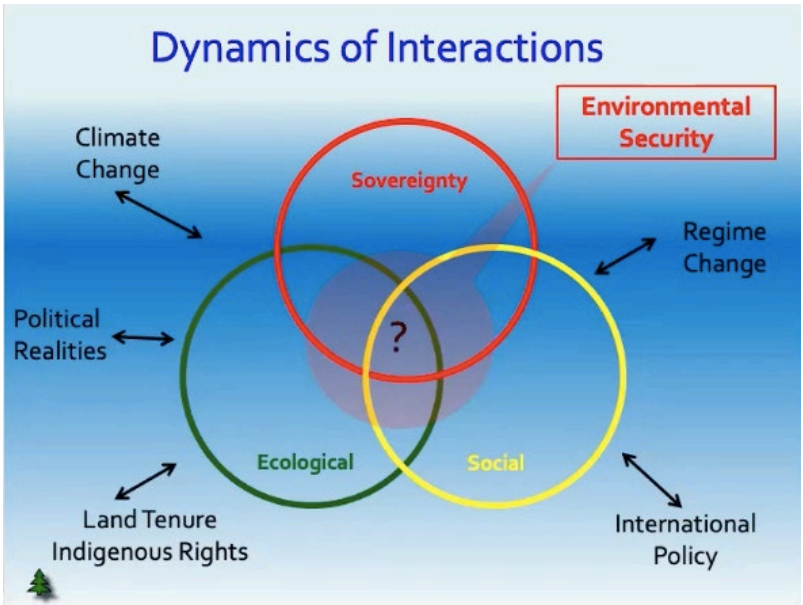
ecologist and evolutionary biologist by training, he's authored over 200 publications on the environmental correlates of Arctic climate change, and he and his students are actively conducting research on the Aleutian Islands, the northern Bering Sea, and northwestern Greenland. He's published extensively on policy issues related to the Arctic environment, Arctic environmental security, and bioterrorism and public health. So, we're very delighted to have Doug here with us today.

Our second speaker is Wilfrid Greaves, an Assistant Professor of International Relations at the University of Victoria (UVic). His research examines global security theory and politics with respect to climate change, resource extraction, and Indigenous Peoples; Canada's foreign policy; Canada-U.S. relations; and the politics of the Circumpolar Arctic. Professor Greaves is the author of more than 20 peer-reviewed articles and book chapters and has co-edited two books, *One Arctic: The Arctic Council and Circumpolar Governance* and *Breaking Through: Understanding Sovereignty and Security in the Circumpolar Arctic*. His monograph on Arctic security and climate change is forthcoming from the University of Toronto Press. He is a coordinator of the North American and Arctic Defence and Security Network and has received research funding from the Department of National Defence, Global Affairs Canada, UVic, and the Social Sciences and Humanities Research Council. So welcome to you too, Will.

Doug Causey

Good morning from Alaska. Welcome to you all. What I want to talk about today is perhaps a different perspective on what climate change is and how it's affecting the Arctic. I am going to switch to my presentation right now. What I'm going to talk about today is environmental security so you can see the context of what I'm going to talk about, as well as physical changes in the North American Arctic and the Circumpolar Arctic. We're going to explore, just a little bit, some of the interactions among the environment, sovereignty, and community resilience; and then what are our next steps.

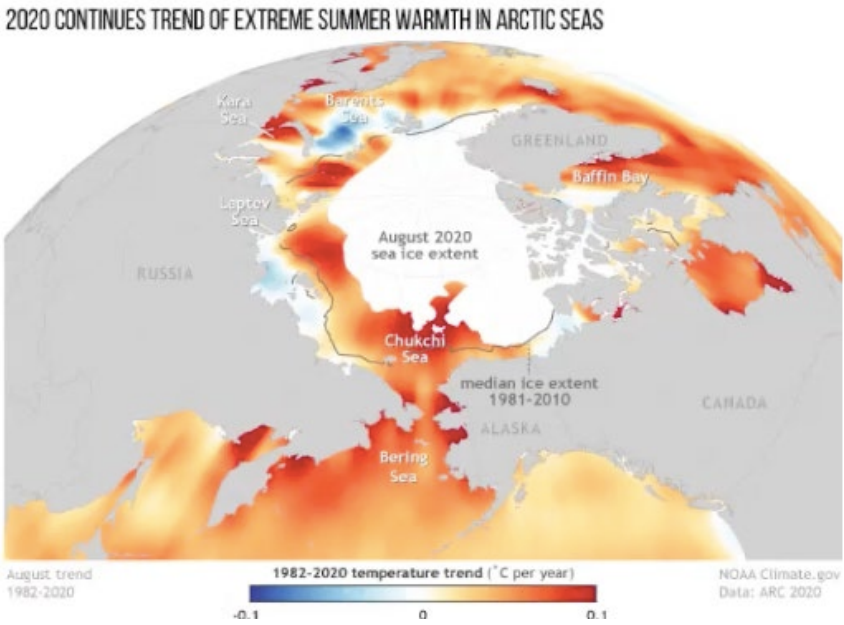
Environmental security is a very complex area. It involves the interactions of three, and sometimes four, very large areas. I'm not a political scientist, so I haven't quite come up with the right term—and here's where I'm going to look to Heather to help me out—but the topic area on top, I call it sovereignty. It's the best I can come up with that encompasses all aspects of things like defence, security, and other aspects of essentially who owns and who operates the land. Ecology and the environment are my background; and the Social topic area includes the whole complex of social resilience, community resilience, and what we do as people living in the Arctic.



And just to give you an idea of what this all means, if we put these three areas together with all their complexities and dimensions, environmental security is the intersection of all of those. So, when all of these complexities are stable, as you can see on the slide, then we can talk about the nature of interactions. But you all know that none of this is stable. So, it's a constantly changing and interacting complex, and I'm going to talk just briefly about how things in the Arctic are changing and how this is affecting all these other components.

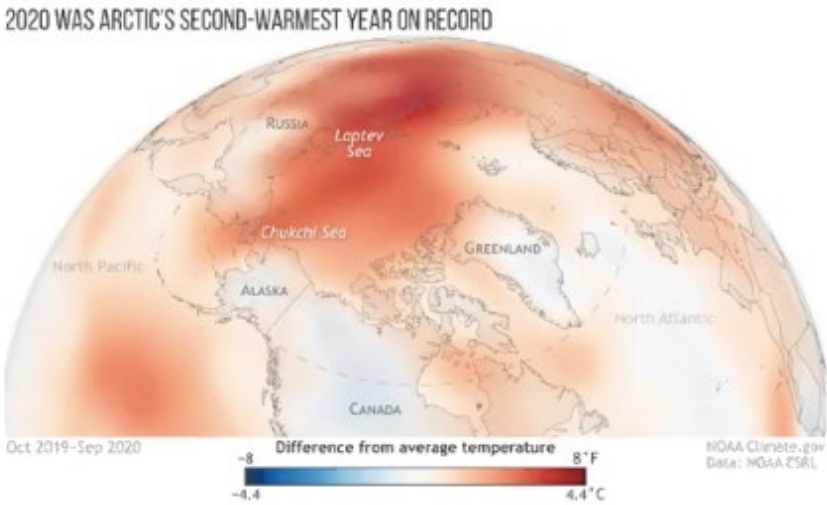
I would be astonished if the people who are listening right now were not aware of these changes in the Arctic, but I'm going to be showing very quickly some images and diagrams that I know you've seen in one way or another, but just to give us a background on what is happening with the Arctic. The next couple of slides are on that, and these are from the U.S. National Oceanic and Atmospheric Administration, which sponsors much climate-related research. What this graph is showing you is that first, the average temperature—the difference since 2000 and the present—its difference (we call it the anomaly) is changing; it's increasing, and the important thing for all of us is that it is not a uniform change in the Arctic. You can see from the graph there that there are places in the Arctic where it's changing quite quickly and other places where it's not so quick.

This is a map of extreme summer warmth. The graph here is showing how summer temperatures have increased over this period of time, and it is localized.

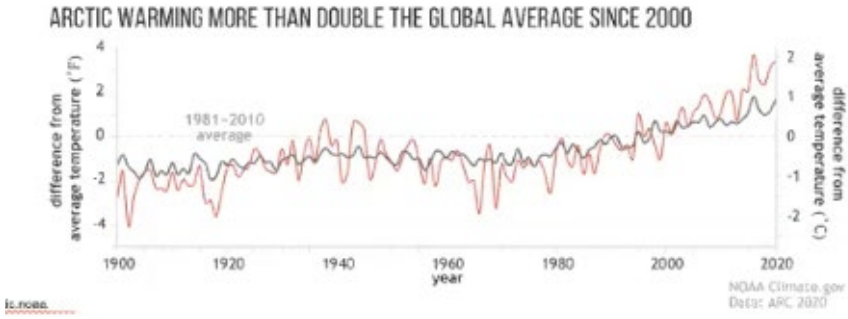


Source: https://arctic.noaa.gov/Report-Card/Report-Card-2020

This is sea ice minimum, and this is showing you, on both the graphic and the chart that follows, that the minimum and the maximum temperatures have increased, and that the difference between the two has also increased.



Source: https://arctic.noaa.gov/Report-Card/Report-Card-2020

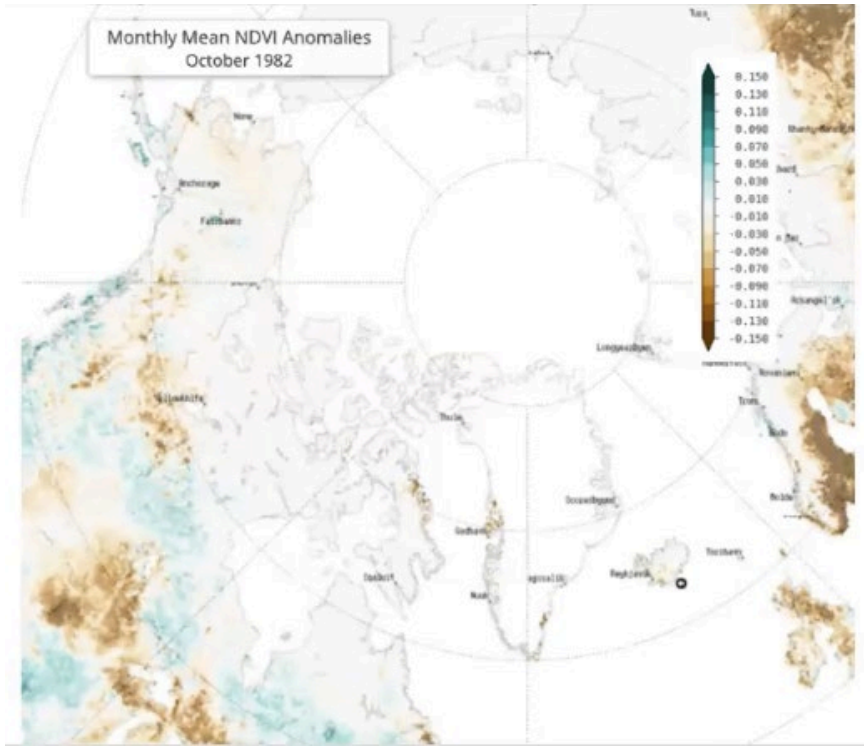


Source: https://arctic.noaa.gov/Report-Card/Report-Card-2020

The next picture shows the decreasing distribution of what's called older ice. The darkest colour is new ice, formed in the previous winter; the white colour represents the distribution of oldest ice, which is older than 5 years. Older ice is thicker ice. Well, thicker ice is now restricted in extent and distribution and this has happened in just 20 years. Rather than distributed throughout the entire part of the North American Arctic and Greenland, now the older ice is in a rather narrow limit over the top of Nunavut, the Northwest Territories, Greenland, and, to a much lesser extent, the Alaskan coastline.

Source: https://arctic.noaa.gov/Report-Card/Report-Card-2020

The next slides I'll go through very quickly. The next slide shows the difference in the distribution of the vegetation, and it is called the NDVI (Normalized Difference Vegetation Index) Anomaly. The colour green means that there's more vegetation. The slides span from October 1982 to October

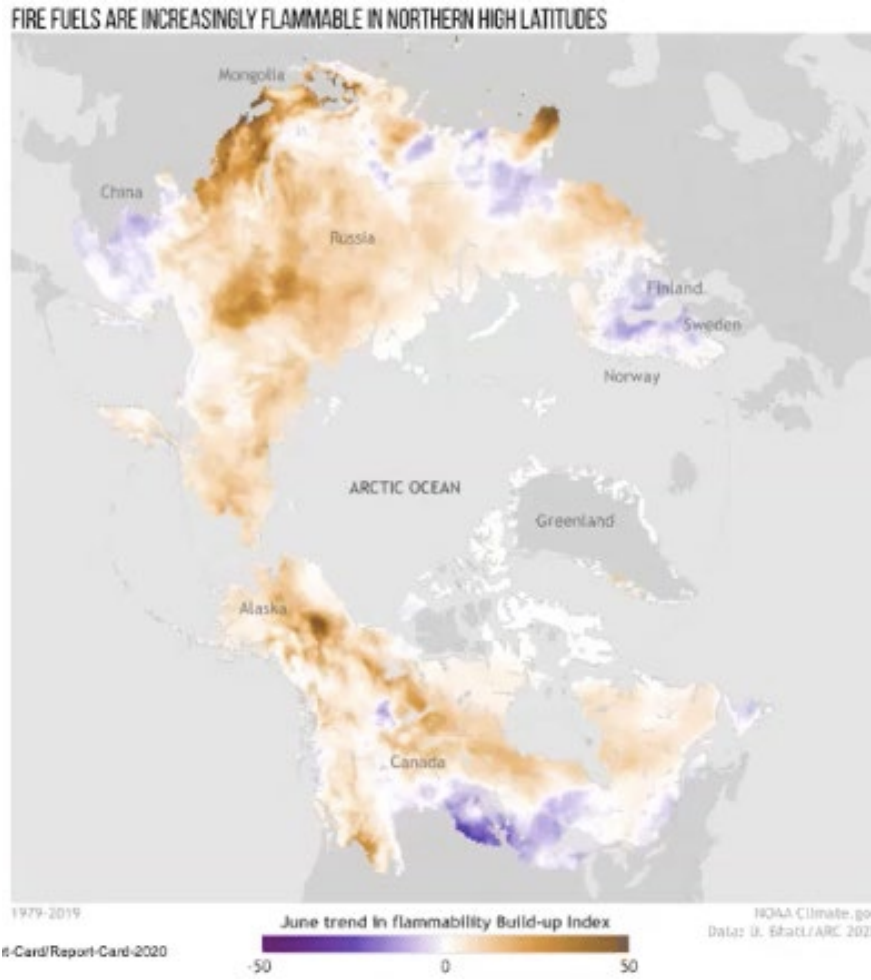


Source: http://nsidc.org/soac/ndvi.html#ndvi

2010, where the data stops. You can see the rapidity of change, and the point is that it is not linear change, but it's accelerating change. This has enormous implications, not only on the natural environment, but on the human environment as well.

The next slide (see the next page) is a summary, up to last year, of the forest fires in the Canadian Arctic, the North American Arctic, and particularly in the Russian Arctic. The increase in wildfires and what's called the flammability index—presence of dried out vegetation—as you can see has *really* increased.

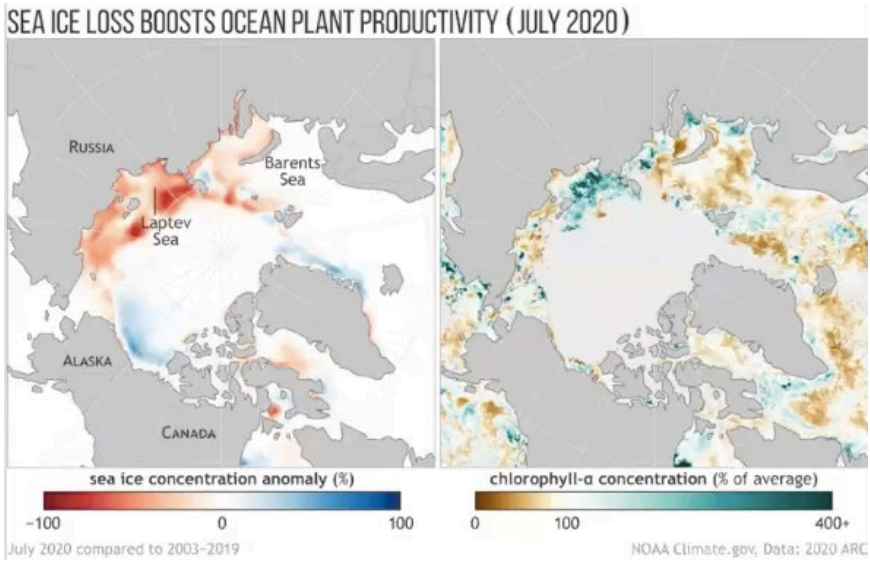
Let me move just quickly into some of the consequences of the environmental change in the Arctic. With the ice retreating and becoming single-year ice rather than thick multi-year ice, it's now very possible for marine transit in the Arctic to increase through several sea routes. The Northwest Passage, which runs through the Canadian Arctic, everyone in Canada I am sure is aware of. The Northern Sea Route, the blue area on the graphic, is exclusively over Russian territories. This is not fully open just yet, but this is what people are looking at as a possible Central Arctic route maybe even in 10-



Source: https://arctic.noaa.gov/Report-Card/Report-Card-2020

15 years. Why this is important is that now there is greater access to the Arctic by people in countries that are not part of the Arctic.

Another thing that's happening is that the loss of ice means that more sunlight can get into the Arctic Ocean. The warming temperatures increase plant productivity, and consequently that means that you have more fish. Associated with the climate change in the Arctic, we have throughput shipping, more fishing opportunities, and a lot more tourism. Tourism cruise ships, which are not unusual now in the Arctic, have more people onboard than are in most of the Arctic communities in Nunavut and the Northwest Territories.

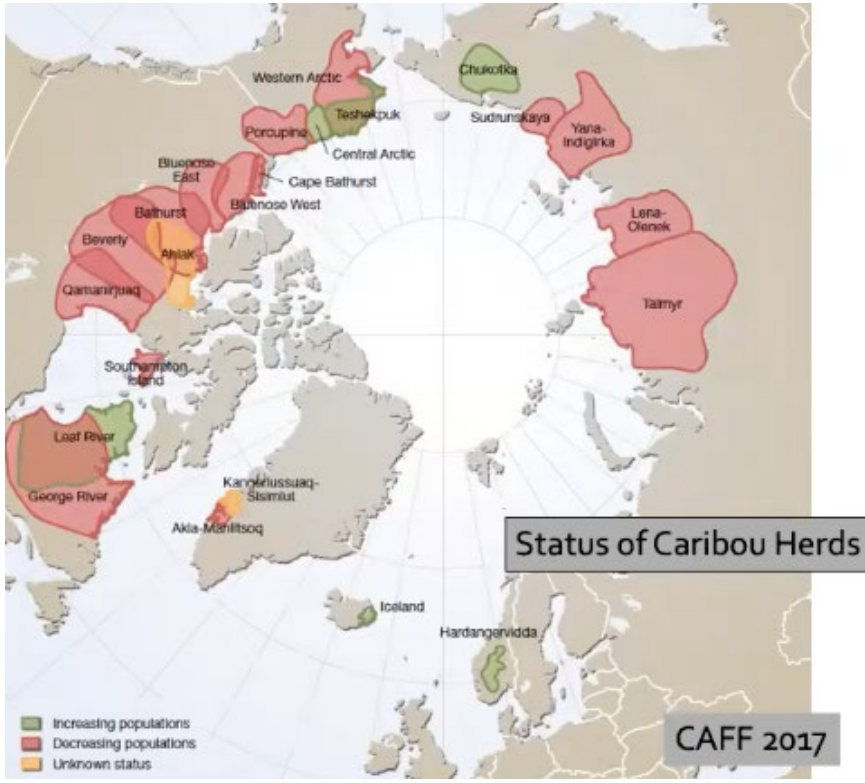


Source: https://arctic.noaa.gov/Report-Card/Report-Card-2020

One of the things that we were very interested in looking at in the Arctic Domain Awareness Center is what happens if there's an emergency? How do you get all these people off? Where do they go? If they went somewhere, how would you get them elsewhere?

These changes are going to affect subsistence economies, partly because you have a difference in the plants and animals that are there, but also now we have increased competition. These are the named caribou herds, and Canada owns most of them. The U.S. has a few herds, and Russia has some large ones, but caribou are really important for subsistence, to be sure, and they're also a key component in the Arctic environment.

The increased access through the Arctic Ocean for travel has several implications. For example, if China can use the Northern Sea Route over Russia—let's let them work the politics out—they suddenly have almost cut the transit time by about 25%. Here we're talking about the significant economic advantages of using the Northern Route as opposed to the route through the Suez Canal. Greater access to the Arctic regions also means that, as we put it, the bad guys can get there a lot easier than they could before, and we're starting to see it now, with illicit and criminal activities. A common quote among the defence security organizations in the U.S., in Canada, and in the other Arctic countries is, "The Arctic is North America's unlocked, unguarded, open back door." This is a major concern for these agencies. For those of us who have been involved or have worked in the Arctic for as long as many of us have, you



know what it was like up until about five years ago. For most people, the Arctic was that white stuff at the top of the map; nobody cared, nobody lived there, there were all these ill-formed opinions and ideas, and that really structured a lot of the approach to defence security.

As change in the Arctic is happening, it is allowing increased seasonal activity, which is impacting the ability of local, regional, national, and international agencies that are involved in both conservation management and regulation. This is bringing Indigenous and First Nations populations under increasing stress, and I am not the person to be talking about that, but I can make some observations, as I have here. This is impacting the traditional ways of life. So, my colleagues and friends are telling me this, and this is something that we will be talking more about. It is a major issue to consider. So, security must accompany this increased human activity that's now possible in the Arctic. And security falls under the very broad term of sovereignty—the awareness, the defence, the whole aspect of land ownership—and it is a matter of collective and individual trust and mistrust as well.

In summary, a rapidly warming Arctic allows for increased human activity, which drives the need for higher security in all its aspects, agile law enforcement and awareness, and advanced human safety and resilience.

Wilfrid Greaves

It's a pleasure to be here. Hello from Victoria, BC. I'm happy to share with you some thoughts that I have pulled together from a couple of different projects that I've worked on, focusing on some security and political dimensions of the Arctic climate change that Doug has so helpfully laid out for us.

To begin with, I won't repeat the summary of climate impacts that Doug has outlined, though I normally start with that. It's really important to understand that physical dimension as a starting point, but as a social scientist, my focus is on connecting the physical realities and the natural scientific knowledge that we have about climate change and climate trends in the Arctic region, which obviously translate into physical impacts of varying sorts on natural physical systems, with how those physical impacts affect human communities and affect Arctic societies. So it's those human and social impacts of these Arctic climate trends that I'm particularly focused on and interested in, as many other scholars are.

We've been talking about these issues for a long time now, certainly for the duration of my career as an Arctic social scientist and long preceding that. There has been a fairly concerted focus on the same basket of issues pertaining to the human health, subsistence, and community impacts of Arctic climate change. As Doug alluded to, and I think it is very important to note, many of these impacts are particularly relevant and particularly harmful for Northern Indigenous communities for a variety of reasons, but fundamentally because many Indigenous communities are still partly or largely based on subsistence activities on the land, so changes to the land have very immediate or sometimes a very dramatic impact upon the quality of life, the conditions of food, and water availability that those peoples and communities have relied upon.

I always think it's worth noting the particular cultural relevance as well of Arctic climate change, that for cultural and belief systems—entire Indigenous cosmologies, in fact, that are premised upon a particular understanding of the Arctic environment—the changes and the radical transformation of that environment have consequences for those belief systems, for those cosmologies, for people's very sense of self, people's sense of collective and individual identity. In that respect, there is a particular relevance of the loss of Arctic sea ice.

Sea ice is the linchpin of many Arctic ecosystems, certainly in Northern Canada. And it is of profound importance for Inuit peoples, who have had an immemorial relationship with the land, water, and ice dimensions, or components, of the Arctic ecosystem. These physical climate impacts have these human and social impacts, and some scholars, myself among them, have, in the post-Cold War Arctic security scholarship, really emphasized many of these challenges and changes to the natural environment as posing human security issues, as posing issues that threaten the process of survival and well-being for discrete and identifiable groups of people located in the circumpolar region.

This idea that Arctic climate change threatens security in the Arctic is a fairly well-established argument at this point—not universally agreed to, perhaps, but certainly widespread and, I think, well-reflected within the literature on Arctic security these days. There has not, of course, been a commensurate policy uptake or a commensurate political response to the threats and dangers to survival and well-being that many—indeed, perhaps most—Arctic inhabitants face. Nonetheless, it's understood within the academic and broader debates and discourse around the subject. It's well understood, and, I would suggest, well accepted, that climate change threatens human security in the Arctic.

What I would like to touch on briefly today, because I think it's a little bit perhaps less common, is this argument of the implications of Arctic climate change for regional security more broadly. In the post-Cold War Arctic context, some scholars—and I would again include myself among them—have really understood the natural environment, the Arctic environment, as being central to the regional security dynamics in the Arctic writ large. This transcends

human security issues and is a basic argument that says that the environment is so central to our understanding of what the Arctic is, but also is so central to the ways in which human beings interact and the opportunities and the conditions of possibility that exist in the region, that you really just can't reckon with, or understand, security in the Arctic without understanding the Arctic environment. Our colleague, Heather Exner-Pirot, who I'm sure is known to many of you, made this argument very effectively in her 2013 article, in which she argued that "the Arctic is exceptional in that the environmental sector dominates circumpolar relations." That is to say that for no other region of the world is the environment so central to politics as it is in the Arctic.

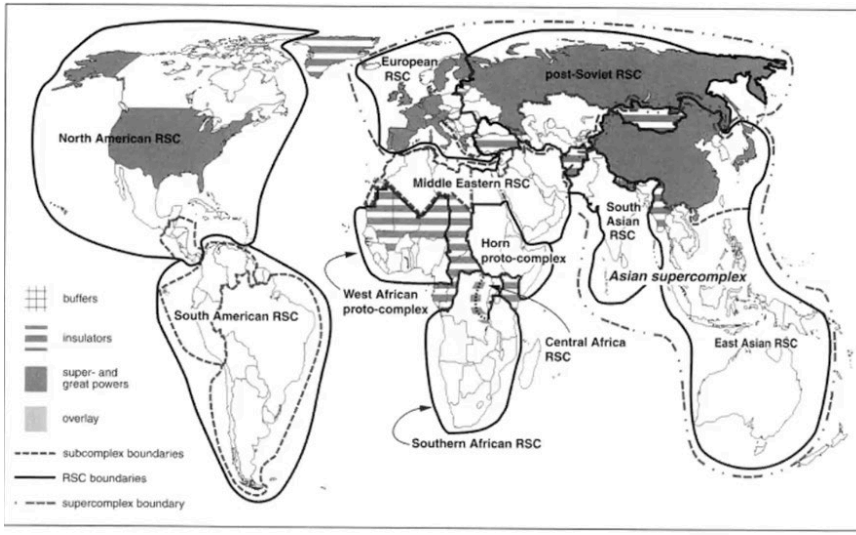
Building on that, I argue that interstate relations and conventional security issues, as well as human security issues in the region, are being affected by climate change. And we need to not maintain a human security lens to the exclusion of a somewhat more conventional interstate security lens. I think what's really important for me about that argument is the assertion that it's not just human security that's threatened by Arctic climate change. It's a phenomenon that also fundamentally affects the security of Arctic states. And so, insofar as those Arctic states, as I've already suggested, have not been particularly responsive to the human security arguments about Arctic climate change, perhaps they'll be more responsive to the argument that their own core national and sovereign interests are also being very directly affected, I would suggest, and in many cases harmed by anthropogenic climate change in the region.

Some researchers in the natural and physical sciences have described the processes of climate change as they are occurring in the Arctic Ocean as Atlantification and Pacification, which refer to the northward intrusion and migration of marine species and warm water from the Atlantic and the Pacific Oceans. So, as currents are changing and as water is warming, there are these interrelated processes whereby species are migrating further north in order to follow the more temperate water that is also now present in the Arctic Ocean as a result of oceanic warming. Atlantification and Pacification refer to these natural or physical processes whereby warmer water from more southerly latitudes is now entering into the Arctic Ocean, thus providing one more of these feedback loops that accelerates the process of Arctic and global climate change.

I suggest that this idea of Atlantification and Pacification can serve as a useful metaphor in the social sciences, particularly in international relations and in security studies as well. I would suggest that Arctic geopolitical and security dynamics are also changing as a result of this environmental and climate change. One of the impacts this is having is the fragmentation of the Arctic,

such that it is going to become increasingly difficult for us to discuss and effectively generate policy at a pan-regional Arctic level—that is to say, encompassing the entire circumpolar region, all eight of the Arctic states—but rather we're going to see a fragmenting effect down to the sub-regional levels of analysis. Within the Circumpolar Arctic as an overall holistic region, I think that this metaphorical Atlantification and Pacification of Arctic security is going to break down the security and political dynamics in the region into sub-regions that are really just northern extensions of the security and political dynamics of the Atlantic and Pacific geopolitical regions, respectively.

This argument is informed by this idea of security regions or constellations. This map here is taken from a well-known book on the subject by Barry Buzan and Ole Wæver. You can see here that they've drawn these lines to indicate the different security regions that exist around the world. Rather than having a global or systemic perspective on security, they're recognizing that, for most countries and most people in the world, security is not actually determined at the systemic level, but is determined at the regional level. It is determined by how well one country gets along with its immediate neighbours, or the more powerful states in its own particular area. That's the level of analysis and the level of real-world politics at which most security decision-making actually occurs.



Map 2. Patterns of Regional Security Post-Cold War Source: Buzan and Waever 2003

I extend this broad framework of thinking to the Arctic region. Looking from a circumpolar context, this is the holistic, unified Arctic region. This is the level of analysis for Arctic politics that has been very relevant in the post-

Cold War period. It has found expression in lots of different policies and initiatives, and of course in the work of organizations like the Arctic Council. I think that climate change, and the fact that climate change has already and will continue to undermine and alter the uniqueness and the holism of the Arctic Ocean region, is going to fragment this Circumpolar Arctic into sub-regions in which the real action takes place.

Atlantification and Pacification refer, in my usage, to the fragmentation of the circumpolar into these two broad regions: one centred on Northern Europe and Northwestern Russia, the other on the Eurasian Arctic, particularly the bulk of the Northern Sea Route and the Northeastern Asian Arctic. One thing I hasten to add is that, as far as Atlantification goes, I think it's actually a bit of a misnomer, because I don't think that, in this context of Arctic climate change, we are going to actually have a single "Atlantic Arctic region." Rather, I think the Arctic is actually likely to fragment into three distinct sub-regions. So, both the Northern European and the North American Arctic regions, which quite simply comprise overlapping, but distinct, sets of political actors, are also, in numerous and profound ways, different places from each other. They are different demographically, politically, economically, and societally. The differences that already exist between the Northern European and the North American Arctics are really, as climate change accelerates, going to drive a divergence in what the priorities of those regions are, what the needs of those regions are, and the kinds of security threats and challenges that people and polities in those regions are likely to face. So, while I say Atlantification and Pacification, I actually argue, more precisely, that there will be three emerging Arctic security sub-regions, if they don't already exist. I think there is some evidence to see this process already at work.

In terms of Atlantification, I think we can really see some of the process at work in the post-2008, and again in the post-2014, period. This has to do in large part with the increasing tensions that have emerged between the Russian Federation and the Western Arctic states. Since 2008, this is the period of the somewhat infamous Russian flag-planting at the geographic North Pole. Tensions are also certainly accelerated by the Russian invasion and annexation of Crimea in 2014 and the subsequent sanctions that were imposed. And we've seen this increase in Nordic and NATO defence cooperation in response, which quite overtly positions Russia as the antagonist, as the threatening actor. It's very difficult to have a pan-Arctic regional cooperation in that context.

Without wanting to play into the new Cold War dynamic (because I think it's a misguided way of framing this rise in Arctic tension), I see how it's an easy model for many of the actors in the region to slip back into. The North American and the Northern European regions diverge because transatlantic

tensions and the absence of American leadership, or at least effective American leadership, are also parts of this story. This is the post-Iraq War and, in some ways, the post-1990s, but really the post-2003 gap in foreign and security policy and priorities that has been severely exacerbated by the last four years of the American Trump administration.

Pacification in this context refers to the emergence of a strong interest in the Arctic and circumpolar politics among major Asian actors, and their deepening engagement with Russia, which of course is the predominant state in the Eurasian Arctic—indeed, it is the only state with territory in the Eurasian Arctic. But its engagement with these leading Asian actors, notably China, as signified by the Yamal natural gas partnership, is really just a different region. It's a region that is operating according to different sets of principles and emerging norms, and certainly different sets of state interests and state priorities in terms of security and politics. It is a far less democratic region. It's a region where the dominant actors are not democracies. There are really important questions here about legal norms and adherence to international law. I also think about mechanisms for political accountability and responsiveness given the non-democratic nature of Russia and China.

The upshot of this argument is that, against these more optimistic assessments of Arctic exceptionalism and region-building in the post-Cold War period, institutions of Arctic regional governance will endure, but which will be increasingly challenged by the fragmentation of issues into these sub-regional levels. Theoretically, this reinforces this move towards a more state-centric form of Arctic politics that has been foreshadowed by our colleague Jessica Shadian, among others. It also sets the stage for increasingly contentious state and sub-state politics within these Arctic regions—for instance, between the territorial governments and the state of Alaska, with the Canadian and American governments respectively; between the Nordic states and Sami parliaments; and between the county levels of Northern Norway, Northern Sweden, and Northern Finland and their own national governments.

The possibilities of sub-regional conflict and spillover are present, but I don't think that this is an argument that says that conflict is any more likely in the region, per se; just that climate change is driving broader political and security changes, which is going to make it less and less possible, or useful, for us to conceive of, and take action at, the level of the region as a whole.

This fragmentation, I think, is underway. As the holism of the region itself is undermined, so too do security and politics become less regionalized. This doesn't mean that conflict is inevitable or even more likely. It does mean, in my estimation, that pan-regional Arctic governance is likely to weaken and that this idea of Arctic exceptionalism or uniqueness is eroding, is unlikely to endure,

and is what I think we will look back on as this brief post-Cold War euphoria and optimism about the capacity for Arctic cooperation. This is an argument that I develop more fully in a paper published in 2019 in the *Arctic Yearbook*, which, for anybody who's interested, is available to access and available online, if you would like to read a little bit more nuance about this argument. Thank you all for your time.

Heather Nicol

Great, thanks to you both. We'll start to get the questions rolling. Let me start by asking you, Doug: Will discussed Atlantification and Pacification as a metaphor, but can you tell us a little bit more from a scientific perspective? What exactly is happening?

Doug Causey

I think what you're asking is what may be some regional differences. From a Canadian standpoint, you look at the western part of your world versus the eastern part of your world. Here in Alaska, we look west and northward almost exclusively—the Bering Sea, which we share primarily with Russia and some of Asia, and then north of the Bering Straits, the Chukchi and Beaufort Seas. All of the images that I presented and that Will presented are maps of change and of what the current conditions are. What everyone understands is that underneath those pictures are ocean currents and atmospheric currents, and, frankly, the level that I work at, as an environmental biologist, is at far smaller scales. These are the scales that most of you are experienced with, as well as local people. So to answer your question just quickly, in the Arctic there are two aspects of looking at science and the environment: there is the scientific approach, and then there's the traditional knowledge. What we're finding is that before these were seen as being separate, but we now are looking at the same environment with slightly different gazes, slightly different worldviews. And what we're finding is that, depending on where you are, we're seeing different magnitudes of change and different types of change.

In the Pacific, we're seeing ocean currents changing, ice patterns changing in ways that are beyond traditional knowledge, and certainly beyond scientific knowledge, because there hasn't been that much work done. But, in general, on a large scale, we are seeing essentially the absence of ice, warming of temperatures, and increase of Southern species, both marine and terrestrial. And some of these are having quite profound impacts and, in the marine environment, we're seeing Southern species of fish coming into the Bering Sea and Arctic Ocean. These not only are disrupting the ecological stability, but they're dragging with them a lot of commercial activities into Arctic fisheries.

I'll just mention one other thing: for example, a really important part of the Arctic environment is pollinators. Those are what cause the vegetation to renew itself. Pollinators are changing and so, in some cases, it's having profound effects on the actual type and cover of vegetation.

Heather Nicol

It's interesting to understand what those metaphors might mean from an environmental perspective. Now we have a question from the audience. A question for Will from Katharina Koch: Would you be able to elaborate a little bit more on the transition from pan-regional to sub-regional activity and behaviour?

Wilfrid Greaves

During the Cold War, the Soviet Union and the United States were in a structural rivalry with each other and were unwilling to cooperate in a way that they feared would give the other side an advantage in that competition. Accordingly, it wasn't possible to have Arctic regional cooperation per se. You could have pieces of it, but you could never have the region as a whole. That dynamic changed at the end of the Cold War when the Soviet Union collapsed, and American hegemony changed the structural dynamics and relationships between those countries. First, through the Arctic Environmental Protection Strategy, and then afterwards the Arctic Council, we actually saw the emergence, for the first time, of these pan-regional Arctic institutions: the idea that Arctic cooperation was not only possible, but that it was flourishing and that now it would be possible to address many of the challenges and issues in the region, notably environmental issues, pollution, transboundary pollution, climate change, and so forth. This happened because of American structural power and dominance. No one was challenging the United States or trying to remove the United States from its position of global leadership.

So, it was possible, under that broad umbrella of post-Cold War American power, to have a regional cooperation for the whole Arctic. And then a lot of political activity was taking place at that pan-regional level. But what I think has happened, and what I think has now outstripped that understanding of post-Cold War Arctic security, is that the United States is, I'm sorry to say, very clearly in relative decline, very accelerated relative decline, because of its own missteps, strategic errors, poor leadership, and so on. The United States remains very powerful and very important, but it's no longer able to set the agenda the way that it once did. It's no longer the unipolar actor in global politics that no country is prepared to challenge. Very clearly there are a

number of countries in the world, including Russia, that have very effectively challenged the United States in various ways.

What we're seeing, and I think where my argument kicks in, is no longer a single structural factor, like the relationship between the United States and Russia for example, having the same effects all over the Arctic region. What we're seeing is really a breakdown of the single Arctic into these sub-regions where very different kinds of political processes can be happening.

Let me give you an example. Russia is pivotal in the Arctic. Russia is so geographically large; it has half of the Arctic population. It's simply integral to the Arctic region as a whole. But, in the contexts of what I'm calling this sub-regionalization, it is possible for, on the one hand, Canada and the United States to have quite conflictual and belligerent relationships with Russia in the North American Arctic. We've been seeing this, going back to 2008, in terms of this kind of ratcheting up of political tensions and allegations of Russian buzzing of North American airspace, a lot of inaccurate information that was being distributed by the Government of Canada at that time, and just a construction and a production of Russia as an antagonist, as an enemy, as somehow threatening Canada's Arctic sovereignty. That can be the dynamic of politics and security with respect to Russia that's happening in the North American Arctic. But, simultaneously with that, you can have Nordic countries (or most of them anyway), including NATO allies and partners, having very cooperative relations with Russia in many respects in northern Europe and in the northwestern part of Russia—the Barents Region, for instance. And you don't have a kind of uniform or pan-regional dimension to Arctic politics and cooperation. You can have Russia be the bad guy over here for one set of Western states, you can have Russia be a necessary partner for another set of Western states over here, and then have the dynamic between Russia and China in the Eurasian Arctic, which is just kind of separate and apart from those other two dynamics. It is its own regional dynamic being driven by the great power interests of two very important countries, China and Russia, that are pursuing their own national interests without particular regard for what it means for Arctic cooperation or the region as a whole, etc. The level of The Arctic—capital T, capital A—stops being a very useful level of analysis, I suggest, for understanding those specific processes that are unfolding within the region at the same time.

Heather Nicol

The next question is from Paul Meyer: How can Arctic issues get traction at COP26 (the 26th United Nations Climate Change Conference (2021))? What

are the current arrangements for search and rescue in the Arctic, and are they keeping up with the increase in maritime traffic referenced in Doug's talk?

Doug Causey

They already are. But, like I said, Arctic issues really, up until recently, were seen as being—this is my interpretation—slightly irrelevant to everything else that was happening in the world, but that has completely changed. So I don't think that it's going to take any extra urging on our part to get this to rise to be an important issue.

Wilfrid Greaves

I agree with Doug, and I certainly wouldn't suggest that the Arctic is not important for climate change negotiations. It of course is and should be considered, but I would add a dimension. As we know, climate change is a global issue and its relevance, and the impacts it's having globally, are clearer all the time. In that sense, I actually think it's going to be perhaps more difficult for Arctic issues to get traction going forward. I think there was a window of time, and I hate to say it but around 2007/2008, when if the Arctic per se, and the radical transformation of the Arctic due to climate change, was going to catalyze action, that's when it would have happened.

The Arctic is peripheral. The Arctic is marginal to global politics. That doesn't mean it's unimportant—of course it's important, particularly from a climate perspective; its role in regulating the Earth's climate is incredibly important. But people around the world don't know much about the Arctic, and, while on some surface level or shallow affective level they might care about what happens in the Arctic, they care much more about what happens close to home. And they care much more about where they live and how they are now being affected by climate change. So I do worry that, actually as climate change continues to accelerate, the Arctic will have greater and greater trouble finding a home on that agenda or finding a champion, because everybody's going to become increasingly preoccupied with climate change where they live. And there are only four million people in the Circumpolar Arctic, and so how do you reclaim that agenda, now that that agenda has well and truly gone global?

Heather Nicol

Great. We have another question here, a question from Ehren Edwards for Doug: Do you think we're seeing environmental collapse or environmental transformation, or probably both? What do you think are the consequences for both Indigenous and non-Indigenous humans' presence in the Arctic?

Doug Causey

It is very much transformation. Collapse really is not a term we use environmentally. That's more something—forgive me, Will—that falls more in your world, not mine. Whenever we're talking about environmental change or permafrost change, this affects Arctic communities and particularly those off the road system. The availability of water in the Arctic turns out to be one of the most critical issues, when what's called the built infrastructure starts to be affected by environmental change. In Alaska, and I know in the Canadian Far North, we have people whose sewage is operated through a honey bucket, and you all understand what that is, but the point is, where do you put that sewage? And where do you get your water? And on and on.

So, the good news is that this problem is increasingly being addressed by many different areas like engineering, biology, and, of course, the social sciences. Nobody has all the right answers immediately yet, but we're now becoming more aware that this is a rapidly changing and transforming environment.

Wilfrid Greaves

If I could just add to that, and I'll loop in the search and rescue and the emergency response piece as well—I think Doug's point is well taken. I don't use the word "collapse" in a terribly scientific sense when I do, so no one should read too much into that. But what does attract my attention, as a social scientist and as an analyst, is to think about the vulnerability of particularly small and isolated Arctic communities, particularly those that may be off-road or only accessible by air or water. This idea of critical infrastructure is just that: it's critical. This is the infrastructure necessary to support settled human life in those places. And what we've seen, as a result of climate change, is the real vulnerability of some of those pieces of critical infrastructure to environmental change—so, permafrost thawing being a major one, coastal erosion being another. When your community is only accessible by air, having the airstrip out of commission is a pretty fundamental challenge to your viability and your survival, your well-being, your ability to access food. When you rely upon diesel fuel being imported, if the boats can't get to your harbour because it's blocked by unseasonable ice or the harbour has collapsed because of coastal erosion, it really does challenge the viability of those communities in the short term and the people who live there.

So I don't use "collapse" in a scientific or structural way, but I think it helps to think about the relative fragility of maintaining the existing modern form of life that many small, isolated Arctic communities have, in the face of insufficient resources from their governments from further south to help them

adapt. This draws attention to climate change adaptation more so than mitigation and the idea of community resilience. Communities can only be resilient in the face of climate change if they're adapting to climate change. Through no fault of their own, many communities lack the resources and the capability necessary to be able to adapt affectively.

In terms of search and rescue, I'll just touch on it very briefly, but I think that it ties into this idea of collapse quite nicely because what it poses is the prospect or the hypothetical possibility of a major outside shock to the existing equilibrium of both the natural and social systems. So maybe you're okay right now, maybe your community is resilient right now, maybe you've managed to improve your infrastructure, or you relocated inland, or maybe you're just fortunate and haven't been terribly affected yet. But will that resilience be able to endure, should there be a major marine disaster in your neck of the Arctic, should there be an oil spill, a pipeline rupture, another natural or human-made disaster of some sort—a shock to the system that you operate and live within? I would suggest that most Arctic communities, again through no fault of their own, but because of the relative vulnerability and the relative precarity of Arctic life in many places, are not equipped to effectively manage or survive that kind of a major exogenous shock.

So cooperating and building up interstate cooperation, on things like search and rescue and emergency preparedness and response, and on oil spill preparedness particularly, is extremely important and has been a focus of activities at the Arctic Council level, as well as at the national and sub-national levels, in recent years. So, the short answer to your question is that there have been these Arctic, pan-Arctic agreements to try to coordinate search and rescue response and, separately, emergency preparedness response, in order to leverage the fact that sometimes your own country's coast guard or navy or other capabilities are not the ones best positioned to respond to a disaster in a given region of the Arctic. Having the Danes and the Canadians be able to cooperate in the Canadian Arctic Archipelago is probably a really good idea. Similarly, having the Norwegians and the Russians cooperate in the Barents, and Canadians and Americans in the Beaufort, and so forth, are positive outcomes. There's an effort to build up that greater cooperation and a framework to make that happen, but that's all trying to create a safety net around the possibility of such a disaster occurring, rather than preventing the kinds of activities that, at their root, are likely to produce such a disaster in the first place.

Heather Nicol

That ties in nicely to our last question from Roy Culpeper, who says that there is a need to protect communities and habitats from further warming.

Could our speakers talk about adaptation or building resilience in the Arctic to cope with the deteriorative climate?

Doug Causey

Here in Alaska—and I know this is also the case in the Northwest Territories and Nunavut—because of melting permafrost, the stability of community structures, like houses that people live in, and water tanks and the rest, is being greatly affected. The term that's used for all of this is the built infrastructure—the pipes, the houses, and the rest. The immediate response in both our countries is to either relocate or replace. So, you would move people to a safer place—and that was the case in the town of Shishmaref, here in Alaska—or if your house fell apart, now we'll just rebuild it. But replacing the same kind of structure in a rapidly changing environment is a very short-term response.

The good news is that engineering and some other fields are looking at reimagining and reconceptualizing what the built infrastructure should look like in the new, changing environment. There are some very exciting developments being proposed that would create new living structures, new community support structures that: (1) are economically feasible; (2) are going to be stable in the rapidly transforming environment; and (3) actually use some of the local Indigenous knowledge about what works and what doesn't. Probably the most important thing is to have built infrastructure that can be maintained by local people.

I will give you just one example of this. One of my colleagues here at the University of Alaska Anchorage, Philippe Amstislavski, is a mycologist—that is, he works with fungus—and he has developed a way to grow local Arctic fungus in a way that it can be used as insulation, to replace what we commonly use, styrofoam. This is a new enterprise that can be done by local people. It sounds funny to be growing mushrooms in the Arctic, but it's not the kind you eat. They can be formed into an insulating factor that is waterproof as well. This is just one example. We have a lot of work to do, and the environment is changing, but using the same old ways isn't going to solve much. The exciting thing is that there are some very new approaches to this.

Wilfrid Greaves

I can't comment on the soils, per se—that's completely outside of my wheelhouse—but I have given some thought to this argument that you see about how climate change could be good for the growing season and the growing range in Northern Canada, that you could see agricultural production increase, and so on. Something that always drives me absolutely nuts about that

argument is that it just seems to be completely ahistorical about the way in which, for example, the agricultural basin of the Canadian Prairies was opened up. What does it take to have an agriculturally productive region that is producing those commodities and food products for export? In the case of the Canadian Prairies, they built a railroad, created three new provinces, and imported millions of new migrants. You have to build a road network. How are you going to get these foodstuffs to market? You need roads, rails, and ports. You need to actually have a physical economic infrastructure to support large-scale agriculture.

The question of whether or not a warmer Arctic will be able to quite literally produce more food, or be more amenable to growing, is only the tiniest and, in some ways, the least interesting aspect of what it would take to actually have agricultural production happening at higher latitudes. Especially in light of Doug's point, this is a moving target. Climate change is happening. So, if you're building to one standard of resilience today, is it going to be sufficient for the climate change that is going to be occurring in 25 years' time? Well, from the perspective of agricultural production in Northern Canada, it's an absolutely daunting prospect to imagine any substantial agricultural production there ever making it to market—which is to say, ever being useful. I'm very skeptical of this prospect, and I've never really seen a good argument for it.

Heather Nicol

Thanks, Will. We do actually have time to answer one more question, from Adele Buckley. The question is that many believe that forests will advance northward, and farming will be enabled. Nevertheless, expert advice tells me that this can only happen if the soils change appropriately, and that's a much longer time scale. Can you comment on that?

Doug Causey

What a great and really complex question. There is no quick and simple answer. I will just say two things. First is that, in one sense, as the temperatures warm and the vegetation changes, we're talking about an ecosystem change. That does tend to change the abiotic environment, like soils. I think that, if what you're asking is how will this affect the type of forest and can agriculture be undertaken at higher latitudes, the answer is yes, but it's not going to be with agricultural plants or animals that are used in lower latitudes.

One obvious example—economic crops like rye and barley can be grown in very high latitudes. We even have a farming community up here in the Anchorage area. But these are rather limited crops economically, and you're not going to be growing corn or wheat or anything like that. But a far more

important question is: what do we really want to do in terms of classic agriculture? There may be some very interesting other ways to be looking at what can be done now, and what can be done in the next 25 years.

Heather Nicol

We have one last question from Jackson Bellamy. How will Arctic resources and environment fare, considering the cumulative impacts of climate change and Arctic activity? How should we rethink environmental security in the presence of these risks and changes?

Wilfrid Greaves

This is a big question. It gets at really fundamental questions of our economic system and our societal values. I think the answer to your question, "how will Arctic resources and the environment fare, considering the impacts of climate change," frankly begs all kinds of other questions that are difficult to answer. It's a great question. It's a thesis question.

But it's hard to say. I would suggest that the major driver of climate change in a broader sense quite clearly seems to be carbon-based consumption and carbon-based capitalism, to the extent that that is the system that has produced anthropogenic climate change. It seems certainly plausible to me that we will have a very difficult time effectively addressing the climate crisis within that economic and social paradigm.

In the context of the Arctic, those kinds of questions are really compounded because there is a higher level of subsistence-based activities, a higher level of locally-based economic and food and agricultural subsistence in some cases, which might make those communities a little more able to revert to more locally-based economies, but it really would still entail huge amounts of external support and frankly a very broad social-economic transition. I think this idea of a transition, whether we call it decarbonization, or whether we call it more industrially-focused Green New Deal policy—even the idea of greening capitalism but doing it for real, such as capitalism somehow managing to reduce greenhouse gas emissions, not only current levels, but aggregate levels in the atmosphere—those are the kinds of questions that would need to be answered in order to get a real handle on your question.

I think that in the absence of that kind of systemic change, we are not going to address the problem, and we will all be continuing to live and work and try to survive in an increasingly hostile global context, I am sorry to say.

Doug Causey

The direct answer is what people like Will and I say all the time: more research is needed. But let me tell you, there are some really interesting approaches being taken in Nunavut, again with the isolated communities, addressing the issue of climate change, the impact of the long-distance transport of pollutants, and the incredible cost of moving supplies from the South up into the North. There are new social networks being put together. Trading networks is not really the right term, but rather than having airplanes fly from Ottawa to every single local community in Nunavut, instead there is a more localized hub-and-spoke system being put together, not only for the transport of goods, but for information and other resources. So, the environmental transportation is causing a dramatic shift in the paradigms that we are using to produce answers and solve the questions. It's very much a dynamic process and that's what I think is very optimistic.

Heather Nicol

Thank you both so much for the wonderful presentations and equally good discussion. Thank you, Will, and thank you, Doug. I'm honoured to have you both as colleagues, and I'm going to turn this meeting back over to Peggy.

Peggy Mason

Thank you very much. I just want to of course echo Heather's sentiments and say thank you to our speakers, and I want to thank you, our moderator, and I want to thank, of course, all the participants for the wonderful questions.

3. A Changing Arctic: Northern Perspectives

Tuesday, 9 February 2021

Peggy Mason

Welcome, everyone. My name is Peggy Mason and I have the privilege to welcome you all to the third in our February 2021 six-session webinar program on Arctic security and to briefly introduce our three co-sponsors ….

I turn now to our moderator and NAADSN lead, Dr. Whitney Lackenbauer, Canada Research Chair in the Study of the Canadian North and a Professor in the School for the Study of Canada at Trent University.

Whitney Lackenbauer

Thanks, Peggy, and welcome everyone. First of all, I want to acknowledge the Indigenous territories—Métis, First Nations, and Inuit—upon which we sit

as we gather in this virtual context from all across Canada. In my case, I live in Oxford County on traditional Anishinaabe and Haudenosaunee territory that is covered by the Upper Canada treaties. By taking the time to acknowledge the land that I stand on, I remind myself of the long history of silencing in this country and the need to speak the truth on a journey towards reconciliation.

Today, I am most delighted to introduce our two distinguished speakers to lead our discussion on *A Changing Arctic: Northern Perspectives*. They are truly community leaders with an astounding breadth and depth of experience and service to their communities and to our country. Bridget Larocque is an Indigenous resident of the Northwest Territories with extensive knowledge of the territory and regional and global worldviews. She has lots of experience using varied research methods, and a deep understanding of Indigenous and gender issues, amongst many other things. She serves as a Policy Advisor and Researcher with the Arctic Athabaskan Council, and was Executive Director of Gwich'in Council International (GCI) from 2007 to 2012, so she brings tremendous expertise on Arctic Council and Arctic governance issues to this discussion. Her other recent work includes acting as Manager of Self-Government negotiations for the Gwich'in Tribal Council, Land Claim Implementation Coordinator and Project Analyst with Indigenous and Northern Affairs Canada, an Assistant Negotiator with the Department of Executive and Indigenous Affairs of the Government of Northwest Territories, and Executive Director of the Fort Norman Métis Community in Tulita, Northwest Territories. I could go on and on. She is also strongly committed to mentoring young leaders in the North, as well as mentoring old academics from Southern Canada like myself.

I am also very honoured to introduce Sergeant John Mitchell. I first met Mitch at Cape Isachsen on Ellef Ringnes Island in the High Arctic back in 2002 when he was completing Exercise Kigliqaqvik Ranger I to the Magnetic North Pole. He had already been leading the Dawson Canadian Ranger Patrol for more than a decade. 19 years later, he is still at it. He has been leading efforts to break trail for the Yukon Quest for many years, many decades. He has headed his community search and rescue association for just as long. He is the most decorated Canadian Ranger in the country. Amongst his many honours are a Medal of Bravery for saving a young boy from being mauled to death by two Rottweilers, the Order of Military Merit, the Yukon Commissioner's Award for Bravery, and the Yukon Community Safety Award. He is also very committed to mentoring young leaders through the Junior Canadian Ranger Program.

Bridget Larocque

Thank you, Whitney. My presentation today will be on *Arctic Security: Indigenous Voices Matter*. I will go through some thinking on Arctic security and some of the forums that we're engaged in, what treaty means for us, and then just some other advanced thinking.

Arctic security is complex, to say the least, for the average Indigenous person. The Arctic is our homeland. It not only sustains us, but keeps us resilient and healthy when it is itself kept in a healthy state. A place of peace and quiet. It is not like the hustle and bustle of outside—the South and its big cities, all concrete and glass buildings, super malls, and paved roads. Our home is the boreal forest, tundra, snow and ice. To the state, security is about power, hard power, and yet, in Indigenous worldviews, security is about soft power: cooperation, peace, and responsibility. As Indigenous Peoples, our worldview is about "holism." Everything is interconnected.

"Taking Up Responsibility" is our commitment to the protection of our environment. We are responsible for human health, environmental protection, and water quality. Another term for this responsibility is "collective stewardship," based on Indigenous values and worldviews. From a soft power way of thinking, we need to talk about social well-being, co-management regimes, and governance. How will military security fit into this conversation? What is our role, if ever, under military threat? Or global threat, which we now face with respect to climate change?

Marc Lanteigne indicated in his 18 September 2020 paper, *Whose Arctic Security is it Anyway?*:

> The problem, however, is whether this talk (militarization of the Arctic) will result in more obscurity around many other pressing areas of Arctic security, especially those on the individual level and related to so-called 'non-traditional' security concerns such as development, education, the environment, gender, and health, (including the effects of COVID-19), which are also affecting the region in the here and now.

I'll ask the same question about the militarization of the Arctic. What do we as Indigenous People do about the "non-traditional" security concerns such as development, education, the environment, gender, and health (including the effects of COVID-19)? How does Indigenous self-determination (rights, land, community, spirituality, and decolonization) get addressed? Where do we find freedom from the destructive regimes we find ourselves in. Colonization and patriarchal controls replaced our matriarchal system and overlooked women's rights to land, governance, and disregarded our power and worldview. If we

accept that militarization is the process by which a society organizes itself for military conflict and violence, then how does the state protect us from conflict and violence? Or why are they putting us, residents in the Arctic, in harm's way?

The most significant agreements that Indigenous Peoples have with Canada on security and sovereignty are their historical treaties and, since 1973, modern-day treaties. From the written word of Jean-Pierre Morin, historian in the Treaty Policy Directorate of the Department of Indian and Northern Affairs Canada (now Crown-Indigenous Relations and Northern Affairs Canada, or CIRNAC):

> The treaties negotiated and concluded between the Crown and many of Canada's First Nations (now Métis and Inuit) are foundational documents in the history of Canada. These treaties established peaceful relations during times of colonial war, established a prosperous economic and commercial trade, and allowed for the organized expansion of Canada. Without these treaties, Canada would likely not be as we know it today. Historic Treaties are not only solemn documents binding the parties to ongoing obligations, they are also documents enshrined in, and protected by, our constitution. As the Treaties will last "so long as the sun shines, the grass grows, and the rivers flow", they will continue to be a central element of the relationship between Canada and First Nations peoples (Métis and Inuit).

This means that Indigenous Peoples are not to be harassed on their lands. How can Canada guarantee this, if external military conflict happens? How can we as Indigenous Peoples avoid militarization?

Besides treaties, there are other such forums that address Northern issues and have NGOs and stakeholders as members, but where are the Indigenous voices? The Arctic Security Working Group (ASWG) is a forum for information exchange with the aim of enhancing the security of and the exercise of sovereignty in Canada's North, through information sharing and cooperation among federal and territorial government departments and agencies, as well as non-governmental organizations, academics, the private sector, and other stakeholders with an interest in Northern/Arctic issues.

The Government of Northwest Territories (GNWT) states, under its work in the Arctic Security Working Group, that "the issue of Arctic sovereignty and security is of significant importance to the Northwest Territories. The GNWT participates in the Arctic Security Interdepartmental Working Group, which provides a biannual forum where representatives share information on

sovereignty and security matters." Is there consultation or adequate resources provided for meaningful participation? Where are the "gender" voices?

Canada's Arctic and Northern Policy Framework states that "Canada's sovereignty over the [Arctic] region is long-standing, well-established and based on historic title, and founded in part on the presence of Inuit and First Nations since time immemorial." (The Métis are not mentioned here, although recognized as an Aboriginal people in the Canadian Constitution). The policy framework language continues:

> Canada's Arctic and Northern governments and communities are at the heart of security in the region. Partnership, cooperation and shared leadership are essential to promoting security in this diverse, complex and expansive area. Working in partnership with trusted international allies and all levels of government, including Indigenous communities, organizations and governments, Canada will continue to protect the safety and security of the people in the Arctic and the North, now and into the future.

As stated in the June 2019 Report of the Special Senate Committee on the Arctic, called *Northern Lights - A Wake-Up Call for the Future of Canada*:

> Government policies must align with the various priorities of northerners, both Indigenous and non-Indigenous, empowering northerners to create their own programs and initiatives. The ultimate goal, in our committee's view, should be the eventual devolution of decision-making powers about northern issues to northern institutions - decisions about the North must be made in the North, for the North and by the North.

Again, from the Senate Report:

> Arctic residents keenly observed other countries' interest in the region's natural resources and the Northwest Passage. The committee recommends that the Government of Canada ensure Canadian Arctic security and safety and assert and protect Canada's sovereignty in the Arctic. In the committee's view, actions ensuring prosperous, sustainable and safe Arctic communities are vital to enhance Canada's ability to project its Arctic foreign policy, including sovereignty in the region.

Human security was popularized in the 1994 United Nations *Human Development Report*, expanding the notion of security to include dimensions of food, health, community, environmental, economic, personal, and political security, with the intention to, in part, address some of the glaring weaknesses of security theory and practice. The strongest argument for protecting the

environment is the ethical need to guarantee to future generations opportunities similar to the ones that previous generations have enjoyed. This guarantee is the foundation of "sustainable development." Yet we know that the UN's Sustainable Development Goals are not being implemented in funding priorities or state budgets.

How can we talk about Arctic security when we do not know what we are asked to do, if ever under military threat? As Indigenous Peoples, our worldview is about "holism" and that everything is interconnected. #AllMyRelations and #AllLivesMatter mean that everything—animate, inanimate, animals, our environment, water, land—must be considered, as varying worldviews have to be reconciled when it comes to military security.

Policies developed without the knowledge and wisdom of Indigenous experts (life-long Northerners) are nothing more than the continuation of the colonial methodology that perpetuates antagonism. There are conversations held without meaningful Indigenous participation … so, what does protection through hard power (military security) and soft power (the ASWG, the Arctic Council (AC), and the UN) look like for Arctic Indigenous Peoples? The participation of Indigenous Peoples as experts and real partners in Canada's security organizations must be genuine; tokenism is ineffective and unacceptable.

In the book *Braiding Legal Orders: Implementing the United Nations Declaration on the Rights of Indigenous Peoples* (pg. 141), it states that implementation is key to giving effect to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) and moving past the current colonial relationship. To implement UNDRIP, Canadian constitutional law must shift in its approach to defining Indigenous Peoples' rights, toward ensuring that the rights are defined according to Indigenous Peoples' legal traditions. Ensuring that the rights protected under section 35(1) align with UNDRIP will mean that Indigenous Peoples' rights will continue to be recognized in the highest law of the land. So, how do we connect to the highest law of the land?

The Arctic Council Advisory Committee is a forum for the engagement of federal, territorial, provincial, and Indigenous partners on the development and implementation of Canada's international Arctic policy, including Arctic Council-related matters. The Committee also serves as the main governance mechanism for overseeing the implementation of the international dimension of the Arctic and Northern Policy Framework. The four objectives are to 1) ensure regular dialogue between the federal, territorial, and provincial governments and Canadian Permanent Participant organizations, with a view to identifying areas of common interest and mutually supportive action; 2)

engage territorial, provincial, and Permanent Participant partners on the development and implementation of Canada's international Arctic policy, including positions taken at the Arctic Council and other international forums; 3) promote greater awareness of Arctic Council and other relevant international activities among Committee members and their respective institutions; and 4) review the progress in implementing the international dimension of the Arctic and Northern Policy Framework.

In considering all of this, several years back there was a Pan-Territorial Arctic Forum. One of the recommendations that I have is that we rejuvenate this forum, with the inclusion of Permanent Participants. Some issues that this forum may address are Arctic human health research, policy making on Arctic foreign policy, UNDRIP implementation (Indigenous sovereignty), and Arctic defence and security. However, the dilemma is how will Indigenous premiers advance Indigenous rights and self-determination while representatives of non-Indigenous constituents and as sub-national governments within the Canadian federation?

John Mitchell

Hi, everybody, from Dawson City. Thanks first of all for inviting me to participate in this. It has been pretty interesting to date. Firstly, as I always do, I want to put a disclaimer out there and make sure that everybody understands that what I present today is a personal perspective based on about 45 years of my life in the Yukon, and it's been a pretty diverse, interesting, and rewarding one. Whitney touched on some of the stuff I've done. I started out on the land, living on the land, trapping, commercial fishing, barge valet, gold mine manager, construction superintendent, and now I'm theoretically semi-retired in these fields and that's not working worth a damn.

During my life up here, I've worked and lived with the local First Nation, the Tr'ondëk Hwëch'in, in various capacities—running their housing program, developing good Northern housing, and also in the outdoor programs with the youth members and the elders. As Whitney mentioned, I've also had 30 years of service as a Canadian Ranger Sergeant. This is really special to me as this position is an elected one and is the only democratic part of the Canadian Forces. I'm probably the longest-serving Sergeant in the Rangers at this point. In this position, I've had ample opportunity to travel a lot in the North and work, make friends, and interact with fellow Rangers within the treeline and all across the High Arctic. I don't like talking about me, so we'll leave that.

Headquarters, of course, is always—and especially at this juncture in command—very sensitive to the personal views of Rangers. We're directed to speak only about what we know. After 30 years of service as a Ranger Sergeant,

I find this kind of humorous coming from people that, for the most part, have a maximum of four years' time in with the Rangers. So, just to be clear, what I say today doesn't reflect the views of the Canadian Forces and the Ranger Command. That being said, my chances of making Chief of Defence Staff or getting a promotion are substantially less than those of the proverbial snowball in hell. As Whitney said, I put in over 25 years of my career getting granny and other people off of the proverbial mountain. So thanks, Whitney, for this opportunity.

We've already heard some presentations capturing the geopolitics—global, national, and regional views—in this webinar. I'm going to drop things down a little bit more to the local level to where us Northerners live, on the tundra, on the rivers and the lakes and the sea ice. Let's talk about Mitch's current views on the changing Arctic or at least the changing sub-Arctic, where I live. We're going to talk a little bit about climate change and global warming, a little bit about social changes, changes in the mining and industry up here, a little bit about COVID, and of course I'd be remiss if I didn't mention sovereignty and the Rangers. These, of course, are only some of the factors at work today, and they have to be viewed as a combined impact or effect on our North.

The first one everybody talks about is climate change and global warming, specifically temperatures. We've all heard that the Arctic is heating up, that the ice caps are melting. And yeah, they are. After living through the last week with temperatures dropping to -45°C. at night, I think we can safely say we're not ready to break out the bikinis or grow bananas in the Yukon yet. That being said, my take on it is this, from my time on the land: yes, we're seeing a gradual warming trend over the last 45 years up here at the local level. We still have cold weather, but it's not as cold and not as long in duration as we had when I first came into the country. Just FYI, my coldest experience then when I was out on the trail was -78°F. To summarize that experience, as Sam McGee said, it wasn't much fun at all.

More important than the actual temperatures are the changes in the local weather patterns and their effects on the land, the wildlife, and the people that live on the land. Recently, the warmer fall temperatures have generally shifted river freeze-ups to later dates, and the somewhat warmer temperatures seem to result in thinner ice and more open water on the waterways. This has presented new challenges in the construction of the ice bridges that provide the winter road access into certain areas during the winter, and even for travel on the waterways with the light snow machines used by the trappers and hunters. It's just getting harder to get around. On the land, I would say also that the warmer temperatures have changed the behaviour of the animals that we harvest for food, and in particular the mainstay of caribou and moose.

The migration of caribou herds has changed. They're tending not to cross into the Yukon and are staying further north in Alaska. This makes them less accessible to the communities as a reliable food source. I think part of that has to do with the status of the rivers that they need to cross during the migrations. They get there and they don't have thin enough water to swim in or thick enough ice to go on. This is a lean land up here. It doesn't support large numbers of animals for long periods of time, and caribou must move to live. They seldom stay in one place for very long, so if they can't make it here, they'll go elsewhere. With moose, it seems that the fall ruts, when we harvest their meat, which is keyed off the temperature, are much later, much more drawn-out, and seemingly more locally specific and erratic. Before we used to say, "first frost in September, it's time to go get some moose meat." Now it's spread out all over the place, in no discernible manner. They seem to come into rut at different times and different locations. This, of course, also means that the annual harvests have decreased.

We've also seen different new species of animals slowly and erratically moving north—deer, coyote, and even cougars, for example. There seem to be more human and wildlife interactions and conflicts reported lately. Part of this, of course, comes as a result of urban expansion. Yes, the population of the Yukon is going up. It's doubled since I came here way back in '76. Now we're at 42,000. This growth pushes further out into new areas, and new resource roads are being constructed that allow access into these areas. But also, some species are behaving differently. Surprisingly, this year for example, we've had two reported instances of lynx, which are normally a pretty shy animal, attacking dogs in the presence of humans. That's not right. Of course, even here in our Klondike region there's evidence of the permafrost melts, slides, new drainage patterns, etc. Those are some of the things we've seen coming out of the gradual warming here.

There've also been some significant social and political changes. The most significant, in my opinion, in this period that I've lived through, has been this time of land claims and self-government for the First Nations and Native peoples. There are teething problems with this—I'll leave that for another discussion, at another time—but it's been a really big change. Within the mining industry is the other big change we're seeing. Mining, specifically placer mining, is the reason for the existence of the Yukon. The discovery of gold in 1896 and the ensuing Klondike Gold Rush in 1898 changed the Yukon forever, as over 30,000 gold-seekers flooded into the territory. This had a dramatic impact on the land that is well recognized among the First Nations people. As one First Nations elder told me, "The trouble is you stayed."

Mining continues to be an important factor in shaping the territory as we know it today. Recently, however, the emphasis has shifted from the bread-and-butter classic placer mining to hard rock exploration and production, and this is creating a whole new dynamic within the territory.

All the large hard rock mines are creating employment, financial opportunities, and also new access to remote areas. They are also creating conflicts within the First Nations, territorial government, federal government, and of course the conservation-minded groups. Access, more than the actual mining, has a greater impact on the land, and we must remember that. While their existence creates employment, the importing of out-of-territory workers to fill positions in the mines places a huge strain on the housing and the social networks within the territory. This is a complicated and challenging tightrope for the Yukon to walk today.

Also new to the territory, of course, is COVID, and we live with it every day. It has definitely affected life and business in the Yukon as we know it. Although we've weathered the initial pandemic storm with zero to minimal active cases, the situation is still affecting our lives and will continue to do so at least for the next year. It'll be interesting to see what the coming summer brings us with the influx of visitors and workers from outside. That's a real question mark there.

The Canadian Rangers and Northern sovereignty. This is where I potentially get into trouble, so Whitney, cut me off if I get too far off course, okay? Remember that this is a personal opinion only. I won't dwell on the origins of the Rangers. I think most in this webinar are aware of them and have at least a partial background. If you are really interested, I'd recommend you read one of Whitney's literary creations. He mostly got it right.

There are some people that have observed that there's been a loss of traditional lifestyles and the associated skills with the Arctic people. In the Rangers, it's not quite that simple. Just as the Yukon has changed over the past 45 years, so have the Rangers. A lot of these traditional skills are being integrated into our current operations, and I believe that the melding of the traditional skills with modern equipment has, in general, increased our capability on the land. Yes, we don't have as many dog mushers within the ranks now, but then we really don't use dogs much anymore either. Our equipment has been slowly upgraded—and I do mean slowly. The process of the acquisition of military equipment, from the point of view of those of us Rangers who have feet on the Arctic ground, sometimes defies common sense and lacks proper appreciation for a thing called timeliness. In the North, this is certainly not limited to the Rangers. Has anybody seen one of our Arctic patrol vessels lately?

Sovereignty does not lose its importance due to the changes that are happening—if anything, to me, it becomes even more important. The bottom line for the Rangers now is that, in the absence of all these technological advances that we don't have, we should be utilizing the Rangers more. We know they work. We need to learn more about the changes occurring in the Arctic, adapt our operations to suit them, and continue to maintain Canada's sovereignty presence. That's it, short and simple.

Whitney Lackenbauer

Thank you both for your wonderful commentaries and also for launching us into a series of questions that are already flowing through the chat. The first question is if you, Bridget, could expand on your introduction to the Arctic Security Working Group (ASWG), and I'll invite you both to comment on this. If you don't mind, I'll just say, in answer to the question from Adele Buckley, that the Arctic Security Working Group was first created in the late 1990s and officially had its first meeting in November 1999. It has met twice each year since that time and really was initiated as a forum to bring together government stakeholders and, in the early days, Indigenous government representees so that participants could talk about Arctic security issues, broadly defined. It started before the Arctic Climate Impact Assessment had been released, before climate change was broadly accepted as that "Inconvenient Truth" unveiled for the world—often illustrated using the dramatic changes observed in the Arctic. The Arctic Security Working Group was a body dedicated to anticipating what challenges might come in the Canadian Arctic—looking at issues of sovereignty, looking at the role of defence, and, over time, also looking at the roles of all the other government departments and agencies at the federal and territorial levels. As Bridget alluded to, there has been limited direct engagement with Indigenous governments at the working group. The Government of Nunavut, as a public government, is always well represented at each of the meetings, so it means that there are always Indigenous Peoples at the table, but the representation of Indigenous governments themselves has not been a very major fixture of it. The ASWG has very much been modelled on a distinct, practitioner-focused, operator-level conversation forum to build relationships and share ideas about how Canada can approach Arctic security. Bridget, I don't know if you want to reflect more on some of those comments. I just thought maybe I'd introduce the Arctic Security Working Group as someone who has been part of it for the better part of a decade now. I know you have some interesting ideas about how the Arctic Security Working Group, or something serving a similar function to it, can be opened up and used to facilitate more security dialogue with other groups of Northerners.

Bridget Larocque

Yes, Whitney, for sure. My observations and my lived experience here in the Northwest Territories (NWT) are that there're various different groups and think tanks that get established and put together, meaningfully and welcomingly, to a certain extent. However, if the Indigenous voice isn't there, if the gendered voice isn't there, then once again we're dealing with high-level patriarchal systems and colonizing, to a certain extent, if we're going to be ignoring the voices that matter and the people that will be most impacted by decision-makers or policy thinkers from the South. No offence to you, Whitney, as an academic, but we'd like these partnerships with academia to advance the Indigenous perspective and Indigenous issues. If we don't have academics as our allies and partners, then who do we have, because the government unfortunately is set up to look after all citizens and not just necessarily the ones that they have established historic treaties with, and now also these new modern-day treaties. There has to be engagement, and meaningful engagement, where all voices that are going to be impacted are heard and respected.

John Mitchell

I really agree with a bunch of the points that Bridget put out there. I guess, if we can skip through all the talking and get to the bottom of it, I'd like to see these great ideas come together into a plan that is implemented, so we're moving forward and not just talking about the same things in a different way forever and ever, amen. I think we get stuck sometimes on the all-encompassing, serve-everything plan, when sometimes maybe we should take a look at a short-term thing, so we get the proverbial ball rolling.

Whitney Lackenbauer

One of the observations I have had at the Arctic Security Working Group is that it is very positive in terms of forging relationships between the different stakeholders, when operators or practitioners need to figure out how to get things done, when the policy has huge gaps in it, or when strategies are either not implemented or only partially implemented. There is a real patchwork. What I find interesting is that, for the people who do participate—and Bridget, you've identified some gaps in terms of representation—they reap the benefits of interacting with other people who are actually dealing with these issues on the ground in a practical way, of seeking out practical mechanisms or forums to be able to get things done or figure out how you can get things done. While there may be ambiguity about whose mandate a responsibility might fall under,

or who's going to direct it, this cannot get in the way of practical action. Mitch, as you love to say, when it's time to get granny off the mountain, you have to figure out a way to get it done.

That spirit is what the Arctic Security Working Group is trying to accomplish. Bridget raised that there is also a gap in terms of the public face of some of these institutions and fora. The Arctic Security Working Group has generally not reached out to diverse audiences to explain what it is doing or to share some of those conversations going on within.

These reflections lead into a question that Dr. Paul Meyer has posed in the chat about references in the discussion to several institutions that are dedicated to Arctic matters on various levels. There is the Arctic Security Working Group, the Arctic Council Advisory Committee, and the Pan-Territorial Forum (although it's not active). Bridget, do you feel that these institutions are effective in their tasks? Is it that they are too limited on what they are being asked to do, or is it that we need to complement those fora with additional or new mechanisms to have these conversations? Bridget, I hope you can make something out of that rather tortured question that I have just posed.

Bridget Larocque

We also talk about not working in silos, and I think we still do that too often, not only with respect to impacts in the North or in the Arctic, but also in the provincial North. Of course, we know one size doesn't fit all, but how can we feed off of, learn from, consider good practice, or consider best practice when we don't know necessarily what other established organizations are doing? If we talk about climate change being a global issue with global impacts, and global impacts impact all of us, it's not an Indigenous issue, it's not a circumpolar issue—it's a global issue. So how do we collaborate and corroborate all the good science and all the good thinking, to come up with solutions or suggestions or even tweak what's out there that has proven to be beneficial in certain areas? Like I said earlier, the Pan-Territorial Forum that was set up originally for the three territorial premiers to meet with the three Canadian Permanent Participants of the Arctic Council organized in Canada—that has fallen by the wayside. However, even if you have that dialogue, then how do these three premiers, who may or may not be Indigenous, concentrate significantly on Indigenous issues, if they're there to represent all citizens of their territories? You mentioned that Nunavut is more of a public government structure; Yukon has a different relationship with Canada, and then of course the NWT territorial government has a different relationship with Canada, and the NWT is 50/50 non-Indigenous and Indigenous. So, there are complexities across all three territories, but that doesn't mean that there shouldn't be some

dialogue and that there shouldn't be some more deep-level conversations, to talk about the best ways forward on Arctic issues, on Northern issues, because we rely heavily on the premiers to have conversations at the premiership level and then also with Canada.

Whitney Lackenbauer

Mitch, you've been involved in many different forums, roundtables, and organizations over the years. Thinking of the different hats that you wear and have worn, I wonder, are there any particular roundtables or activities in which you have been involved in the past that could or should be resurrected or rejuvenated to accomplish some of these things?

John Mitchell

I'm more of a feet-on-the-ground. I think the one that you and I have talked about and that is of concern with me, with the expansion of activity in the North, is the whole search and rescue and safety net. I don't want to limit that to "Joe lost in the bush under a spruce tree or an ice chunk." The safety net looks at the whole community. It's a bigger picture than just search and rescue, for example. I think that's something that we should talk about. We've made advances in that and I'm sure there are some role models out there we could learn from.

Whitney Lackenbauer

Thanks, Mitch. I see that Dr. Peter Kikkert has asked a question. He organized a very successful Kitimat Roundtable on search and rescue last year around this time that engaged with a lot of those issues that you've brought up—not just search and rescue in the individual search response, but also broader ideas of dealing with disaster management and this broader safety net. Peter has asked if Sergeant Mitchell could comment on the Rangers' role in response to COVID-19 and some of the impacts the pandemic has had on Ranger training and operations. After that, Bridget, I would also love to hear your further reflections on the impacts of COVID-19 in Yellowknife and the territories, and perhaps some lessons you might suggest or things you have learned.

John Mitchell

In terms of the Rangers, what happened was that the Canadian Forces stood up and started operating under Operation Laser, which was in response to the pandemic. As part of that, the Rangers, to shortcut all the communications and talk, were stood up to various capacities all the way across the North. Their

roles varied, from ones of observation and communication only, to some organizing hunting parties to go out to hunt for the food on the land and bring home the meat. In Dawson, concurrent to COVID, just as it was peaking, we had a flood emergency, and we ended up going on standby and actually doing a water rescue, where we saved two young guys from the river. That was really rewarding. The response, because we were already up on standby, was about a half an hour. We got boats rolling and we pulled these two young dummies off the middle of the river. They'd come down in the high water on a canoe and ended up stranded in the middle of the river. We were able to get them off safely, so that was great. After that, it tapered off down to mainly observations and reporting to the headquarters and what was going on in the communities.

In Dawson, throughout the duration of the Op Laser operations, I was part of the CEMC (Community Emergency Measures Committee), a municipal/ territorial inter-agency group that met on a weekly basis to update each other on the situation.

Bridget Larocque

When COVID-19 came about, a lot of Indigenous communities shut down their own respective borders, as small as they were, not only in the provincial North, but also in the three territories. There was initially this huge anxiety and concern, and the communities started thinking about ways that they can keep their communities and the families safe. So, a lot of them went out on the land and removed themselves from the community, knowing that in March, of course, was spring break—teachers were coming back, kids were coming back from the South, and there was that uncertainty. Then the NWT territorial government put us on lockdown, with restrictions on travel, people coming in were to be essential workers only, the territory was shut down, and people were having to work from home. There are of course always positives and negatives, because then the children are home impacting their parents during the workday, and then you would see the anxiety because, all of a sudden, products were in low supply in the stores, and there were concerns of hoarding. We had issues with Yellowknife being the centre of burden, more or less, because community people that were able to drive in, and fly in, were coming here and accessing all the amenities and resources here.

The one big thing, however, was scientifically at the Arctic Council level, the Ministers of the Arctic Council, of the eight nation-states, asked the Sustainable Development Working Group, through the Arctic Human Health Expert Group (AHHEG) and the Social, Economic and Cultural Expert Group (SECEG), to look at the impacts of COVID and to really look at what's happening where in the Arctic. There was a paper put together for the Arctic

Council Ministers, both from an academic and a grassroots perspective—what we were seeing on the ground, and also what was being researched scientifically. So, there was a huge collaboration on really trying to get a clear picture of what was happening on the ground, but also what was happening scientifically. I think in certain states and certain areas, we have fared a lot better than other larger centres. But I think we could have done a lot better as human beings—not necessarily just being told what to do by the governments in our respective territories and countries, but also taking action ourselves. How do we look to our health and consider what's important, from a more humanistic approach and perspective, rather than questioning science to the extent where it becomes conspiracy theories, which does nothing but increase anxiety in a lot of the areas?

Whitney Lackenbauer

We've got a few more questions queuing up, and I'll try to put two of them together here for your reflections. Relating to the theme of great power competition, and associated geopolitical or geostrategic dynamics, how much is the resurgence of great power competition in the Arctic a narrative that you are hearing about at the community level, or at the regional level in the North? Ernie Regehr has asked, Is this competition a visceral presence? Does it affect how communities relate with their counterparts, specifically other Arctic states? Are there any implications that you are seeing at the community level of all of this talk about great power competition and the danger of militarization in the Arctic spilling over or affecting Canada's ability to do things in the North?

And if you don't like that question as I've framed it, I would invite you to reflect on the perceptions of some of the major powers—non-like-minded states that do not have the same concept of respect for sovereignty, never mind Indigenous sovereignty, as Canadians do. So, what are your thoughts on what you're hearing at the community level about great power competition or assumptions about Canada's place in a world that seems to be a lot more uncertain, and potentially more volatile, than we were perhaps imagining it to be even five years ago?

Bridget Larocque

It's hard for Indigenous Peoples to think of sovereignty, especially sovereignty with Canada, because we come from different perspectives on what sovereignty means, which you alluded to. A lot of Indigenous Peoples will defend Canada, not necessarily because it's Canada, but because it's our homeland. When we hear about these superpowers, China and Russia, of course we have concerns with nuclear armament and so forth—things that are

beyond our control. What could we possibly do? If they don't even respect humanity to any kind of extent in their own lives, then how can we possibly, as a smaller group of people, have any real political clout in those areas?

The other thing is that we rely heavily on Canada as a peacekeeper. Although its reputation has diminished, there is still some merit to that; hopefully there're some ways, through the United Nations and other fora, to rebuild this thinking, but I think there has to be a bigger platform where all the states come together and figure out how cooperation and the sharing of resources (that doesn't deplete the Earth) can possibly work together. I think that, in a small territory like the Northwest Territories, we sit back, and those are sometimes too big of issues for us to even consider, when we're just struggling on a day-to-day basis to survive and try to keep ourselves sustained with the resources that we have. Sometimes we can't even think about Russia and China, when we're worried about the impact of our *own* development—tar sands, pipelines—that affects our livelihood, impacting our animals, the birds, our water, our land; logging, taking away our trees. These things are also spiritually significant to us, and water is all of our lifeline. Without water, we're all nothing. This isn't only an Indigenous issue: it's a global issue, and it's a human issue. That's all I have to offer on those global perspectives.

John Mitchell

Bridget said it pretty well on the whole thing there. There doesn't seem to be a lot of interest in or appreciation for the bigger issues. I'll reiterate what Bridget said. Talking from the Ranger point of view, in my Patrol about 60% of the Rangers are First Nations people, and I think that's the link or the tie-in to this whole sovereignty thing, that means different things. It's their tie to the territorial lands that they really get into. It's being able to go out and travel, patrol the lands and keep an eye on them. That's really important to them. Bear in mind, we're sitting out here at, I don't know, 2,500 miles from Ottawa… that's a long way from the nation's capital. Whether people put it in so many words or not, being Rangers on patrol in our traditional territory makes us feel a little bit more Canadian.

Whitney Lackenbauer

Building off of this, we've been talking about issues of infrastructure and food security, supply chains, etc. COVID-19 has brought many of these issues to the fore, which are also obviously affected by climate change and other drivers. I bring this up because, when I was in Kugluktuk last February, I asked a group of Rangers a similar question about great power competition. There was about two minutes of silence, with everyone thinking about my question

about China and Russia, and then one of the young Rangers just said, "well, we don't think about them." Instead, they explained to me that they worried, like Mitch mentioned, about where the caribou were at that time of year, their ability to travel safely over the land in light of prevailing conditions, and so on. If I was a good listener, what I think that the Rangers were telling me was that they were content to leave those conversations about great power competition for other people to deal with. In essence, they wanted to see action and to be involved in the conversations that matter to them on the ground.

This may be a bizarre segue, but I would love to hear from both of you about what you would say if the prime minister's chief of staff came up to you today and said, "I will action whatever you give to me as your priority investment to improve the North, the quality of life at the community level, or if you want to improve human security or environmental security." What would you tell her? I don't mean to put you on the spot, but we have questions about naval vessels, Coast Guard vessels, port facilities, transitions from diesel to electric, dependency on green technologies for energy generation, etc. If you were given a moment to help to set the priorities, what would your main priority be?

Bridget Larocque

How can we even think about how we may interact with China or Russia, if we may not necessarily know who they are? Are we going to believe and trust in what Canada is saying to us, when it has not had that dialogue with us in the past? The treatment and disregard for Indigenous sovereignty, Indigenous Peoples' place in Canada—where does that leave us with really wanting to engage or share with Canada, with the Government of Canada? We grew up playing this game, "I declare war on whoever," and we didn't know what war was. So, how do we think that we can impact other people's lives, without even knowing if they are a threat or a support, or who they are?

I think that a lot of times, to Canada, we weren't even human beings, until it determined policy or put in an Act that recognized us. The trust on what it is doing geopolitically—what Canada is and is not doing on Arctic security or at the UN or through NATO, the relationships of Canada and the United States, and the United States and Mexico, in North America, what kind of relationship does that mean? What does it mean when the superpowers ignore Canada or take away our resources? And then the impacts on Mexico… so all these geopolitical international concerns—yes, a lot of us can say no, we're concentrating on the ground, on what's happening to us now in our lives, but how do we try to expand our own borders to even have an international impact? That's huge because, even at the Arctic Council where we're at the

table as participants and entering into dialogue, we don't have a vote. So once again, there we've gained internationally, but we're still not on equal footing with our nation-states.

Whitney Lackenbauer

Mitch, I wonder if you have any reflections that you'd like to add on that topic. The other question was about where you might see strategic investments. What might you suggest, from a Dawson standpoint, about government investment that would have the greatest impact on members of your community?

John Mitchell

In terms of the Rangers, get them out on the land. We're burning daylight. We're wasting time. We're not putting enough money—and it's not an expensive proposition compared to building Nanisivik up. It probably doesn't even cover two props on one of those patrol vessels. But we need to maintain a Canadian presence out there. In terms of the communities, again it's the sustainability, the safety net within the communities. We have to start looking at what we've got when things go wrong and get it there. At the very least, do some serious planning and implementation, because in some of the communities, Lord help us, if the power goes out, things are going to get rather chilly. I'll leave the other stuff to somebody who knows more about it than I do.

Whitney Lackenbauer

Bridget, I wondered if you had any top-of-mind thoughts about key investments. And key investments, as Mitch just gave a great example of, does not necessarily mean national in scope or huge money. Big investments could be turning to communities and investing in sustainable communities and bolstering resilience at a community level as a first priority.

Bridget Larocque

I think there has to be a huge review of what it is that the territories want to be, how they want to operate, and what is important to them. If it's the Indigenous Peoples, then we're in 2021 and we still talk about huge issues with education, suicides, and homelessness popping up more and more... so we have all these social disparities. You have to know why these things are occurring and why they're happening, and some of the work out there that can combat that. The other thing is when we talk about education, we need to ask what kind of education? Because clearly in our schools we are not teaching STEM to the

extent that we should. Speaking earlier with a colleague of mine from Iceland, we were talking about education. Well, back in the day, anybody that wasn't considered university material was thrown into the trades. If we're talking about infrastructure, it's the trades people that have to have these high-level mathematical skills to know how to build the infrastructure. In technology, we're still struggling with bandwidth and fibre optics, so there are so many different things to concentrate on, but we're not having those conversations at a high level in the territories.

The territories are so heavily dependent on Canada. We talk in Canada about the Have and Have Not provinces—well, we're the Have Not territories. Even though Nunavut is a public government, where is its own source of revenues? Where is the revenue from all of the mines that we're operating in the Northwest Territories? What is happening with the resources that are extracted or come from the territories? Where are those going, and why are we getting such a small proportion back for the operations of 100,000 people? It's a huge, vast territory with 33 communities in the Northwest Territories, and so many of them are very isolated, remote settlements. What's the impact financially? If we had a wish list, what would be the financial resources required to keep the territory sustainable, instead of being constantly dependent on the federal government? It's a huge issue and I don't have the exact answer, but I think we have to have statistics and data, and we have to know what we're up against, what are some of the real hardcore infrastructure needs, and what are the education needs so that we have our own human capacity and we have capacity building that is going to be brought into the future for a more sustainable, prosperous territory.

Whitney Lackenbauer

Thanks, Mitch and Bridget, for bringing your lived experiences, your very deep knowledge and wisdom on a lot of these issues, to our conversation. I have certainly learned a lot. One of the themes that has come up today is education, and I always feel that whenever I have the great pleasure of speaking with either of you, I learn a tremendous amount. Bridget, I think you repeatedly brought up the need for trust, and how trust will only be earned if there are conversations that are meaningful, are substantive, and that do not shy away from the big issues or the core issues. I thank both of you for really encouraging our group to grapple with some of those issues and to remember that, at the end of the day, what we care about is, as fellow Canadians, making sure that we are able to live sustainable, fulfilling lives. You have given us a lot of food for thought in this, and I continue to welcome your insights as we move forward. Thank you for also sharing your ideas about priorities, because you both

referenced how we can have grand plans and general statements, but unless we can figure out ways of implementing and where to channel these resources, plans often fail to achieve fulfilling outcomes. So, thanks for helping us to channel our energies in a fruitful way. Thanks, everybody, for listening, and thanks for your questions. We did not get through them all, but we will certainly store some of them as well for the last session.

4. A Changing Arctic: Political and Legal Considerations

Thursday, 11 February 2021

Peggy Mason

Good afternoon, everyone. My name is Peggy Mason, and I have the privilege to welcome you all to the fourth in our February 2021 six-session webinar program on Arctic security, and to briefly introduce our three co-sponsors. …

I am now very pleased to turn things over to our moderator and someone I've known for a very long time, Dr. Robert Huebert. He is an Associate Professor in the Department of Political Science at the University of Calgary.

Rob Huebert

Thank you very much, Peggy. First of all, let me say how thrilled I am to be moderator of such an outstanding panel, and I'm really looking forward to what the speakers have to say. Dr. Elizabeth Riddell-Dixon is a Distinguished Senior Fellow at the Bill Graham Centre for Contemporary International

History at Trinity College, a Senior Fellow at Massey College, a Professor Emerita of Political Science at the University of Western Ontario, and a NAADSN Member. Dr. Aldo Chircop is a Professor of Law and Canada Research Chair in Maritime Law and Policy at the Schulich School of Law at Dalhousie University.

The two points of introduction I want to give, to make sure that everybody has a full appreciation for just how lucky we are today, include first and foremost that we are hearing from two of the most brilliant minds that we have looking at Arctic issues. Aldo—in terms of any subject that he touches, he becomes the immediate expert. I'm not saying that snarkily. I'm saying, anyone who has known him for any length of time knows he is someone that you engage on the other side of debates only if you really have spent all day and all night brushing up on the issue area. He has a brilliance that you will see coming through. I also have to give him credit. He's the one who got me started on the Arctic. After probably one too many beers at Domus—the graduate law pub at Dalhousie University—he's the one who suggested I look at the Polar Sea. So anything I've said or gotten wrong on Arctic issues, it's all Aldo's fault on that particular context.

In terms of Elizabeth, for any of you who ever had been looking at the Arctic before the Arctic became such a popular issue, there were three leading scholars you had to read. These were the works of Franklyn Griffiths, Shelagh Grant, and the third member of the triangle was Elizabeth Riddell-Dixon. It was a little easier in those days. I mean, once you read all those three authors, you pretty well knew everything that was written on Arctic issues in Canada. Of course, that's no longer the case. Elizabeth continues to write on the subject. This is evident with her participation with the NAADSN network, shown by her writings with Suzanne Lalonde and Whitney Lackenbauer.

The last point I'll make, before turning it over to them, is that we are also privileged that these are two individuals who truly believe in scholarly exchange. You can have arguments in which you totally disagree with what they have to say, and they will respond, and they will respect you as soon as everything is over. This is unfortunately a characteristic that doesn't seem to be as prevalent as it was in the past. So, we are indeed privileged to have both of them.

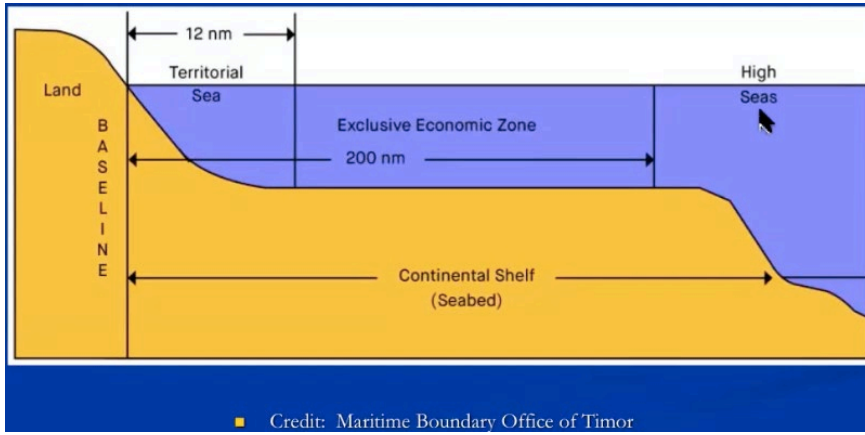
Elizabeth Riddell-Dixon

Thank you, Rob, for a most generous introduction. I'm delighted to be sharing this panel with you and Aldo. 45 years ago, when members of the United Nations were meeting to negotiate the rules and regulations to govern the world's oceans, no one was talking about Arctic resources beyond 200

nautical miles from shore. Today, Canada, the Russian Federation, and Denmark, jointly with Greenland, have all delineated extended continental shelves, starting 200 nautical miles from shore in the central Arctic Ocean. Why have these Arctic neighbours devoted so much time and so many resources to establishing their extended continental shelves in the Arctic Ocean? To answer this question, I'm going to begin with a brief overview of the extended continental shelf regime, before turning to the questions central to this presentation. First, to what extent do the Arctic extended continental shelves of Canada, Denmark/Greenland, and the Russian Federation overlap? Second, what are the prospects for maritime boundary delimitation? In other words, what are the prospects for resolving the overlaps?

What is an extended continental shelf? To answer the question, we turn to the United Nations Convention on the Law of the Sea. The Law of the Sea Convention gives the coastal states sovereignty over a 12-mile territorial sea. Here we're talking about nautical miles. 1 nautical mile is equal to about 1.9 kms. Beyond the territorial sea, the coastal state has an exclusive economic zone in which it has sovereign rights to the living and non-living resources. Beyond 200 nautical miles from shore—in other words, beyond the exclusive economic zone—the coastal state has an extension, where the continental shelf extends as a natural prolongation of the land territory. The process of defining the outer limits of a country's extended continental shelf, in accordance with the provisions in the Law of the Sea Convention, is called delineation. Delimitation is the process of establishing political boundaries between states.

Why do states care about the extended continental shelf? The answer is resources. Article 77 gives the coastal state sovereign rights to explore and exploit the non-living natural resources of the seabed and subsoil of the continental shelf. So, these would be resources like oil, gas, and minerals. It also



gives the coastal states sovereign rights to explore and exploit sedentary living organisms, which are immobile on or under the seabed. These include things like barnacles and corals.

States' rights to the extended continental shelf pertain only to seabed resources. The water column above it is classified as high seas, which means that the freedom of navigation and the freedom of overflight prevail. The extended continental shelf is not about claiming the North Pole. It's not about claiming Santa. It's about rights to seabed resources. Responsibility for defining its continental shelf rests with the coastal state. The Convention outlines steps in the delineation process that are important to legitimizing the outer limits of an extended continental shelf.

First, the coastal state conducts scientific research to determine if its continental shelf beyond 200 nautical miles is indeed a natural prolongation of its land territory and, if so, to determine its outer limits, in accordance with the provisions in the Law of the Sea Convention. After gathering and analyzing the scientific data, and relating them to the provisions in the Law of the Sea Convention, the coastal state makes a submission to the Commission on the Limits of the Continental Shelf. The Commission reviews the submission to determine if the coastal state has defined its extended continental shelf in conformity with the legal norms, and it then makes recommendations to the coastal state. The Law of the Sea Convention specifies that "the limits of the shelf established by a coastal state on the basis of these recommendations shall be final and binding" (Art. 76.8). So, the Commission makes recommendations, but it's the coastal state, not the Commission, that establishes the outer limits of the continental shelf.

When it comes to the development of customary international law in the case of jurisdiction over land, or the legal status of the Northwest Passage, the exercising of sovereignty is important. But the extended continental shelf regime is different. According to the Law of the Sea Convention, the coastal state does not have to exercise sovereignty over the continental shelf in order to enjoy its rights: "The rights of the coastal State over the continental shelf do not depend on occupation, effective or notional, or on any express proclamation" (Art. 77(3)). So, there's no need to stake claims. It's not a case of "use it or lose it." A state's continental shelf either meets the Law of the Sea criteria for an extension or it does not.

Canada, Denmark, and the Russian Federation are all parties to the Law of the Sea Convention. Although not a party to the Convention, the United States treats the extended continental shelf provisions as customary international law. All four countries have conducted scientific research in accordance with the extended continental shelf provisions in the Law of the Sea Convention. The

Source: https://www.dur.ac.uk/resources/ibru/resources/ArcticMapsMay2020/SimplifiedArcticmappp.pdf

Russian Federation, Denmark/Greenland, and Canada have all made submissions to the Commission on the Limits of the Continental Shelf.

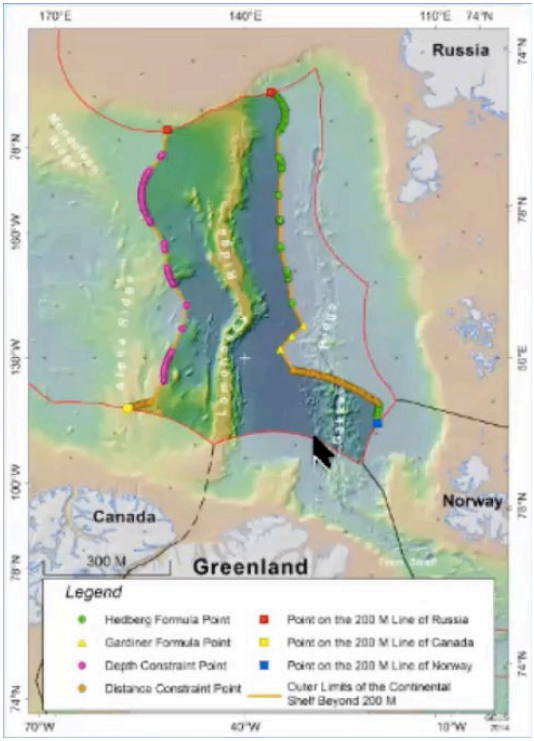
This brings us to our central questions. First, to what extent do the extended continental shelves overlap? In the map (above), Russia's delineation is depicted in yellow, Denmark/Greenland's delineation is depicted in pink, Canada's delineation is depicted in green, and the blue indicates an area that's likely to be included in the U.S. submission, although we won't know the exact details until the United States actually files its submission. The stripes indicate areas of overlap. For example, the area of pink and yellow stripes indicates an overlap between the submission of the Russian Federation and that of

Denmark/Greenland. In the area around the North Pole, we see green, pink, and yellow, which indicates overlaps between all three submissions.

As you can see, the overlaps are considerable. However, we need to insert a caveat. Identifying overlaps is not the same as saying there's conflict or the threat of violence. The Commission on the Limits of the Continental Shelf is a scientific body responsible for making recommendations. It is not a court of law, and it has no mandate to resolve overlapping maritime boundaries. Responsibility for resolving overlaps rests with the states involved, which can use a variety of mechanisms, including bilateral negotiations, multilateral negotiations, and taking a case to the International Tribunal for the Law of the Sea.

Having identified sizable overlaps, we come to our second question: what are the prospects for maritime boundary delimitation? Several factors facilitate delimitation in this case. Both Russia and Canada chose not to delineate to the other's exclusive economic zone. In terms of the criteria in the Law of the Sea Convention, Denmark/Greenland, Russia, and Canada could all have delineated across the Arctic Ocean to the exclusive economic zones of their neighbours. But only Denmark/Greenland did.

As seen on the map (to the right), we have the Danish/Greenland submission, starting at the exclusive economic zones of Greenland and Canada, and going all the way across to the exclusive economic zone of the Russian Federation. In contrast, Russia's submission stops slightly beyond the North Pole. Russia stopped well before the exclusive economic zones of either Greenland or Canada.



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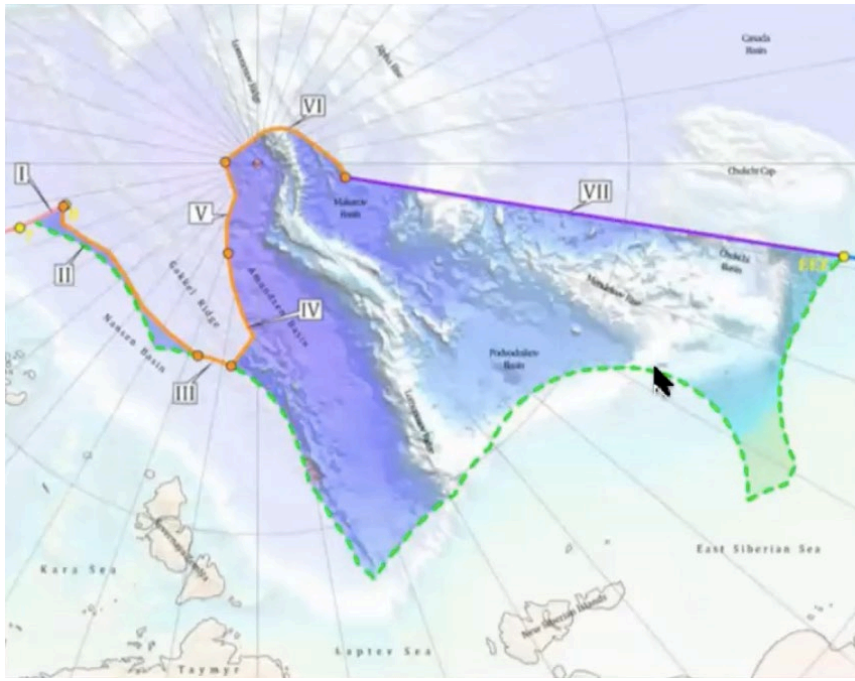
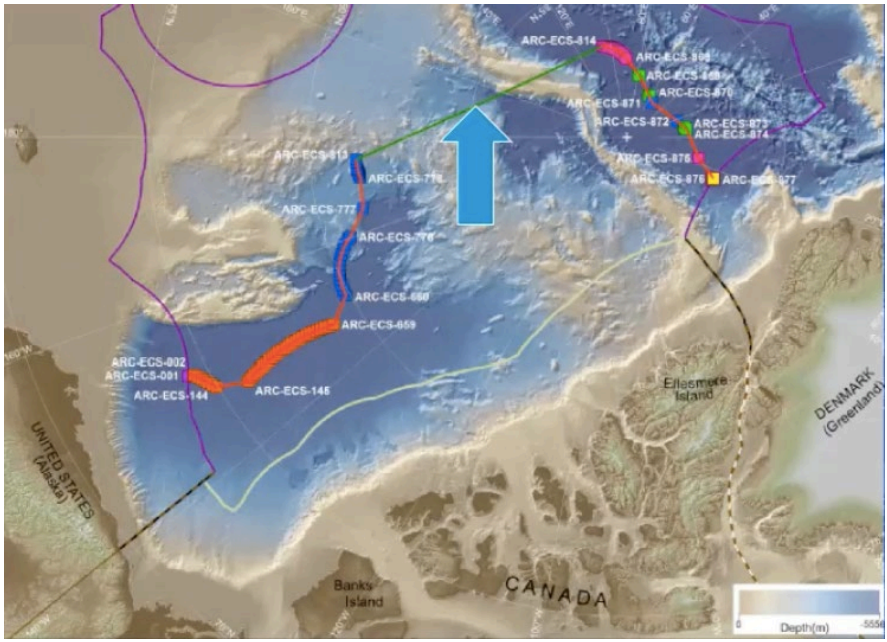


Source: https://www.un.org/Depts/los/clcs_new/submissions_files/rus01_rev15/2015_08_03_Exec_Summary_English.pdf

Likewise, Canada stopped well before the exclusive economic zone of the Russian Federation. The green line (indicated by the blue arrow on the map on the following page) denotes the furthest extent of Canada's delineation, which stops long before the purple line denoting Russia's exclusive economic zone. Canada drew this arbitrary Northern Line, which is the maximum extent of Canada's delineation, but it's not the maximum extent of Canada's entitlement. The Northern Line is a practical solution. Making a huge claim, on what would clearly fall on the Russian side of an equidistance line, would likely result in Canada having to cede large areas in future delimitation negotiations. Russia's and Canada's decisions to limit the extents of their continental shelves for political reasons mean that the overlaps are considerably smaller than could otherwise have been the case.



Source: https://www.un.org/Depts/los/clcs_new/submissions_files/can1_84_2019/CDA_ARC_ES_EN_secured.pdf

A second factor facilitating delimitation is that when Russia delineated its extended continental shelf, it deferred to its 1990 agreement with the United States. In 1990, the United States and the Soviet Union negotiated an agreement delimiting their respective territorial seas and exclusive economic zones in the Bering Sea, in the Chukchi Sea, and in part of the Arctic Ocean. The treaty was ratified by the United States, but not by the Soviet Union, which collapsed shortly after the agreement was negotiated. Hence, it's not a treaty in force. Nonetheless, Russia abided by its provisions in delineating its extended continental shelf. Russia's deference to the boundaries in the 1990 agreement is conducive to delimitation in several regards. It respects a boundary previously agreed upon with the United States, it results in a smaller overlap with Canada's extended continental shelf than would otherwise have been the case, and it makes it easier for Russia's Arctic neighbours to compartmentalize Russia's foreign policy, viewing it as cooperative regarding extended continental shelves, while being critical of Russia's behaviour regarding the Ukraine.

A third factor facilitating delimitation is Canada and Denmark's decision in May 2018 to establish a Joint Task Force on Boundary Issues, focusing on three areas: Hans Island, the Labrador Sea, and the Lincoln Sea. The ownership

of Hans Island has no implications for the delineation or delimitation of Arctic extended continental shelves.

A treaty exists delimiting the continental shelf within 200 nautical miles from shore between Greenland and Canada in the Labrador Sea (#5 on the map); however, a more comprehensive treaty is needed that includes the extended continental shelf. In other words, they need a treaty that includes the continental shelf beyond—as well as within—200 nautical miles from shore. In the Lincoln Sea (#1 on the map), they need to negotiate a treaty delimiting their extended continental shelves north of Ellesmere Island and Greenland. In 2012, Denmark and Canada signed a non-legally binding agreement pertaining to the outer limits of their exclusive economic zones north of Ellesmere Island and Greenland; however, a legal treaty is needed to finalize maritime boundaries in this area.

Source: Canada, Department of Foreign Affairs and International Trade website.

The work of the Joint Commission is important to the future delimitation of Arctic extended continental shelves for a couple of reasons. The legal principles it employs may establish precedents for delimiting extended continental shelves in the Arctic Ocean. For example, if the Task Force uses equidistance principles to delimit the exclusive economic zones in the Lincoln Sea, it will set a precedent for continuing to use equidistance principles beyond 200 nautical miles from shore. At present, the countries have four maritime boundaries to delimit, which is a lot. Resolving the three outstanding issues will clear the decks to focus on delimiting their Arctic extended continental shelves.

Resolving maritime boundary disputes can be difficult and time-consuming; however, past experience shows that Arctic countries use legally accepted channels rather than resorting to unilateral grabs for jurisdiction. The 2010 Russian-Norwegian Accord for the Barents Sea serves as an encouraging example of maritime boundary settlement. The Accord ended a bitter dispute

that had dragged on for some 40 years, involved petroleum and fish resources important to both, and involved a significant power imbalance between the two countries. Yet neither the Soviet Union, nor the Russian Federation that succeeded it, used its vastly superior military might to take control of the area.

In conclusion, while media stories may lead us to conclude that we're heading for "World War III on Ice," the evidence supports more positive conclusions. In the delineation of Arctic extended continental shelves, there's no need to resort to military solutions, as there is a regime in place and its rules are being respected. The high degree of cooperation exhibited by Arctic countries in the delineation process and the fact that they continue to discuss issues related to overlaps both bode well for future settlements. While the overlaps in the extended continental shelves delineated in the Arctic Ocean are considerable, they will be resolved peacefully and in accordance with international law.

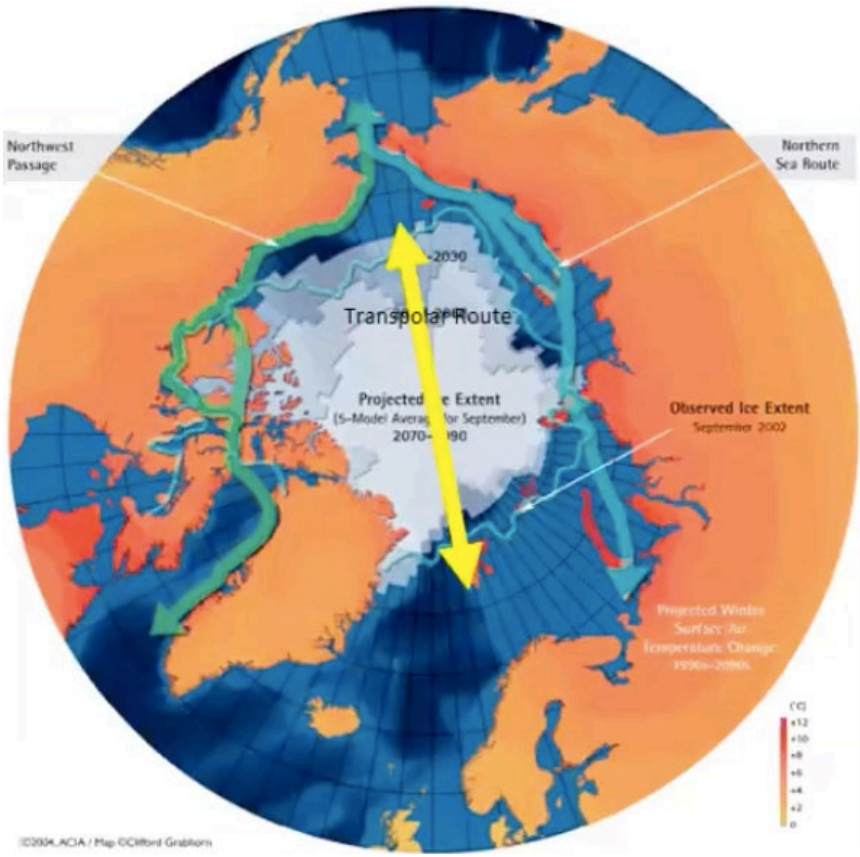
Aldo Chircop

I'd like to share a few thoughts on where the regulation of Arctic shipping in a changing Canadian Arctic stands. The proposed topic has a focus on Canadian waters, but I will be referring to other regions of the Arctic as well.

By way of an outline, I will first offer a few words on the impact of a changing Arctic on navigation, then explain briefly the rationale for regulating Arctic shipping. Much of this might sound obvious, but it is good to take a step backwards before we take a few steps forward. Then I would like to explain how is Arctic shipping being regulated, and end with the question, "is it enough?"

It is useful to first consider the impact of a changing Arctic on navigation. Between the 2nd and 14th centuries, we saw the emergence of the Silk Road, which eventually included a maritime route and revolutionized trade. What you saw eventually in the 19th century—1869 to be precise—was the opening of the Suez Canal, and that further revolutionized trade, especially by shortening the distances and time between Asian markets and the European markets. We saw yet another revolution with the opening of the Panama Canal in 1914, which, again, revised maritime trade routes, and shortened distances and linked markets in exponential ways.

Against this backdrop, it is good to ask the question of whether Arctic routes could potentially also impact international trade. The jury is still out there. Certainly, the Russian Federation has invested and continues to invest very heavily in its Northern infrastructure, with the ultimate aim of opening the Northern Sea Route for all-year-round navigation. If it manages to do that, then, potentially, it could open a new international trade route. Perhaps it



Source: Arctic Council, Arctic Marine Shipping Assessment Report (2009), as modified by A. Chircop.

might be limited in terms of what cargoes will be carried, but it is proposed as another way of connecting Asia to Europe and North America. Are we on the eve of a new international maritime trade route? So much depends on the change that we are seeing in the Arctic and ultimately, of course, the political and economic decisions that will be made to invest in the infrastructure that is needed and to invite uptake by the shipping industry.

There is reason to suppose that Arctic routes could be attractive. For instance, if we look at the Northern Sea Route through Russian waters, it is approximately 8,000 km shorter than the Suez Canal route, and it has potential for year-round navigation if the infrastructure that is needed to support that is in place. The Northwest Passage is also significantly shorter than the Panama

Canal by 9,000 km, and it is also 17,000 km shorter than the Cape Horn route. In comparison to other routes, it offers certain advantages. At this time, these routes are primarily seasonal. There is also a hypothesized Transpolar Route, as depicted by the yellow line on the above map, in the event that we might see a long season of relatively ice-free waters in the central Arctic Ocean. Again, this is a hypothesis at this time, but I have colleagues in Iceland who are thinking that Iceland could become an entrepôt centre if this route materializes. Understandably, all eyes, at this time, really are on the Northern Sea Route.

These potential new transit routes are not the only forms of shipping. There are other types of shipping that are important, which we already have. Those include destination shipping to export resources for use in the Arctic, shipping to support Northern communities, logistical support, etc. Then there are other forms of shipping like marine scientific research vessels, fishing vessels in the lower latitudes, and even, increasingly, recreational vessels in the summer season.

All those aside, what is the rationale for regulating Arctic shipping? There are many reasons for regulating Arctic shipping, rather than letting it happen on its own. Clearly, shipping has always been important for the Arctic. This is a remote region, and the ship has always been a platform to support Northern communities, but also a platform for other ocean and terrestrial uses. We should be very concerned about the impacts of increased shipping on Arctic Indigenous communities. Indeed, this was one of the reasons behind the *Arctic Waters Pollution Prevention Act* of 1970, and we know there is growing concern among Inuit communities.

Even at its best, navigation in both the Canadian and Russian Arctics is variable, hazardous, and has evolving conditions. There may be areas of open water, but there may be areas of ice cover and there may be a change in ice cover forecast. Even when there are ice floes, rather than full ice cover, some may be multi-year ice, which is harder than steel and can be very dangerous for shipping. There may be ice packing and, indeed, icebreakers may be required for passage. The weather itself can be variable. There may be very clear conditions or reduced visibility with fog, and then there is the winter darkness for shipping going beyond the shoulder seasons. There is a danger of ice buildup. For smaller vessels this is a really serious concern, because it affects the intact stability of the vessel. A fishing vessel, for instance, could topple with this kind of ice accumulation on the superstructure.

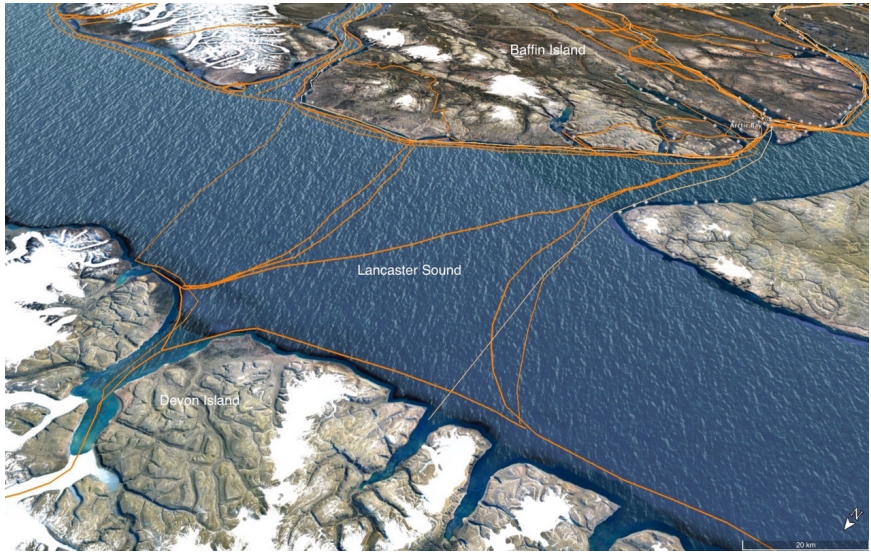
Charts are a big issue. According to the Office of the Auditor General's assessment, "many higher-risk areas in the Canadian Arctic are inadequately surveyed and charted." Less than 25% of charts are "good." One figure even says that less than 10% of charts are good, which tells you how poor the

charting is. The areas travelled are remote. There is little infrastructure for transit. There are no major ports with repair facilities. Search and rescue is a major concern because of the distances. There is little salvage support for vessels that might be in need of assistance. And the pollution response is very significantly constrained because of the long distances.

Yet, we see increasing traffic, especially for passenger vessels, which has produced heightened risks. There are general concerns about survivability in this environment. If we have a serious situation of a casualty, then we have a real problem in terms of a timely response in order to minimize injuries and loss of life. And then there's the environmental impact. More ships will mean more noise and essentially have a range of impacts, which I will speak to a little bit later.

The Arctic has always been used by Inuit communities. Inuit ice routes have been mapped by my colleague Claudio Aporta. For example, there are Inuit ice routes right across Lancaster Sound, one of the major routes in the Northwest Passage. There will be a concern here about potential conflicts between communities that rely on the presence of sea ice and the needs for safe navigation, which requires the use of icebreakers.

There have already been three substantial groundings in Canadian Arctic waters: in 1996, the German cruise ship *Hanseatic* (259 onboard), then the *Clipper Adventurer* in 2010 (197 onboard), and most recently the *Akademik Ioffe* in 2018 (163 onboard). Thankfully, there were no injuries or loss of life,



Source: https://limn.it/articles/shipping-corridors-through-the-inuit-homeland/

but real concerns remain. In the case of the *Hanseatic*, it took a few days before a vessel that had the right draft could reach the *Hanseatic* and off-load the passengers. Our ability to support vessels in trouble is significantly constrained, and we have been very lucky so far.

The limited capacity to respond to oil pollution is also a serious concern. If you have ice in the area, there is a real problem. A study by the Pew Charitable Trusts in 2013 noted that, "[i]n the best conditions, recovering spilled oil is difficult. A response effort is considered successful if 20 percent of the spilled oil is recovered." If we think in terms of ice cover, how can you do a cleanup operation? We have mechanical recovery, dispersants, and in-situ burning. None of these are ideal, especially in-situ burning. If you burn oil, you create smoke and you're producing a lot of black carbon, which is itself a climate forcer.

How is Arctic shipping regulated? At the international level, we have the United Nations Convention on the Law of the Sea (UNCLOS), which offers a kind of umbrella framework. There is the famous, or infamous, Article 234, which enables states bordering ice-covered areas to regulate shipping within their exclusive economic zones. The two principal instruments through which we have international standards for Arctic shipping are the International Convention for the Safety of Life at Sea (SOLAS) and the International Convention for the Prevention of Pollution from Ships (MARPOL). Under the auspices of these two instruments, we have the so-called Polar Code: the International Code for Ships Operating in Polar Waters. We also have other instruments that apply, such as the Intact Stability Code concerning the stability of vessels.

Additionally, we have the rules and regulations of the International Association of Classification Societies (IACS), whose members are industry associations. So, even international regulation does not rely solely on the prescriptions of public authorities, but relies also on industry regulation. There are other instruments adopted by the International Maritime Organization (IMO), such as the International Convention on Standards of Training Certification and Watchkeeping, and the International Convention for the Control and Management of Ships' Ballast Water and Sediments. These are simply examples. The difference between those instruments and SOLAS and MARPOL is that the latter two have been specifically amended to address polar shipping.

We must not forget the role of the Arctic Council. The Arctic Council is not a regulator, however. It is a forum where there is discussion of future regulation at the IMO and coordination among the Arctic states. This speaks to

what Elizabeth mentioned earlier—the kind of cooperation that occurs in the Arctic occurs also with respect to the regulation of shipping.

Domestically in Canada, we are party to both SOLAS and MARPOL. We have the *Arctic Waters Pollution Prevention Act* and the *Canada Shipping Act* of 2001. Recently, we adopted a new set of regulations under the auspices of these two statutes to implement the Polar Code. So, Canada has now fully implemented the Polar Code, as have all the other central Arctic Ocean states—the United States, the Russian Federation, Norway, and Denmark/Greenland. In Canada, we also have other rules and regulations that apply. These are set out in instruments of public law and private law that also apply to Arctic waters as they would to other marine areas.

What is the Polar Code? The Polar Code is essentially in two parts. Part one is on maritime safety and concerns the design and construction of the vessel (eg. the hull), the equipment on board (its polar service temperature equipment), and operations onboard the vessel. Part two of the Polar Code focuses on vessel-source pollution. The Polar Code is linked to amendments to MARPOL Annexes I (oil pollution), II (noxious liquid substances carried in bulk), IV (sewage), and V (garbage). There are also provisions in a non-mandatory part of the Polar Code concerning ballast water management. Both Part I and Part II have provisions that are mandatory and other provisions that are recommendations.

Regarding the environmental risks posed by shipping in the Arctic, I recently published an article that looked at the range of risks posed by shipping and the extent to which these are addressed by the various IMO regulations, as seen below.

Environmental risks of shipping in the Arctic

(A) Shipping risks	(B) IMO PC rules	(C) IMO PC guidance	(D) Other IMO rules	(E) Other IMO guidance	(F) Not addressed by IMO
Oil pollution	•	•	•	•	
NLS (bulk) pollution	•	•	•	•	
NLS (packaged) pollution			•	•	
Sewage pollution	•		•	•	
Garbage pollution	•	•	•	•	
Air pollution			•	•	
Grey water				•	
Ballast waters		•	•	•	
Anti-fouling paint			•	•	
Biofouling		•		•	
Icebreaking					•
Mammal strikes				•	
Noise				•	

(c) Chircop (Pugwash/NAADSN 2021) 11

The IMO also has guidance instruments under the Polar Code that are not mandatory, but you can see that other environmental risks are addressed in the form of guidance (i.e., ballast water, biofouling, etc.). Nonetheless, we still have other IMO rules that would apply to many of the other environmental risks posed by shipping. In addition to those rules, we have further IMO guidance. Almost all the shipping risks are addressed by guidance or mandatory rules. However, we don't have international rules or even guidance for icebreaking at this time, although we do have guidance in Canada.

One quick word on the future designation of low-impact transportation corridors: Canada is moving toward the designation of corridors for shipping, and this will make a lot of sense because it will enable the focusing of limited resources on those areas that are most heavily navigated. Therefore, what we will see here is investment in infrastructure along these corridors, focusing on search and rescue, salvage, and other capabilities, and essentially providing these services without charging shipping. The rationale is to incentivize ships in the region to use these corridors, rather than navigate all over the place. One potential concern, however, is that, as shipping grows, we might have heavier traffic in chokepoints in straits and narrow channels.

Is this regulation enough for safe and environmentally acceptable shipping in the Arctic? No, but it's certainly a very good beginning at the international level, and an improvement at the Canadian level as well. Essentially, the new regulations implemented in the Polar Code have significantly improved the regulations we had earlier. Although much was learned from Canadian and Russian experiences, the Polar Code remains a first-generation instrument and will continue to evolve with experience. The corridors can be expected to play an important role.

What I would underscore here is the importance of reconciliation, following the recommendations of the Truth and Reconciliation Commission, because shipping is not exempt from activities that impact Indigenous interests and uses. Indeed, we know there is the potential for disruption. Proper consultation flowing from the Crown's duty to consult is vital. Consultations must be respectful and engaging at the very earliest stage, rather than allowing shipping to be centrally regulated and administered by technocrats in Ottawa, the way it has always been in the past.

The Polar Code also has regulatory weaknesses and gaps that will need to be addressed, and some of these will need to be implemented also within our legislation. Many of the provisions of the Polar Code do not apply to SOLAS vessels, like fishing vessels and recreation vessels. Indeed, there is a discussion at the IMO at this time to see how the Polar Code can be extended more fully to these vessels.

There are some issues with some safety aspects of the Code. We know, for instance, that personal protection equipment and rules on lifeboats may not be sufficient. Research done by Norwegians has indicated that the standards of the equipment that we have today are insufficient for the five-day timeline within which to rescue people in the Arctic environment. Also, the search and rescue timeline needs to be reconsidered, especially with respect to passenger vessels.

There is a proposal for a heavy fuel oil ban. The Marine Environmental Protection Committee of the IMO recently indicated that it is going to adopt a so-called ban on the use and carriage for use of heavy fuel oil on ships in June 2021. It is really more of a phasing out, rather than a ban. We will see a ban perhaps in 2029. This slow phasing out has been criticized given the potential risks of heavy fuel oil in the Canadian Arctic as well as the Arctic as a whole.

We still have issues with respect to reception facilities for ship-generated waste. There is an initiative at the IMO to look at how Arctic states can cooperate to establish port reception facilities for substances such as oil on a regional basis. We also have not addressed air emissions, and this is a real concern. In fact, we have higher standards for emissions south of 60 than north of 60. This needs to be addressed, as the emissions from the burning of fuel oil are harmful to human health. Greywater, especially from cruise ships, is still not addressed as a mandatory rule. We have not even started to regulate noise pollution.

My last point is the importance of the continuing work of the IMO and the Arctic Council. It is very important for Canada and the central Arctic Ocean states to continue the kind of cooperation and consultations they have been undertaking at the Arctic Council to then cooperate and advance Arctic shipping standards at the IMO.

Rob Huebert

We are getting some very good questions on specifics for both conversations, and I'd like to start off with two questions for both Aldo and for Elizabeth. Elizabeth, you talked a little bit about the political decisions that the Russians and the Canadians had, in terms of where they had basically drawn their final lines for their submissions to the UN. Both Canada and Russia had actually extended beyond what Russian had in 2001. There is also the famous and well-recorded Canadian cabinet meeting that you brought out so well in your book on the subject—the 2013 meeting for Canada in which the Canadian government made the decision to extend its efforts to determine its submission. What was the basis for Canada and Russia to ultimately extend their final delimitations based on what they had originally seemingly put forward—as you put it, a political issue?

For Aldo, can you elaborate on the dumping of greywater from passenger vessels? Speaking a little bit from personal experience, I was on an unnamed cruise vessel where, as it was sailing through the Northwest Passage, the crew had contended that the regulations allowed them to discharge their greywater if they were past the 12-mile territorial sea within the Northwest Passage, which I thought was not the case. They talked about the difficulties that they have, that there are no locations to discharge greywater. That means ultimately, of course, for any cruise vessel an issue of practicality, that they will be dumping. I'm wondering if you can offer some insights and thoughts on that.

Elizabeth Riddell-Dixon

Canada and Denmark had an agreement that Canada would not delineate east of the Lomonosov Ridge, and Denmark would not delineate west of the Lomonosov Ridge. In terms of the Law of the Sea Convention and the science, both countries could have gone much further in their delineations, but they agreed to draw the line at the Lomonosov Ridge. Then, in 2013, a couple of days before our submission was due at the Commission on the Limits of the Continental Shelf, former Prime Minister Stephen Harper announced that the Arctic portion of Canada's submission was inadequate because it did not include the North Pole. He sent our scientists back to do three more years of survey missions.

The next year, Denmark made its own submission pertaining to the area north of Greenland, which was far larger than originally expected. Prior to December 2013, the Greenlandic and Danish governments had differing views about the size of the area to be included in their joint submission, with the former advocating for a larger area and the latter restricting the area in light of its agreement with Canada. When Stephen Harper said that Canada would claim the North Pole, Denmark accepted Greenland's argument for a much larger delineation.

What is surprising is that the Russian Federation was as circumspect as it was when it made its submission. In spite of Canada's contravention of its bilateral agreement with Denmark (which upset Russian as well as Danish officials), Denmark/Greenland's expansive submission, and tensions between the Russian Federation and the West over Ukraine, Russia was remarkably restrained when it made its 2015 submission regarding the Arctic Ocean.

Canada's delineation is substantially larger than originally anticipated because of the 2013 decision to include the North Pole.

Aldo Chircop

I want to distinguish between sewage and greywater. Sewage is regulated under Annex 4 of MARPOL, and indeed there is the rule that you actually referred to concerning treatment or comminution, and then permissible discharges at certain distances, but this does not apply to greywater. Having said that, under the *Arctic Waters Pollution Prevention Act*, the rules are very, very clear that you cannot discharge anything. I would say, also, that if we look at regulations under other environmental legislation in Canada, they are very strict in terms of what you can actually discharge into the marine environment. What we have to remember is that greywater carries a danger of pathogens.

What is really important is having an international rule. The Polar Code and Annex 4 of MARPOL should be amended to enable the treatment of, and regulation of the discharge of, greywater. That will address the gap. In the case of Denmark, with respect to Greenland, the discharge of greywater for all cruise ships in Danish/Greenlandic waters is regulated. They decided to go with a unilateral rule.

Rob Huebert

We've got a large number of questions coming in, so I'm going to try and get to as many of them as possible. Paul Meyer asks: the existing search and rescue (SAR) capability in the Canadian Arctic seems inadequate for likely future maritime traffic. Is there any correlation between levels of shipping and available SAR capabilities for regulations or policies?

Aldo Chircop

I have colleagues who are looking at this, people with engineering backgrounds essentially, to see what the extent of SAR capability is here. There are some very serious concerns. It was discussed recently at the Protection of the Arctic Marine Environment meeting and within the Arctic Shipping Best Practices Forum. The real concern here is what the appropriate times are to be able to rescue people in time, and this is not simply a matter of having the search and rescue resources. This also relates to the kind of protective equipment that is available onboard. One has to look at the SAR capability here also with reference to how much time there is to respond, and that depends on the protective equipment.

For instance, the Polar Code permits both hard- and soft-top lifeboats. And Norwegians have carried out studies that indicate that the soft-tops are probably not sufficient to respond within the five-day survivability period without risking significant human loss. This is one reason why the Danes, with respect to the waters of Greenland, require only hard-top closed lifeboats.

A few years ago, I was part of a simulation that looked at survivability rates for search and rescue in Canadian Arctic waters, taking into consideration a small cruise vessel that grounds where you have a senior population onboard. The response times, and the limitations in terms of where this vessel was, were considered, exploring how quickly you could reach it by other vessels that may be expected to be in the area. Then, of course, the area of the search and rescue and the extent to which you could bring helicopters; but, with helicopters, you have to refuel them at intervals. The simulation did not produce very happy results. It showed essentially a potential high casualty rate, simply because one cannot get to a large number of people in time, and you don't necessarily have ships in the area all the time. There is an additional concern if you have draft restrictions as well, which was the case, for instance, with the *Hanseatic*, where the closest icebreaker could not reach it because of draft restrictions. Another vessel had to be brought in, and that took a few days. So, you have this very complex situation here. I don't have precise figures to give you on actual response times in the Canadian Arctic, but these are all the elements that are playing into those models.

Rob Huebert

I have one here for Elizabeth from Alexandria Kaminski: What is your view on the growing presence of non-Arctic states, both economically and militarily, in the region, like China? What would be the effects on international law if a country like China chooses not to act in accordance with its terms?

Elizabeth Riddell-Dixon

First of all, the extended continental shelf is not going to be developed for decades—certainly not in my lifetime and probably not in the lifetime of even the youngest person on today's webinar. There are lots of resources still on land, and in the exclusive economic zone. As a general rule, the further out you go, the fewer resources you find. Hence, at present, there is no pressure from China or any other state to develop resources on Canada's Arctic extended continental shelf.

China has respected the sovereignty of Arctic countries, and it has a strong vested interest in having the Law of the Sea Convention's norms respected. China is very effective worldwide in getting what it wants through its investments, which results in influence as well as economic benefits. It has no need to resort to military actions. At the same time, Arctic coastal states need to work out domestic regimes that are going to protect them from undue influence by countries, like China, that invest heavily in their resource development.

Rob Huebert

We have a couple questions on shipping that I will join together for Aldo, coming from Bill Adams and Adele Buckley. Is there a potential for tanker traffic transiting Arctic routes in Canada? If so, how would a major spill be handled? Is there an effective method of policing adherence to shipping regulations?

Aldo Chircop

What we have to consider about shipping, and especially large vessels in the Arctic, is that there are certain draft restrictions. Straits in the Arctic are not necessarily the deepest, so there would be an issue in terms of the ability of fully-laden large vessels to transit with large bulk cargos. However, having said that, we know the experiment of the *Manhattan* essentially demonstrated that it is possible for that sized tanker, with assistance, to navigate through the passage. One has to think, what trade would it actually be serving? Where is the product coming from and where would it be going? A colleague of mine, Frédéric Lasserre, has made some interesting studies here, in terms of the extent to which shipping companies are interested in, or can foresee, growth opportunities or perhaps the offering of services in the region. At least the studies he has undertaken show that there is no rush by shipping companies to come forward to provide those services.

Hypothetically, we could have an oil spill—realistically, a spill of fuel oil rather than from an oil cargo (unless it is a vessel carrying fuel in the North). It could be from a vessel grandfathered until 2029 and that may be burning heavy fuel oil. If such a vessel became a casualty that results in the release of fuel oil in the Arctic marine environment, unfortunately it would be catastrophic. Even though most commercial vessels are supposed to have some sort of Ship Oil Pollution Emergency Plan, the reality is that remoteness and the ability to support a vessel will constrain the response effort. The response personnel, assets, and capabilities needed to be able to respond to that spill would need to be brought in over potentially great distances. This is one of the problems with the lack of infrastructure in the Canadian Arctic and other areas of the Arctic as well, where there aren't necessarily response platforms already in place to enable this kind of timely response, as there would be, for instance, in other Canadian waters. It is sad for me to say this, but very often we see further development in the law through accidents. Accidents often drive the development of standards.

In terms of policing shipping regulations, what is going to be very important here is port state inspection. The Polar Code regulations, adopted under MARPOL and SOLAS, will be enforced in due course on the basis for spot inspections in ports under the Paris Memorandum on Port State Control

and the Tokyo Memorandum on Port State Control, which should be the two principal regimes that are likely to be inspecting vessels proceeding to or from Arctic waters. The U.S. has its own port state inspection. At some point in the future, we will see some sort of concerted inspection campaign in support of the Polar Code, especially under the Paris Memorandum. That is where we're going to see some enforcement teeth for the Polar Code. Vessels that are not compliant may not be permitted even to depart a port until they rectify deficiencies.

Rob Huebert

Aldo, there is an add-on question, just in terms of your reply to the enforcement issue. There are issues that have been raised in the pandemic environment about the regulatory shipping regime in Canada. The New Zealand vessel, the *Kiwi Roa*, sailed right through the Northwest Passage without being stopped. What are your thoughts on these facts, in terms of Canada's enforcement capabilities? Fines have allegedly been brought against the ship, but it still sailed through without being stopped. What does that tell you?

Aldo Chircop

Perhaps it is not only necessarily a matter of enforcement capabilities, but rather a matter of the political willingness to enforce. That is a very delicate issue because we continue to regard the waters enclosed by the Arctic Archipelago as historical internal waters over which we exercise sovereignty. In theory, what it means is that we exercise the full powers and jurisdictions that are available to any state on its land. But, is there political willingness to exercise this sort of jurisdiction, especially given the particular relationship we have with the United States and the sensitivities involved there, and also with respect to some European states that also have their views with respect to the legal status of those waters? Essentially, the challenge there is that yes, there might be perhaps a communication from NORDREG (the Northern Canada Vessel Traffic Services Zone Regulations) to the vessel to direct it one way or another, but if that vessel does not comply, it raises an interesting question of whether Canada will enforce, and how to do that remains to be seen. Canada's willingness to enforce might be considered provocative vis-à-vis the United States and some European states. That is part of the backdrop to the enforcement of shipping regulations in the Arctic.

We have a mixed approach. On the one hand, we're saying, "yes, we are embracing international regulations, we've embraced the Polar Code, we've implemented it and are applying it to all ships within Canadian Arctic Waters";

but, at the same time, when it comes to exercising our enforcement muscles, we do not necessarily do it. In fact, the proposal for the low-impact corridors is very indicative of this. Corridors will be designated to focus provision of support services, but they will not be mandatory—they will be voluntary.

Rob Huebert

Elizabeth, another question has come up for you. There's been discussion in some of the Danish media about some of the Danish security forces being concerned about Russian behaviour vis-à-vis the ultimate determination of the continental shelf. What exactly is at play in the Danish concerns, and how do you understand it?

Elizabeth Riddell-Dixon

Most Arctic scholars argue that, if there are military threats to Canada's Arctic, they will result from conflicts in other parts of the world spilling over into the Arctic. Russia has been very cooperative with the Danes and the Canadians regarding Arctic extended continental shelves. Russian officials shared confidential information from their submission with Canada and Denmark early on. As illustrated by the negotiation of the Russian-Norwegian Accord for the Barents Sea, Russia is not going to grab jurisdiction. That dispute went on during the Cold War and involved important, if not vital, national interests; yet neither the Soviet Union nor the Russian Federation used its military might to assert jurisdiction. Of the three countries that have made submissions pertaining to the Central Arctic Ocean, Russia has been the most judicious. All of these facts bode well for the future. I'm not saying that conflicts in other parts of the world could not spill over in the Arctic, but the prospect of conflict over Arctic extended continental shelves is extremely remote.

Rob Huebert

We have time for one last question for Aldo. Could you please explain the regulatory regime that governs icebreaking activity in the central Arctic Ocean?

Aldo Chircop

Icebreakers are vessels like any other, so, essentially, they would be subject to the regulations for polar shipping. A couple of things need to be said here. We need to distinguish between marine areas that are within Canadian jurisdiction, and areas in the Central Arctic Ocean that are beyond national jurisdiction. For areas within national jurisdiction, there is the greater ability to potentially regulate in a manner that would avoid potential conflicts with, for

instance, Inuit ice routes or migratory paths of animals, and so on. We know that there are a number of impacts there.

If we are looking for an answer in terms of how vessels are guided with respect to navigation that involves icebreaking, we need to look at the Polar Code. This is not necessarily limited only to icebreakers and also applies to ice-strengthened vessels. Under the Polar Code, vessels with a Polar Ship Certificate are expected to have a Polar Water Operational Manual onboard. That manual will guide the vessel with respect to how it will be navigated.

As I mentioned earlier, one of the issues is that we do not have an international standard for icebreaking per se, to govern the icebreaking's impacts on the marine environment. There is nothing to prevent icebreaking in the Central Arctic Ocean from continuing to break ice, despite the area's environmental vulnerability. The rules that we have are mostly dedicated to pollution prevention, and icebreaking is not exactly pollution prevention.

Within Canada, we have guidelines for navigating vessels in ice-covered waters. These guidelines include navigating vessels for the safest possible operation when there is ice present.

Rob Huebert

Well, that takes us right to the limit of our extra time, so I'm afraid I'm going to have to call these proceedings to an end. I would like to just thank the both of you for what I expected to be a tour de force of these two very critical issues. I knew you would both deliver, both in terms of your formal presentations and your answers to the questions. I would also like to thank the audience members for their engagement and the questions that were put forward, which were obviously of critical importance in understanding this subject. Thank you very much for your openness and willingness, as always, to discuss these issues.

5. Resurgent Great Power Competition: What Does it Mean for Arctic Security and Stability?

Tuesday, 16 February 2021

Peggy Mason

Good afternoon, everyone. My name is Peggy Mason, and I have the privilege to welcome you all to the fifth in our February 2021 six-session webinar program on Arctic security. …

I am now very pleased to turn it over to today's moderator, Paul Meyer, retired career diplomat, including having served as Canada's Ambassador for Disarmament, and the current Chair of the Canadian Pugwash Group.

Paul Meyer

Welcome, everyone participating in the webinar. As Chair of the Canadian Pugwash Group, I am delighted to have been able to collaborate with our two other organizers in putting together this webinar series on a crucial topic.

Today, the focus is on resurgent great power competition and what it means for Arctic security and stability. We will have the benefit of the perspectives on this topic from two eminent scholars, Dr. Andrea Charron and Dr. Nancy Teeple.

Andrea Charron has her PhD from the Royal Military College. She has experience working with several federal government departments, including the Privy Council Office's Secretariat for Security and Intelligence. She is currently an Associate Professor of Political Studies at the University of Manitoba, where she serves as the Director of the University's Centre for Defence and Security Studies.

Dr. Nancy Teeple has a PhD from Simon Fraser University, and she is now a post-doctoral fellow with the North American and Arctic Defence and Security Network. She is also an Adjunct Professor and Research Associate at the Department of Political Science and Economics of the Royal Military College. Nancy's research interests include nuclear strategy, missile defence issues, arms control, and Arctic security.

Andrea Charron

I thought maybe what I would do is set the stage and start by framing the global view of great power competition, and then seeing if, in fact, it actually does apply to the Arctic. My bottom line upfront is that I'm not sure that the resurgence and emergence of Russia and China are at the same level of concern as they are in other parts of the world. Rather, competition in the Arctic is buffered thanks to organizations like the Arctic Council, which has established for 25 years now an Arctic state versus non-Arctic state government structure, as opposed to a great power versus everybody else in the rest of the world structure. If we don't take steps to improve continental defence, however, I think this vulnerability will be exploited, and then the great power game in Asia and Europe may indeed find its way to North America. Now is definitely a critical time to consider how great power competition involves the Arctic, and its implications. While we may think the resurgence of Russia and the emergence of China are a direct result of President Trump, I want to remind everybody that the signs came much earlier, under the Obama administration's June 2015 National Military Strategy. It was placed, however, at the centre of the Trump administration's December 2017 National Security Strategy, and then the January 2018 National Defense Strategy.

Military officials under the Trump administration have made countering Chinese military capabilities the number one concern. This, however, was always pitched in an Indo-Pacific context. The question becomes, does the great power competition apply in an Arctic context? In the last year, the U.S. military seems to have bolted ahead of the U.S. National Strategy via its pivot

to the Arctic and, in some cases, with very hurried armed services-specific Arctic strategies, rather than operational responses to a coherent national strategy. It seems to be focusing almost exclusively on great power competition in the Arctic. The question that still remains is whether or not the rest of the U.S. military budget and institutional momentum will follow.

20 years after 9/11, the focus of the U.S. military (with Canada as an ally), which was on the Middle East and on countering terrorism, has returned to Eastern Europe and the Balkans, then pivoted to Asia, and now, tentatively, sees a mini pivot to the Arctic. The pivots have resulted in different coalitions in each case and different levels of attention. I think we in North America feel the pivot to the Arctic acutely, but that's a function of geography and sparse infrastructure. The bigger issue and stickier problem will continue to be the containment of China in a Pacific context and Russia in a European context.

Nevertheless, as a result of renewed great power competition, and with two peer competitors, there are three premises and a conclusion for the Arctic. The first premise is that everyone is dusting off their deterrence handbooks and rediscovering that nuclear weapons are a grave and imminent danger. Second, the U.S. way of war and momentum means that U.S. and allied capabilities will be focused in the Pacific, and U.S. and NATO attention, in Europe. This is what Joel Sokolsky referred to as "the Away Game." Knowing full well the first two, the third premise is that Chinese and Russian tactics will exploit the North American homeland, especially via grey zone tactics, as well as other geographic combatant commands' seams that, other than the United States Central Command (USCENTCOM), are located in the middle of oceans, out of sight and out of mind, and in international waters. The conclusion to be drawn from successive NORAD and United States Northern Command (USNORTHCOM) commanders is that continental defence can be exploited because it has always been marginalized in favour of this Away Game, especially as argued by General (retired) O'Shaughnessy and current Deputy Director of Operations for NORAD Brigadier General Fesler.

The Arctic is a significant part of the North American homeland and is likely to become more accessible, but it also has three combatant command seams coupled with aged infrastructure that provides key information, like the North Warning System. This perhaps accounts for the hurried attention of the U.S. services to the North American Arctic. Remember, NORAD's main focus for 63 years has been the Arctic. The number of Russian sorties has ebbed and flowed, but the behaviour has remained, in the main, professional. That is not the case in other parts of the world—for example, the poisonings in the United Kingdom, annexation of new territories, and jamming of GPS signals near

Svalbard on the coast of Norway. The terms "geopolitics" and "great power politics" are often synonymous for international politics or strategy relating to international politics and the influence of basic geographic features.

When we're talking about the Arctic, we have one defining feature, and that's an ocean. We think of the Arctic as a maritime domain only. There are advantages and disadvantages to that. The main advantage is that the Arctic Ocean, as outlined in the UN Convention on the Law of the Sea (UNCLOS), has very clearly defined zones under national and international jurisdiction. We really haven't had to worry much about the international donut hole until recently as a result of technology and climate change. The disadvantage—and again, this is rooted in the same UNCLOS—is the fact that the rights are determined by land, not by water. This preferences Arctic states over non-Arctic states for decision-making. Herein lies the fundamental challenge. The Arctic Council has preserved this hierarchy, which means that two P5 (Permanent Five) members of the UN Security Council are Arctic states—Russia and the U.S.—and the other three are observers, along with ten other states. Some of these are quite important potential powers, like India, and one of course is the most anticipated power to the U.S.—China.

The basis of the U.S.'s grand strategy to deal with potential competitors has been to keep them from having the freedom to roam like the U.S. has. The problem is that Russia has always had that ability, although it was more concerned about its near abroad, but China's ability to roam is very new and, via its Belt and Road Initiative, is reaching deeper into parts of the world than the West thought possible in a few years, and far below the threshold of war. Indeed, in many cases, the injections of infrastructure and cash along the Belt and Road are development lifesavers, and the West simply has no counteroffers or alternatives.

While the U.S. has a grand strategy to ensure national interests, Canada has a fit-where-we-can strategy, and that depends heavily on where the U.S. goes and what niche roles we can play. The U.S. clearly made counterterrorism and the Middle East the clear grand strategy priority immediately post-9/11, and then shifted to the Pacific by the Obama administration, even renaming the United States Pacific Command (PACOM) to the United States Indo-Pacific Command (INDOPACOM), in recognition of the significance of Asia. More of the world lives in Asia than outside of it, and its economic might may well eclipse the U.S. if the West continues to dismantle free trade between allies.

I'm not prepared to say that the entire U.S. military is shifting to the Arctic, and as evidence I turn to policy and money. For example, the Marine Corps' current plan to redesign its forces, called Force Design 2030, is driven

primarily by a need to better prepare the Marine Corps for potential operations against Chinese forces in conflict in the Western Pacific. Additionally, the fiscal year 2021 National Defense Authorization Act directed the U.S. Department of Defense (DoD) to establish a Pacific deterrence initiative to, quote, "carry out prioritized activities to enhance the United States deterrence and defence posture in the Indo-Pacific region."

When it comes to Russia, and its aggressivity, it is the Balkans and Eastern Europe that are still more at risk, and the U.S., via multiple presidents—and not just Trump—has needed to convince NATO allies that they must spend more on national defence. NATO has reconfigured its commands in a transformation that has seen the reconstitution of a new version of the Supreme Allied Commander Atlantic (SACLANT) position, now called Joint Force Command Norfolk (JFCN) based in Norfolk, Virginia, and twinned with the Second Fleet Commander (Vice Admiral Andrew Lewis). Admiral Lewis reports to the SACEUR Commander (General Wolters) in the JFCN role but in his 2nd Fleet position, he reports to US Atlantic Fleet Commander, Admiral Grady. The United States European Command's (EUCOM) 6th Fleet Commander is Vice Admiral Black. The 2nd and the 6th Fleet both have areas of responsibility in the Arctic and the North Atlantic, but the 6th Fleet also has the Mediterranean and the top half of Africa. The one line they both adhere to strictly is 45° West, which is the line in the Atlantic that separates USNORTHCOM and EUCOM and ensures Greenland is squarely in EUCOM's AOR. The joke in the Naval world is that the most likely conflict in the Arctic will be between the 2nd and the 6th Fleets, fighting for capabilities, resources, and operations from the twinned SACEUR/USEUCOM General. More importantly the lingering significance of sea lines of communications is the symbolic importance of the transatlantic link to NATO cohesion.

Finally, in a report to Congress released on 27 January 2021, entitled "Renewed Great Power Competition: Implications for Defense, Issues for Congress," there is not a single reference to the Arctic. So, if U.S. grand strategy is not including the Arctic in its calculations, should Canada? This is the conundrum and the key argument of successive NORAD and USNORTHCOM commanders, who have pleaded with U.S. and Canadian officials to pay attention to continental defence, which includes the North American Arctic. While we have heard lots of references to North Warning System renewal, NORAD modernization, and even an evolution of North American defence, what we don't have are the concomitant budgets, capabilities, or political backing.

Canada has had a more realistic and tempered view of the Arctic than has the U.S., and we realized that there is, in fact, a continuum of activities that occurs. Some occur at the defence end, requiring the need for interceptors to defeat incoming air threats, for example, and there are many activities at the safety end representing the sole mandate, for example, of the Canadian Coast Guard. Canada has also integrated Indigenous knowledge, especially via the Rangers; the U.S. has a very uneven attention to this essential partnership.

Rather than thinking about great power competition in the Arctic, we are facing competition between Arctic and non-Arctic states, in which there are great powers represented on both sides. We've been incredibly fortunate to have had the Arctic Council introduced at a time of relative peace that firmly cemented much of the thinking in the Arctic, something the Asian and European regions lack. There is no organization that seeks to promote cooperation in Europe that includes Russia as an active and key decision-maker, and the same for the Pacific. China and Russia are the adversaries in these contexts, but not necessarily in the Arctic.

The Arctic will become very unstable if Russia and China believe that their tactics, such as anti-access, area-denial, and bastion defence, will work in the North American Arctic contexts, which means that heeding the calls of the NORAD commanders and committing to continental defence is essential. Canada's contribution is making sure that NORAD modernization and the wider evolution of North American defence come to fruition, but it is also with a view to benefiting Northern residents and cooperating with allies to share more domain information. The one clear advice that we do have from the U.S. is that we need, and they need and expect, more allied support in the Arctic to make sure that U.S. deterrence is not compromised by a vulnerable homeland. Canada can contribute valuable information, especially to intelligence, surveillance, and reconnaissance, and can contribute to what the Commander of NORAD and USNORTHCOM General Glen D. VanHerck calls today "information dominance."

Nancy Teeple

What I'll do is address the overarching question of today's session: what does resurgent great power competition mean for Arctic security and stability? I will do a broad overview of great power competition and the strategic behaviour of the three key actors: Russia, China, and the United States. I provide a context for understanding the regional landscape and a framework for understanding threats to, through, and in the Arctic. I consider the impact on security and stability in the region, with a look at the role of arms control as a stabilizer in the Arctic, and I conclude with a look at how states' national

interests involve cooperation and competition at the same time. So, of course, these works build on current works that explore different ways of looking at the Arctic, a departure from the past that focuses on cooperation *or* competition, and the framework for in, to, and through the Arctic—so I have to attribute much of this to building upon Whitney Lackenbauer's work.

To provide an overview of the context, the Arctic is a zone of both cooperation and strategic competition concurrently. Cooperative circumpolar relations are enabled through a number of institutions, including the Arctic Council, the United Nations Law of the Sea Convention, the Ilulissat Declaration, and the Polar Code, among others. Climate change introduces non-traditional security challenges to the Arctic region. Melting sea ice and longer navigation seasons have led to increasing international activity and access to the region. This includes economic development for oil and gas, minerals, fisheries, and tourism, etc., and shipping provides shorter routes from Asian to European markets. Of course, all of this includes nations increasing their Arctic military capabilities to defend, deter, and enhance their national sovereignty and respond to emergencies.

The Arctic region is increasing in its strategic importance and economic potential. The military strategic behaviours of the key actors have created a security dilemma, an international relations theory concept in which states that view one another as competitors are suspicious of one another's activity, so one state might start militarizing for its own defence and another state sees that action as a threat or challenge and responds in kind, spiralling into a competition. This is often based on the perception or misperception that the other state might be getting ready to take offensive action. This is something that's commonly seen and, in this context, it's not much different. The primary great power actors are a resurgent Russia, a revisionist China, and a United States that is pivoting to the Arctic. Great power competition occurs on a global scale and, in this case, regionally, as peer competitors pursue long-term economic and security interests in the Arctic.

The strategic behaviours of peer competitors that are creating challenges involving potentially provocative developments are a rising China as a peer competitor to the U.S. with Arctic ambitions; Russia's control of the Northern Sea Route posing a freedom of navigation challenge to the U.S.; Russian advances in missile technology involving the testing and deployment of systems in the Arctic; and Russia and China developing missile capabilities with the intention of holding at risk critical sites in the U.S. and Canada. The absence of a regional organization or forum to manage military and security issues is problematic, as is the growing strategic cooperation between Russia and China.

The following framework is a tool to contextualize actors and events in the Arctic, a framework attributed to Whitney Lackenbauer. Number one, there are different Arctics, including the North American Arctic (Canada-United States-Greenland), the European Arctic (Norway, Sweden, Finland, Iceland, Russia), and the Central Arctic Ocean. Number two is understanding threats *in, through,* and *to* the Arctic. Wilfrid Greaves had also presented on threats *from* the Arctic, so I thought I'd include that here because we have great power threats being posed by, for example, Russia's ability to threaten North America with standoff weapons and controls *in* or *from,* and *through*, the Arctic; Russia's threats *to* European states in the Arctic, such as Norway; and China posing potential threats *to* and *in* the Arctic, and, potentially in the future, *through* the Arctic.

This leads us to a series of questions for consideration. How could great power dynamics affect security and stability in the Arctic? Well, what do we mean by security and stability? We mean security from both traditional and non-traditional perspectives: human, environmental, economic, political, and the strategic dimension, which will be our focus in a realist perspective. Stability would be characterized by low tension or a low security dilemma, so low tensions between the nations in the security dilemma. This is reinforced through cooperative frameworks and adherence to legal regimes and norms of behaviour, and ultimately provides a predictability through transparency and dialogue.

Another question is to what extent could military developments and resulting tensions undermine the cooperative framework of circumpolar relations? Some of these include tensions in other geopolitical regions spilling over into the Arctic and the escalation of confrontation or miscalculation creating a crisis. The potential impacts of these are states withdrawing from agreements, wedges being driven between states or between states and their own citizens, and the weakening of institutions and arrangements.

Russian strategic behaviour involves provocative—to the West—military activity contributing to a security dilemma. Included in this is its revitalization and building of new Arctic bases and ports along the Northern Sea Route; modernization and development of new conventional and nuclear weapons systems; deployment of regional denial systems like its air defence systems and anti-ship missiles; resurgent military exercises in various parts of the Arctic, such as its strategic bomber patrols near the airspace of other Arctic states or its exercises through the GIUK gap; and increasing economic cooperation with China, including liquefied natural gas (LNG) development and Chinese investment and cooperation in the building of Northern Sea Route infrastructure.

China's Arctic reach is a result of its economic and scientific research interests in the region, but these are also giving rise to China seeking to make claims in the Arctic, particularly in the Central Arctic Ocean. China declared itself a "near-Arctic state" in its 2018 Arctic Policy, and it is exploring the Polar Silk Road as part of its Belt and Road Initiative, which includes the LNG development with Russia. It has made and continues to make investments in states that are somewhat economically vulnerable and looking for opportunities, such as Iceland and Greenland. This also includes the added challenge of predatory economics being exploited in the region and the potential use of economic coercion and control, with political strategic implications. Finally, there are challenges of dual use: the potential for military applications like infrastructure or scientific research to be used in the future for military purposes, such as the purchase of ports and air bases, or other projects in the sea.

In terms of Western strategic behaviour, the U.S. (and Canada) are modernizing North American defence and renewing NORAD. This includes evolving defence and deterrence concepts and architecture to counter Russian and Chinese missile advances. Such systems are advanced enough to travel through the Arctic, threatening the North American homeland. This is embodied in the new SHIELD concept and deterrence concepts being explored, which seek to be able to deny, deterrence by resilience to strengthen at home, and deterrence by deception (information operations, as explored, for example, by Troy Bouffard). U.S. military branches have released a number of Arctic strategies reinforcing joint force concepts, responding to various traditional and non-traditional security threats in the Arctic. What is unique about this is that branches that have never released an Arctic strategy before are doing it now, such as the Air Force or the forthcoming Army strategy. This is unprecedented and shows this pivot to the Arctic. Another dynamic is the increased NATO-Nordic defence cooperation—NATO exercises in the European Arctic in and around Norway, involving non-NATO states such as Sweden and Finland. These are all potentially provocative to Russia in the region. Russia perceives the increasing NATO activity near its borders as a threat and ascribes offensive intention to the U.S. and NATO due to these kinds of behaviours.

With that, I pose some controversial questions. These threats, challenges, and questions are debated among Arctic scholars. What is the potential for armed conflict in the Arctic? Should the Arctic Council be expanded to cover military security matters? Should NATO become more involved in the Arctic? Is there an "Arctic exceptionalism" that cannot be affected by geopolitical

developments? Arctic exceptionalism is the notion that the Arctic is a zone of peace and cooperation, governed by institutions to resolve disputes, and that the region, as a result of its exceptional cooperative character, is unaffected by great power competition. This is also debated more recently.

Preliminary outcomes with regard to the impact on security and stability are uncertain. There is speculation about possible outcomes, given the trajectories of activity to date, but we can consider potential outcomes like great power competition that may have impacts on the security and stability in certain parts of the Arctic and not in others. Conflict in the region is unlikely, although confrontation and points of escalation may occur in the European Arctic. China is a wild card because it has the potential to drive a wedge between states and become a security threat through dual-use Arctic capabilities and its interests and push to become more involved in regional politics and Arctic governance. The Arctic Council will remain a cooperative forum. However, whether it will diminish or become ineffectual, if the Arctic cooperative regime becomes undermined, is uncertain. Of course, strategic nuclear and conventional competition could impact the cooperative framework. On the positive side, arms control has a stabilizing effect.

With that, I want to talk about the role of missile technologies and the post-arms control context. We're living in a post-Anti-Ballistic Missile (ABM) Treaty world, and a post-Intermediate-Range Nuclear Forces (INF) Treaty world. So, do these create conditions for arms races? Nuclear weapons have a significant role in great power competition. The New Strategic Arms Reduction Treaty (New START) was set to expire and was recently renewed, but this is the last remaining bilateral arms control treaty between the nuclear great powers, U.S. and Russia. Whether it will be renegotiated within the next five years is under consideration. New conventional and nuclear delivery technologies are faster, more manoeuvrable, stealthy, precise, and accurate, which is quite destabilizing, both globally and regionally. The breakdown of arms control, leading to arms race behaviour, could have an impact in the Arctic. This concerns the role of the Arctic in deployments of nuclear systems and missile defences in the region. Nuclear weapons testing in the Arctic has security implications at the local and regional level, involving radiation poisoning of inhabitants and measures taken to contain any further contamination.

U.S. missile defence expansion and deployments of Aegis missile defences in the European theatre caused President Vladimir Putin to respond, unveiling a series of systems in his speech in Moscow in March 2018 where he said, "No one listened to us. Listen now." These are systems intended to defeat, or at least bypass, missile defences and threaten North America and the European side

(where Aegis is deployed at sea and on land). Essentially, Russia can target North America while remaining below the nuclear threshold. It can attack the United States if there is a conflict in another geographical region, and the intent is to prevent or delay the deployment to these theatres. Shorter- and medium-range systems can reach targets in the European Arctic, such as the Barents Sea.

Arms control would provide stabilization in the Arctic. Arms control cooperation could reinforce cooperation in the Arctic, with a positive spillover into regional relationships and possibly elsewhere. It would bring problematic nuclear technologies into New START and limit missile defences. It would address dual-use systems where target states may not be able to distinguish nuclear from conventional warheads. Discussions on arms control could consider controlling tactical (theatre) nuclear warheads (shorter range for use within the region), which New START doesn't. Another item is proposals for an Arctic nuclear-weapon-free zone (NWFZ) that would limit or prohibit nuclear behaviour in the Arctic through bi- or multilateral agreements that would reinforce cooperation, transparency, and confidence-building among key great powers, easing tensions in the region and possibly at a broader, global level.

Great powers' national interests span both the cooperative and competitive areas, and they are happening concurrently. We have to consider, down the road, whether there will be a point where it will shift in one direction or another, or continue in this way. It is in Russia's national interests that the Arctic remains a zone of cooperation, to facilitate resource development and resolve disputes peacefully. But Russia is competitive in its interest in controlling the Northern Sea Route, ensuring the survivability of its strategic deterrent, maintaining the ability to use military forces in the Arctic, and keeping NATO out of the Arctic and away from its borders.

China's national interests are in having access to Arctic shipping routes, exploiting resources, exercising influence, participating in Arctic working groups, and scientific research. The influence dimension has a competitive aspect as well. China's Arctic ambitions are uncertain and ambiguous. Its economic ambitions have a predatory character, and its investments involve potentially dual-capable civil-military use.

For the United States, it is in its national interests to cooperate through the Arctic Council, among other regional arrangements, for human and environmental security, economic development, and the resolution of territorial disputes. But the competitive side is that it is pivoting to the Arctic. Its military branches are pursuing joint concepts and responses through Alaska to traditional and non-traditional threats and challenges in the region.

Additionally, the modernization of the North American defence architecture, while perceived as defensive, also uses offensive concepts and systems to demonstrate the ability to threaten its adversaries and thus make the continent more secure.

We see this trend, and there could be a point in the future where it goes in one direction or the other, but it could be debated whether these cooperation or competition modes will continue to move forward side-by-side with little impact in the region.

Paul Meyer

We've benefitted from really insightful presentations, and now we can dig a little deeper in the question-and-answer segment. To kick us off, I'd like to ask Andrea about a point she made in the presentation regarding the U.S. military running ahead of U.S. governmental policy. I wondered if the Biden administration is likely to rein in the military on this front, or is it just not going to focus on Arctic security issues? And if I can supplement that with a question from the chat, in your opinion, how could U.S. military capability be best utilized in the Arctic? Is there a role for U.S. allies to supplement that activity?

Andrea Charron

I think we are going to see Biden resetting many agendas. In some cases, he has completely reversed decisions that Trump had made. On other occasions, it's sort of an adjustment or a different emphasis. I think that's what we can expect in the case of the Arctic. As Joshua Tallis argued in *War on the Rocks*, the U.S. National Security Strategy should set the tone for what to expect in the Arctic, and then the military services should provide operational guidance to their armed services via the strategies. But what we see is that the armed services have come out ahead with the strategy for the U.S., and that's really putting the cart before the horse. I fully expect, especially with the Arctic Council meeting in May and with the handover to Russia, that U.S. Secretary of State Blinken is going to reset the tone.

And this also speaks to the chat question. Coincidentally, Norway, Finland, Sweden, Iceland, and Denmark are all due to issue new Arctic strategies and, from what I'm hearing, it is very much a return to, let's talk about High North, low tension; let's talk about Russia's defensive capabilities; we need to watch them, but let's not always assume nefarious intent; we need to work together on other issues. I also expect that everybody is going to put climate change first on their agendas, and that really is pressing for the Arctic, and so I think that's where we're hoping we're going to see much more

leadership on the part of the U.S. via Biden. I hope the first thing they do is take the Department of Homeland Security's Arctic Strategy, rip it up, and throw it in the garbage. How can you have a strategy that refuses to mention the words "climate change," as Troy Bouffard has pointed out? It is not tenable. I think we're all looking for that quiet leadership to come back with Biden, because the Arctic has been working. We need the cooperation in the Arctic to continue to work, because we can't possibly have fronts open in all parts of the world. The focus in the Arctic should be on the really pressing issue of climate change.

Paul Meyer

Both you and Nancy refer to the SHIELD and the upgrading of U.S.-Canadian defence systems in the Arctic. If I can pose a question from both Peggy Mason and Adele Buckley, are we, in a sense, by looking to invest in renewed Northern defences, just contributing to a "security dilemma" response from the other side? New weapons systems seem to make irrelevant some of the radar-based systems that the successor to the North Warning System would entail. Are we in danger of contributing to an escalatory cycle at the very time when we may want to encourage greater stability and de-escalation in military actions in the Arctic?

Nancy Teeple

I always work within the security dilemma framework in terms of thinking about how nations compete, especially in the nuclear realm. What we're looking at is destabilizing systems with conventional warheads now on them, for better or for worse, to meet New START numbers, but also to reduce the nuclear threshold. I see the whole thing as a spiral. The U.S. withdrew from the ABM Treaty, it pursued national missile defences, and so on. Of course, adversaries will respond in kind, because the idea is that mutual vulnerability, reinforced by survivable second-strike capabilities, tends to keep tensions lower. There's always going to be a security dilemma if you view one another as competitors, but that tension will be low if both nations are less incentivized to use these weapons because they know that some sort of retaliation will come. Of course, the more usable systems with lower yield warheads, conventional warheads, more precise warheads, and the ability to get past systems that would otherwise be able to defend—the idea is that if one state has an advantage over the other by having these missile defences, the other state wants to restore some sort of parity or balance.

That is how I perceive Russia and China's development of hypersonic glide vehicles, next generation cruise missiles, and these other types of systems. On one hand, you see the modernization of systems because a lot of these deteriorated during the 1990s and post-Cold War period, but post-ABM, it seems there has been a shift to modernizing systems with more offensive capabilities to try to restore that balance, because if one state has an advantage, the other state will want to respond in a way to exploit the vulnerabilities, the "seams," as Andrea has mentioned. The pursuit of the SHIELD concept is an attempt to defend even more strongly against that. Deterrence by denial has been around since the Cold War, but being explicit about this doctrine, and focusing on offensive ways of ensuring that, is a new thing—being declaratory about that, that's new.

Andrea Charron

Often these questions remind us that the U.S. and Canada are different, because we do see questions of missile defence very differently. In the U.S., their questions are always, "what's the cost" and "what's the most credible system," never a question of "do we need BMD"? Need is always assumed to be there. In Canada, we argue about the high cost, what's the credibility of the system, and why would we need it—after all, we're Canada. No one wants to attack us—or so the thinking goes. We've always had a disconnect in terms of conversation, but I think that, as technology advances, the U.S. is also starting to think, "we only have so many dollars to spend," and COVID-19 has been really instructive because here we have a virus that has dismantled and destabilized many countries around the world, including the U.S., and it didn't involve a missile—it involved a virus. When you think back to the problems that the U.S. has had with China and with Russia of late, it's not missiles—again, it's grey zone activity, it's misinformation, disinformation, and using bots on the internet.

So, I don't think it's a coincidence that the 2021 Congressional Budget Office has just released a study on cruise missile defence for the U.S., and it's quite clear they are very concerned about the cost versus are we going to be able to have a credible system, because we can't possibly protect every site in the continental U.S., let alone in North America. It costs an incredible amount of money and, by the way, our competitors can get at us very, very cheaply via these grey zone tactics. So, I think again you're going to see this idea of a SHIELD, which is often thought of as like the equivalent of the Iron Dome for Israel. The SHIELD that General (retired) O'Shaughnessy and Fesler were really talking about is an approach to the importance of North America in wider defence strategy for the rest of U.S. and Canadian policy. The new term

that certainly the new Commander wants is information dominance. The more we know about China and Russia, and their intentions, and the more we include information from other domains, the more likely we are to be out in front ahead of them.

So this brings up the North Warning System, which is just one small part of this bigger idea called NORAD modernization. The North Warning System is the main source of information for NORAD, and successive commanders have said that's enough. Well, it's not enough. We have allies, and we need their information. We need to think about improving the North Warning System. There's a new initiative called Pathfinder that processes information from the North Warning System and using artificial intelligence and machine learning, helps analysts to see more of what the North Warning System picks up. An analyst's ability to see patterns using older algorithms can't keep up with new technology. With the help of artificial intelligence, and using more information from allies, maybe we don't need to put billions of dollars into brand new, replacement systems. Maybe there are things that we can do to augment the capabilities of current systems.

What you're hearing from the U.S. is that we need allied support, and I think that is definitely going to continue. The expectation is that everybody has to contribute with all the information they have so that we don't need to come down to these very, very expensive missile defence systems, which may or may not be able to address all the new technology that's coming at us and now missiles coming from any place in the world, which is something we didn't have to consider before as well.

Paul Meyer

One question here asks about Canadian policy perhaps being neglectful of allies like Denmark and Iceland. Should we be doing more with these countries? Another question here notes that Denmark has shown some support, at least in aspirational terms, for the idea of an Arctic nuclear-weapon-free zone. Can Canada and other Nordic countries move that project forward in any way?

Andrea Charron

I think there's a recognition on the part of NATO, the U.S., and all of the allies that they need to work together in a more integrated fashion. It used to be that NATO would do stuff over here, NORAD would do stuff elsewhere, and there was a combatant command seam that would cover it. We're realizing now that maybe that's not the best case. We're especially seeing this when it comes

to Greenland and Iceland, because they've always been in very strategically important places, but they're starting to come back into play.

One of the things you're starting to see NATO do is specify which states hold which positions, especially when it comes to an Arctic context. One of the things it realized with exercises like 2018 Trident Juncture, which involved almost all of the NATO states, is that not all the NATO states are capable of participating in the Arctic at the same level. Maybe some states can contribute information as opposed to actual ships to operate in the Arctic. So, you're seeing this recognition that NATO and especially USNORTHCOM need to work more closely together, which is why you have this creation of Joint Force Command Norfolk, which basically cements USNORTHCOM and NATO to work more closely in a maritime context in the Arctic and North Atlantic.

The one thing I'll say about Greenland is that we have to be careful that we don't use Greenland especially like a pawn. Denmark feels that acutely. Greenland is still under Denmark; it is not yet a sovereign state. It may very well be that if Greenland ever does achieve sovereignty, it may feel it's more aligned with the North American partners. But we need to be careful not to assume what's going to happen. Ultimately, Denmark still has that say. That's why you have this uncomfortable seam that ensures Greenland remains in EUCOM's AOR. That's something to watch in the future. Greenland also has some key U.S. assets—you can't refuel in the North American Arctic without being in Greenland. So, I think all the allies are well aware of the contributions that Greenland, Denmark, and Iceland make to collective defence. We still have the NATO policing operations that we do on behalf of Iceland—those are still continuing. I think you're seeing more concerted efforts to integrate and share information, especially with the NATO Arctic partners.

Nancy Teeple

In regard to how Canada and Nordic countries might move forward on a nuclear-weapon-free zone in the Arctic, one consideration in this is obviously exploring the interests of different states. I would suggest that Canada and the Nordic countries would have a vested incentive for a NWFZ in the Arctic. What has to be considered is that, as a whole region, it is unlikely to happen. The Circumpolar Arctic is huge, and encompasses U.S. operations and, of course, Russia's Northern Fleet, which is part of Russia's nuclear assets, in its Arctic region. So, things to be considered are limited zones, exclusion zones, and things of that nature to start out with as a proposal to at least get these other nations, these nuclear powers, to the table to discuss it.

Some questions to ask would be, would this be a bilateral agreement? Or would it be multilateral? Can you enforce it against other nations that might

seek to operate with nuclear assets in the region? Does that include primarily the maritime domain? The air domain? What does that all mean? Ultimately, the question is to what extent that would interfere with U.S. and Russian interests in that region.

The other thing is that a dialogue needs to get started then with the governments of these countries, because we've seen a trend over the last 20 years of—in the Canadian government at least—a decline of engagement in nuclear arms control, non-proliferation, and disarmament. It's not entirely absent, but it is a significant decline compared to the 1980s and 90s. There needs to be a way to bridge Canadian government, Global Affairs, and advocacy organizations that want to move forward on this initiative, not just in the Canadian context—though that might be a place to start—but really moving this forward with other nations and getting the right actors to the table to consider this seriously.

Paul Meyer

Related to this, I wonder about possible incremental steps towards this goal and that recalled, for me, an idea that Ernie Regehr has put forward, which is essentially that we reconsider an idea from the past, which was a keep-out zone for U.S. attack submarines—or for that matter, allied NATO attack submarines—with respect to the so-called Russian Bastion, where their SSBNs, their submarines that can launch strategic ballistic missiles, reside, in order to avoid destabilizing actions, recognizing that a secure second-strike capability is a stabilizing feature for a nuclear deterrent relationship. Might this sort of arms control measure be advanced at this time? Any thoughts as to the viability of that kind of restraint measure going forward?

Nancy Teeple

These kinds of incremental steps and keep-out zones focus on keeping those second-strike capabilities closer to one's own territory, within the Arctic, so that they're limited. It might have more receptivity in the U.S. and Russia. The idea of anything that would threaten those second strikes would be a good start, with the potential to move towards covering broader regions. If your boomers (SSBNs) have intercontinental range, is it necessary for them to roam further out from these areas in the first place? The whole point of the attack submarines is to be able to seek out and target these boomers, which are supposed to provide that secure second strike. So, this could be a step in the right direction.

Andrea Charron

I am a bit of a pessimist. I think ultimately hegemons want the freedom to roam, and they're not going to restrict themselves that way. I think what you have heard in the background is the need for what we have in the South and East China Sea, which is a code for unexpected events. It's called the Code for Unplanned Encounters at Sea (CUES). Maybe the time has come—and especially as Russia is taking over as the Chair of the Arctic Council and is looking for wins—where we might be able to advance along these lines, not as part of the Arctic Council but using it as a launch platform for discussions outside of that forum. This might start with agreements about the kinds of activities that are acceptable in the Arctic and which are not, both from a climate environmental protection perspective and also because it is a very dangerous part of the world in which to operate. Search and rescue (SAR) assets and assistance can be very far away. Ensuring cooperation among allies will continue to be important.

The activities that absolutely have to stop are things like the jamming of GPS signals by Russia. That is just unacceptable. That is not professional and really we need to put pressure on them to stop that. So, I think we take the opportunity of Russia as Chair, which is looking for accomplishments after its two years to say, "look, we did this, this, and this, and this." So far, all indications are that Russia will be focusing on environmental protection and sustainable development, but outside of that context could be some agreement about better behaviour. And I would love to see the Open Skies Treaty be reconstituted, because that has been vital, especially in the Arctic context; again, because if you crash-land, you can't pick up the phone and say, "come and get us now." So I'd like to see also Open Skies perhaps be reinvigorated.

Paul Meyer

I'd like to pose a final question relating to a question Nancy mentioned in her presentation about whether the Arctic Council should expand its agenda to include security issues. My question to both of you, is would this be wise for the Arctic Council to do? Could you please, in your responses, also include any final comments you would like to make?

Nancy Teeple

Most Arctic specialists advise against the Arctic Council bringing military issues into the Council, and I tend to agree. The reason why is that that cooperative framework that happens in the Arctic, I think, is facilitated through the Arctic Council not being focused on military or traditional security matters. There needs to be some sort of forum exploring that outside of the Arctic

Council. However, that's a challenge at this point because of Crimea and Ukraine, and any kind of Western-Russian military cooperation broke down. A challenge would be to get some sort of alternative forum that already exists—some propose the NATO-Russian Council—to start exploring the military domain. I would agree that the Arctic Council is best focused elsewhere.

Andrea Charron

I agree with Nancy. The Arctic Council works very well given its current mandate. There's always a danger that, when you add things on or change the mandate, you have to open the agreement. Given the geopolitically contested world, we may throw out the baby with the bathwater and we may lose things that we don't want to lose, trying to add new things to it. I think the Arctic Council has a big enough agenda with environmental protection and sustainable development. As Nancy mentioned, it's not that we don't talk about security-like issues in offshoot fora of the Arctic Council, such as the Arctic Coast Guard Forum. Whenever you have states rubbing up against each other in meetings, they bring up other issues, and who knows what is discussed in the hallways. But we want to keep this organization going because it does seem to be one of the organizations that continually does produce helpful agreements and is making strides in all sorts of areas, including aiding Indigenous populations across the Arctic with things like telehealth and maintaining languages, and the like. I don't want to mess with something that's working.

Paul Meyer

Certainly, it seems like it would be most prudent for the Arctic Council just to keep things going with its cooperative spirit and its present mandate. Well, it looks like we have exhausted our time. In conclusion, I just want to thank Nancy and Andrea for your insightful comments. You've given us a lot to reflect on going forward.

6. Conclusions and Recommendations for Canadian Action

Thursday, 18 February 2021

Ernie Regehr

Good afternoon, everyone. My name is Ernie Regehr, and I am pleased to welcome you to the sixth and final session of our Arctic Security Webinar Series. Today's discussion will be a chance to recall and review some of the conclusions and recommendations that emerged from, or that we would like to see come out of, the five earlier sessions. Today's discussion will be led by Dr. Whitney Lackenbauer and Peggy Mason, and this webinar series has been brought to you by our three sponsors. …

Let me introduce our panelists. They're not appearing for the first time in this series today, and they're both certainly well known to many of you, so my introductions will be fairly brief. You already know that Peggy Mason is the President of the Rideau Institute. She has also had a distinguished career in

government and diplomacy, including serving as Canada's Ambassador for Disarmament from 1989 to 1995. Among many other things, she served on the UN Secretary-General's Advisory Board on Disarmament for eight years. She is currently a very active and valuable leader in a number of Canadian civil society organizations that address these issues.

Whitney Lackenbauer is Research Chair in the Study of the Canadian North and a Professor in the School for the Study of Canada at Trent University in Ontario. He also serves as Honorary Lieutenant Colonel of the 1st Canadian Ranger Patrol Group. As mentioned earlier, he is the Network Lead of the North American and Arctic Defence and Security Network. He has written, co-written, or co-edited more than 50 books and more than 100 academic articles and book chapters. Many of you are very familiar with his prodigious output. I would only add that the Arctic security community is itself very fortunate to be the beneficiary of all of that work and his leadership.

Today, we're all fortunate to have Peggy and Whitney here to guide us through our discussion. I thank you both for agreeing to do this. We'll hear first from Peggy and then from Whitney. They've emphasized that they want this to be a participatory session. All of the topics explored in this series are on topic today.

Peggy Mason

Thank you very much, Ernie, and it's really a great pleasure to be here today at the tail end of what has just been a marvellous series of discussions. I will make a few opening comments and touch on a few points.

Andrea Charron, in her presentation, brought up that there is resurgent great power competition, but not yet in the Arctic, and Whitney talked to us about avoiding either-ors, avoiding binaries, and pointed out that there is *both* competition and cooperation in the Arctic. We know, from the Canadian Defence Policy 2017, the view of the Government of Canada that there is no military threat to the Canadian Arctic per se. To keep things that way, but also to go well beyond that, and to build human security in the Arctic, we have heard different speakers talk about different aspects of what I see as a three-pronged approach.

The first is building resilient Arctic states from the community level up. Canada has a huge amount to do here, and we heard about that in every one of the sessions. This is Ernie Regehr's idea of stable states being secure states, as discussed in his keynote, and that, in turn, requires community resilience, which again, in turn, requires sufficient resources and meaningful Northerner participation.

Prong two is on diplomacy and arms control—the full gamut, from high-level strategic talks down to military-to-military talks, to build and reinforce strategic stability. We have a new opportunity to do that with a new American president, to build the broader strategic stability on which the Arctic also depends, all the way down to dialogues at the Arctic level. That is prong two.

Prong three is a focus on continental defence to remove vulnerabilities to the extent possible and to do it in a way that is not destabilizing, that does not incentivize arms racing, and that does not undermine deterrence, which is based on mutual vulnerability. Here there's agreement on Canada's role in NORAD modernization—an enhanced focus on a traditional area for us: domain awareness, intelligence, reconnaissance, and upgrades to the North Warning System using artificial intelligence and machine learning. So, there's broad agreement on this niche role for Canada, which is very good news, because there are so many Arctic priorities that require funding on critical areas of human security, related, of course, first and foremost to climate change. And military spending on NORAD modernization is not funded by the 2017 Defence Policy. So, it is very good news that there is agreement on a niche area for Canada where we can keep the cost under control, hopefully.

Now, on enhancing strategic stability, Ernie Regehr referenced the Biden-Putin agreement to explore strategic stability discussions on a range of arms control and emerging security issues. While that's not Arctic-specific, it obviously is very important for the overarching strategic stability. And obviously, Canada must support that effort, but I also pressed Ernie for some other dialogue processes, more Arctic-specific dialogue processes, as this is one of his many areas of expertise. So, I just wanted to throw out some of the examples.

When one sees the areas where Russia used to be involved in these kinds of Arctic-specific, military-to-military-type dialogues or related dialogues, but is not now, there's room for hope that we can perhaps get things back on track. So, the first proposal is to bring Russia back into the Arctic Security Forces Roundtable, a forum that involves military, government, and expert voices to promote greater regional understanding, dialogue, and cooperation in the Arctic region, and that also includes some non-Arctic states. Russia was a member, but not since 2014.

The second proposal is to revive the Arctic Chiefs of Defence Staff forum. That included Russia, but has not met since 2013. That could focus on promoting information sharing, transparency measures, and other cooperative measures to reduce the risk of military incidents and miscalculation. The Organization for Security and Co-operation in Europe's Vienna Document is

also often cited as a guide for military-to-military relations that might be drawn on in the Arctic setting. Andrea Charron also mentioned the idea of a military code of conduct, which seems to be gaining currency. Of course, it would require buy-in from all states with armed forces capable of operating in the Arctic. Proponents see it as defining acceptable military practices and promoting transparency, with a view to reducing irresponsible military activity and brinksmanship, while preserving a low-tension Arctic environment.

I would say, before turning very briefly to China, that my last point here is that states, including Canada, can and should promote deepening cooperation with Russia in the Arctic. Its upcoming chairmanship of the Arctic Council offers an opportunity there, although Whitney did offer some caution and nuance in how we approach that. As I said, states, including Canada, can and should promote deepening cooperation with Russia in the Arctic, without signalling tacit toleration of Russia on Ukraine or Crimea. Frankly, states have to learn how to walk and chew gum at the same time—to have the necessary dialogues to promote stability without signalling tolerance in any way for Russian behaviour in Ukraine or elsewhere. I raised Ukraine specifically because that is where Canada can actually signal a slight difference in approach. In addition to all that we're doing to support good governance in Ukraine and military readiness, we should also start including in our talking points support for the peace process, for the Normandy format that grew out of the Minsk Agreement for Ukraine, which the Government of Canada studiously avoids referencing in public pronouncements. It's time we started raising that. I note that there are many voices urging Biden to take up the Ukraine issue in this way.

Now my final point. I really was interested in the opening keynote, and of course it was echoed by many different speakers and participants—this issue about how to handle China's soft power in the Arctic. A short version of the question is, do we resist at all costs "the long con," or do we welcome China into the Arctic to allow the kinds of investments that are needed? To that, I would say that really there are fundamental governance issues involved here. I participated in a conference process that looked at Chinese investment in Africa with some very key African speakers. They said that what they needed was expertise and support to negotiate good deals in their interest. This brings us right back to the first point I made about community resilience and about giving Northern communities the resources, the expertise, the support, and the listening, so that we can strengthen their ability to take advantage of investment opportunities without negative aspects of exploitation.

Whitney Lackenbauer

Thanks, Peggy. I think you covered a wonderful range of areas that we began exploring in our discussions over the last three weeks. I will build on a couple of the elements that you raised and maybe filter it through that framework that several of us referred to, thinking about threats *through*, *to*, and *in* the Arctic, and as Dr. Greaves mentioned, also threats *from* the Arctic. How do we employ these filters when we look at Russia, for example, as potentially a source of threats to North America? Russia may not pose a direct threat *to* the North American Arctic, but threats may emanate *from* the Russian Arctic, be they submarines or cruise missiles, that may pass through Canadian aerospace or territory to reach targets.

We have also been encouraged to think about threats to the Arctic. We had a session offering rich reflections on how we conceptualize climate change and environmental change as both threats to the region, but also creating or amplifying threats within the region. And then considering the broader basket of threats within the region, we heard insightful Northern perspectives, with Bridget Larocque and John Mitchell bringing to the fore the myriad concerns at the local level. It was very interesting that they expressed unequivocally that they are not hearing a lot of concerns at the community level about the great power competition as the most urgent set of threats to Northern ways of life. Instead, the focus is on other threats. We heard gendered perspectives and Indigenous perspectives on these themes, and an affirmation of the centrality of the environment to discussions about Arctic geopolitics on the different scales that we have been exploring.

Today, I would love to hear questions from all the participants and some ideas on where this conversation might be taken in terms of policy. We have the 2019 Arctic and Northern Policy Framework, which gives a high-level Government of Canada perspective on a host of issues familiar to those of us who have been exploring Arctic issues for a long time. The big challenge, of course, is converting that unprioritized list of apparently equally urgent needs into something that is actionable. Then, how do we bring those agenda items into meaningful dialogue with what we prioritize as requirements within the defence and security sphere?

I really like how the Arctic and Northern Policy Framework broadens language from whole-of-government, which I would argue is still something that has not been achieved, to whole-of-society approaches. It is difficult enough, even within the federal family, to get departments and agencies to speak to one another. The need to broaden that out across governments and levels of government within Canada, given the way that we're constructed as a

country, and then also broaden that out to whole of society, is a daunting challenge. I see real opportunities for engaging with non-governmental organizations and also with the private sector to leverage some of the existing capacity within the North. When I say that, I am not only talking about disaster response or more human security responses. I am also thinking about layered ecosystems of sensors and other constructs to which Dr. Charron and Dr. Teeple introduced us. I think we also can contemplate opportunities or roles for Canada relating to North American defence and security, more broadly defined.

A lot of the discussions touched on the human and social impacts of climate change, and the centrality of the environmental sector to Arctic politics. I found the way that Dr. Greaves connected that to the streams of Atlantification and Pacification to be innovative and useful—how Pacific or North Pacific political affairs spilling over into the region also may be a catalyst for spillover effects on regional stability. Today, we might discuss NATO and the re-emergence of the Greenland-Iceland-UK gap as a framework for exploring the European or Eurasian Arctic as an entrance point into the North Atlantic, and some other classic Cold War frames that some of us may have shelved but are now pulling back out.

I also think that, as much as I agree with Peggy's military assessment that there is no short-term immediate military threat to the Canadian Arctic, this does not mean that there are no threats by non-like-minded states to the Canadian Arctic. Here, I think particularly about below-the-threshold activities: things that we have seen playing out in the Nordic countries, and certainly in the Baltics and Ukraine. We might also discuss cyber in more detail. On several occasions, Dr. Buckley has raised questions about cyber, and we may wish to explore the Arctic dimensions of cyber and where that domain might be used in a distinctively Arctic way. I would suggest that its purpose would not be to destroy things, as much as to potentially sow chaos and divert our attention and resources towards our Arctic so that they cannot be used to mitigate or meet threats in other parts of the world.

We might also talk about information operations and how the potential for the polarization of certain debates may also be ripe for exploitation. Perhaps some of you will suggest that those Arctic debates are inevitable domestically, given the dilemmas that lie at the core of our economic and development models for the Arctic, which in essence seek to exploit the very hydrocarbon resources that are the drivers of climate change and human instability in the region.

I would also love for us to return to community-level and resiliency issues. As I mentioned, Bridget Larocque raised important questions about the

gendered impacts of security, and the priorities within Indigenous communities in the North. Additionally, John Mitchell talked about the Rangers and about the implications of environmental change for search and rescue, imperatives for emergency and disaster response, and humanitarian assistance within the region. As well, Dr. Causey talked about threats to built infrastructure and what future investments in infrastructure might look like, given the dramatic environmental changes occurring in the region. He enticed us in terms of thinking about new social networks emerging in the North, how we might conceptualize opportunities at the sub-regional level, and what sort of relations we might look for *within* those areas rather than fixating on connections to Southern Canada. This ties into interesting opportunities for the Canadian Armed Forces to be at the forefront of innovation as the military determines what its increased Northern footprint should look like, this being directed by *Strong, Secure, Engaged* and also the Arctic and Northern Policy Framework.

Lastly, one of the topics I would love for some of the audience members to weigh in on is NORAD modernization. This is an area in which Canada needs to get moving in earnest. Unless we start to have some of those difficult discussions, we will miss the opportunity to shape what kind of roles we would like to play within that construct. I think the most contentious questions will be about missile defence and whether or not the new deterrence by denial approach and the SHIELD construct unveiled by the United States encourage Canadians to revisit our stance against direct participation in missile defence, which we have held over the last couple of decades. If so, what should our direct participation look like? How does providing sensor systems in the Arctic implicate us in the larger construct, if they are inherently contributing to layered systems ultimately feeding into U.S. analytics determining how to respond—perhaps even pre-emptively—to adversarial missile strikes against North Americans or the territories of our allies?

I think there are real opportunities to foster frank conversations about what NORAD modernization should look like—and I am deliberately making a normative statement there. What should NORAD modernization look like from the standpoint of Canadian participation? Who should be involved in that conversation? What opportunities might Canada stand to gain by being involved in that conversation earlier rather than later? How can we encourage decision-makers within the civil service and the political elite to take note of emerging North American defence and security challenges, and think about proportionate Canadian contributions to them?

Ernie Regehr

Thanks very much, Whitney. We're off to a terrific start. There is one question from Paul Meyer in the chat and another question coming up, but maybe I'll insert one because it was on one of the early panels, the Northern Perspectives panel. There were specific comments about the importance of devolving decision-making in the North and, in that context, there was a point made that it's very important for all voices to be heard—the importance of Indigenous communities, Rangers, and others on sovereignty issues. So, the broad question is, are there institutional gaps that need to be closed or filled in order to enhance or amplify voices of the North in these decisions? And Peggy, I wonder if you might look at Paul Meyer's question.

Whitney Lackenbauer

Thanks, Ernie, that is a great question. I want to be very clear that I am not speaking on behalf of Northerners—this is the perspective of Whitney Lackenbauer, Ontarian, on it. I think there are gaps. But I also want to start with a caveat that, when the federal government held the consultations that led to the Arctic and Northern Policy Framework, the Department of National Defence was applauded as an example of best practices for ongoing consultation and information exchange with Indigenous people with respect to activities in the Arctic. So, when I read that reference in the Arctic and Northern Policy Framework, in light of the UN Declaration on the Rights of Indigenous Peoples, Article 30, and requirements that "military activity should not take place on lands or territories of Indigenous Peoples, unless justified by a relevant public interest or otherwise freely agreed upon with, or requested by, the Indigenous Peoples," I thought, "good, so, Canada is doing well." Northern rightsholders are acknowledging that.

That said, we have thick informal networks that exist, in which Northerners serving in the Canadian Rangers, for example, are not only the eyes and ears, but also the voice, of their communities within the Canadian Armed Forces. That contributes to situational awareness about threats in the North, and potentially to the North, particularly on the soft security side. Gaps exist on the hard security side, and it is going to be interesting to see in which conversations about those topics Northern Indigenous representatives want to be involved. We are all well aware of capacity issues that challenge a lot of Northern representative organizations, including the Permanent Participants to the Arctic Council. While individuals have a great deal of subject matter expertise in certain areas, the realities of many Northern representatives' organizations are that a small number of people are expected to comment on a very wide range of areas.

One of my questions is, do Northern Canadians *want* to be involved in conversations about how we are going to deal with military threats that pass *through* the Arctic? By this, I mean threats that do not threaten or heighten the risk to their homeland in the direct way. If they do want to participate substantively, then as part of the process leading up to NORAD modernization, the Department of National Defence and the Government of Canada have an opportunity to arrange for those conversations. These conversations may not be exclusively big "C" consultation, as legally mandated, but also conversations around these issues where there is also an opportunity for reciprocal learning and education in dialogue with Northerners. This also may help to avoid setting an agenda that implies a binary between investing in communities and investing in dedicated military infrastructure or capabilities. The vision of the Government of Canada is, and must be, to do both. That is the only responsible vision. Figuring out how everyone can benefit from a bigger pie will be beneficial with the caveat, as Peggy said, that we do not want that pie to get too big and choke out our ability to enjoy other pies in other parts of the government as well.

Peggy Mason

To answer the question from Paul Meyer, "if there was one arms control or confidence building measure relevant to Arctic security you would wish to champion in the near term, what would it be?"—it really goes back to the point I made about the dialogues. I really think, if I could do one thing, it would be to reinstitute the Arctic-specific military-to-military dialogue processes that used to involve Russia and now do not. That would be my point there.

I want to join with Whitney—this may be the one area on which we just disagree, and that's with respect to ballistic missile defence and Canada's role therein. Even the wildest proponents of the ground-based ballistic missile defence system in the U.S. will only assert that it can work against a small number of missiles from a rogue state. Translating that into the Arctic, into the context of Russia and China, even if we say it's going to be conventionally focused, Russia is not going to look at it that way, nor should it. SHIELD is tantamount to a denial of nuclear deterrence. It's essentially saying that we will no longer have mutually assured destruction. If it worked, it would put at risk the retaliatory capability of Russia and China, which is the basis of nuclear deterrence. But I take heart, because what I heard from Andrea Charron in particular was that it's completely unfunded. It was unfunded even under Trump. And with Biden, we're all familiar with his priorities; certainly we're familiar with the climate priority and rebuilding post-COVID. The SHIELD

system we're talking about is extraordinarily expensive, and it would be on top of huge increases in nuclear modernization that are already planned, which I think President Biden will also be interested in curtailing somewhat, although that is a difficult task, as President Obama found out. One confronts a massively powerful series of vested interests when you take on the nuclear weapons infrastructure in the United States. I guess I would suggest that we haven't missed the boat with respect to shaping the architecture, because it's a bit more open than perhaps we might have thought, and also, that I think there's more than enough for us to do with respect to focusing on the enhanced domain awareness aspect. I've been involved in these discussions at the government level on ballistic missile defence, and Canada joining, and I'd also suggest that Canada should run in the other direction, rather than getting involved in the political dimension of that, which is quite difficult.

Whitney Lackenbauer

I actually agree with a lot of what you said, with some caveats. First, I am not sure that SHIELD is designed or conceptualized to deal with every massive nuclear exchange; it may be more about scenarios in which an adversary could seek to deliver a targeted, limited conventional strike against North America to disrupt our ability to mobilize and respond to adversarial actions in other parts of the world. That said, I would refer off to a piece that Ryan Dean and I wrote for NAADSN, thinking about deterrence logic, as well as Ernie Regehr's wonderful book *Deterrence, Arms Control, and Cooperative Security* where he deals with some of these questions head on.

If SHIELD is truly about complete deterrence by denial, if this is the Strategic Defense Initiative (SDI) Star Wars 2.0 in its aspirations, that is going to require a fundamental rethinking of how we conceptualize deterrence. On the other hand, enhanced capability for deterrence by denial, in theory, could actually enhance the credibility of the deterrence writ large. The conversations will also be informed by which domains we are thinking about. Where I agree completely with you, Peggy, is on the need for Canadians to have discussions about this. These are core issues. These are questions with which Canada has grappled historically, and while I worry that we have forgotten how to have these conversations, it is important to do so.

Ernie Regehr

We may come back to this topic again, but there are a couple of other questions. One is from Richard Denton, and he asks about a deep-water port in the North and then makes the comment that "we're spending large sums of money on the Navy, new vessels, but will any of these play a role in the Arctic,

ice hardened, and would this money not be better spent on icebreakers and search and rescue?" So, if you have comments on the utility of the new Arctic patrol vessels and the slowness of acquiring another large icebreaker, do share.

You might also add to that Adele Buckley's question, which is a more straightforward information one. She asks, Is Canada an equal partner in NORAD, now or in future modernization plans? I don't know whether Adele Buckley means by that an equal funding partner as well, but that's implied.

Peggy Mason

I guess it all depends on what you mean by equal partner. I mean, we have our specific areas of responsibility and I would say that, within those areas, Canada is sovereign in them. But I will go back to the example of ballistic missile defence. One of the reasons why it became so politically toxic when Paul Martin was considering it was because the aim to shoot down the missile in space before it gets over your airspace. When it's being targeted, the United States would not know whether it was going to hit the United States or Canada, whether it would hit the Arctic or the mainland of the United States. That means that the decision to shoot it down is a vital national security decision that cannot be devolved. So, it means that even if Canada participated fully in missile defence, which I frankly don't think we're going to do, but if we did, we still would not have equal decision-making power. We would be sitting at the table, but the decision would be made by the United States because it can't, in fact, devolve the decision. That's an example of where we're not equal partners based on capacities, given that the U.S. has the bulk of the missile defence capacity. But, having said all that, and I'm sure Whitney will elaborate on this, Canada has a lot to say and it's a very unique relationship, this partnership for North American aerospace defence.

With respect to these sums of money on the vessels, my concern about the Arctic offshore patrol vessels was that they weren't ice-capable enough. I mean, it's the classic problem of Canada trying to do many things with these big projects and there being some concern that perhaps we spread ourselves too thin, and therefore they wouldn't be able to play the role in the Arctic that we need. I suspect the ships that are being discussed are the new surface combatants, and not the patrol vessels that have specific relevance to the North. Again, I'd have to say, it's not an either-or. We have to prioritize, but we really have to find money for some of these capabilities that are so desperately needed in the Arctic.

Whitney Lackenbauer

NORAD may not be a completely equal partnership, but it is equitable. And given the equities that Canada brings to the table in a bi-national command, when you look at the asymmetries according to every metric of power between Canada and the U.S., we are the envy of any modest-sized country in the world in terms of the relationship that we enjoy with the United States. My suggestion is that we are well-situated: we have a "seat at the console" (as my colleague Richard Goette describes it), we have a seat in decision-making within NORAD, and there are expectations that we are going to ante up. When the DEW Line was created, the Americans paid for the whole thing. We eventually picked up some of the operating and maintenance costs after it was operational, and Canada paid for 40% of the construction costs relating to upgrading the DEW Line to the North Warning System in the 1980s—with the U.S. still kicking in 60%. If I'm looking at that trend line, it would not have been surprising to me if a Trump administration had insisted that we pick up 60% of the cost for sensor systems in the Canadian territory this time round; actually, Trump would probably have tried to negotiate and have us pay 100% of the cost to reciprocate for what the DEW Line cost the U.S. back in the 1950s. Going forward, I think that it is Canada's time to not be excessively parsimonious; we cannot look like we are free riding on this one. We have responsibilities under NORAD. NORAD benefits us, and the Arctic represents an area in which Canada is well suited to make meaningful contributions to NORAD that would be respected by our "premier partner."

In terms of questions, the *Harry DeWolf*-class Arctic and offshore patrol vessels give us a lot of capability that we did not have before. The fact that they have relatively modest armament and can only break ice up to one metre does not worry me, given the near-term absence of military threats in or to our Arctic and the amount of capacity that the platforms bring for humanitarian disaster response capabilities. These are great to have. It is telling that the Canadian Coast Guard is also procuring some of them. Does that negate the need to build icebreakers? No. We have our interim measure, given the recent purchase of three medium icebreakers (CCGS *Captain Molly Kool*, CCGS *Jean Goodwill*, and CCGS *Vincent Massey*), but we need to get going on CCGS *John G. Diefenbaker* and figure out what our needs are going beyond that. So, recapitalization is important.

There is a much bigger question about infrastructure needs in the North. We throw out declarations of requirements for infrastructure like ports, and this is a good idea—and Canada is building a deep-water port in Iqaluit. I am not sure that is an ideal spot, but the people who are making these decisions obviously arrived at it based on their criteria. Is one port sufficient? I think that

depends on what futures we are trying to carve out. If we are looking at augmenting our ability to operate with deep-draft vessels in the Arctic, or to stimulate non-renewable resource-based economic development in certain areas, then it probably makes sense for us to look at ports. It also behooves us to think about these major infrastructure investments in terms of multi-modal systems and dual-use, civilian-military benefits. We also must continue to have conversations with our American and Kingdom of Denmark/Greenland allies to figure out, through a defence and security lens, where infrastructure investments can be optimized in a truly North American construct.

If we are thinking holistically about what North American defence and security modernization looks like, we need to really open up our aperture and look much more broadly at all the secondary and tertiary benefits, but also the risks, that these kinds of investments entail. We should also have frank discussions about what the relative short-, medium-, and long-term returns on investments are for some of these massive infrastructure projects versus investing in improved wharfs and small-craft harbours at community levels, which can enable localized search and rescue, food sovereignty, and so on.

Peggy Mason

I just want to come back in on the cost aspect, and that's of course why the Canadian surface combatants are in the news, because of increasing costs, but I do think we have to face that elephant in the room. I mentioned in the opening that the 2017 defence policy, even with the very significant increase in defence spending, did not include NORAD modernization. The big increases set out in the 2017 defence policy don't actually kick in until 2021, which means you know the government's already facing all of these other fiscal challenges and the feeling is that, when it comes to NORAD modernization, the Department of National Defence (DND) would be told to find the money, which means setting different priorities. Now, on the plus side, I would say that for the past 10 years, DND hasn't spent its annual allocation and, since the 2017 budget, it hasn't spent it to the tune of about $2 billion a year. Under the new accounting procedure set out in the 2017 defence policy, which was a very good change, the money doesn't lapse; it just gets added back into the budget. So, that part of it is the good news, that there's perhaps a little more wiggle room than there would have been otherwise, and, of course, the reason why the money is not being spent is because the procurement programs are just so difficult to manage. It's not that the money is not allocated; it's that the programs are behind. Nonetheless, it provides some room to manoeuvre. But I do think that we have to be very clear-minded about the fact that there are a lot of calls on

government spending going forward. I would add, of course, that that means the North should get its fair share of that, but nonetheless there are many calls on that money.

Ernie Regehr

There's another question, a comment related to NORAD and NORAD modernization, but I think before going to that, if you don't mind, there's one that's more climate-oriented that we may do well to get into. Bill Adams asks, Is Russian long-term economic dependence on Arctic fossil fuel development going to conflict with U.S. and other world powers' priorities for responding to climate change by reducing and eliminating fossil fuel use? So, comments on the long-term viability and future of the Russian Arctic?

Whitney Lackenbauer

Thanks, Mr. Adams. I think this is exactly the sort of long-term strategic questions that we should be grappling with. Again, when we are assessing the nature of threats, who we are seeing as threats, and the basis upon which they can mount a threat, we need to ask deeper questions. I look at Russia's vulnerability and the fragility of its undiversified economy. If it is continuing to chart futures that are predicated on a tremendous global demand for oil and gas, and if that is something that the world is deciding to wean itself off of, what does that mean in terms of Russian behaviour? Does it have to act in the short term, while it can still afford to be a bold player? Does this mean that, over time, it is going to make structural adjustments, recognizing that that global demand equation is going to change?

I read a news piece today about Russia potentially building plastics factories in its Arctic, and I would see that as potentially a way of Russia saying, "How can we remain a player going forward if oil is not going to be used primarily as an energy source, but as something that's going to be fashioned into plastic products?" Maybe this is the kind of structural change that we might anticipate from Russia going forward, or we might see the opposite logic of wanting to keep drilling and opening the taps as wide as it can while there is still the demand for it. Does that potentially bring Russia into loggerheads with the West, if the West does choose to get serious on mitigating climate change? This is a wonderful, big question with a lot of strategic implications, not only related to the defence realm, and not only related to the Arctic, but more broadly.

Ernie Regehr

Edward Kaufman asks whether there would be difficulties in establishing an Arctic Code with respect to any redundancy with UNCLOS or the Arctic Council.

Whitney Lackenbauer

If this is a Code of Conduct in terms of military behaviour, I would say that as long as it is in compliance with UNCLOS, and no one is taking away from the sovereignty or sovereign rights of the Arctic states sitting at the table, then it is neither redundant nor competitive with the Arctic Council. I am a big fan of the Council not having a military/security mandate. I think that, ironically, what saved the Arctic Council was the United States and Russia opposing well-intentioned appeals in the 1990s to have the Arctic Council solidify or cement a nuclear-weapon-free zone or arms control regime within it. I think what has allowed it to thrive into the 21st century was removing these high political issues that, particularly since 2014, would have probably sunk the Arctic Council—or at least stressed its ability to function as business-as-usual, as it has largely succeeded in doing.

In terms of the Arctic Code of Conduct, I would not turn to the Arctic Council as the institutional mechanism to manage that. I do not think that serves the Arctic Council's purpose, or the Arctic states' purposes. Instead, we might look to mechanisms like the Arctic Security Forces Roundtable and the now defunct Arctic Chiefs of Defence Forum as options to revisit—which I am sure are already being considered. I think Peggy set up the wicked challenge of doing so without it looking like we are handing Russia a new *status quo*, a return to business-as-usual more broadly, after its unlawful activities in Ukraine and elsewhere.

Peggy Mason

Yes, of course, as Whitney surmised, it's a military Code of Conduct and therefore should be outside the Arctic Council. Of course it would need to be in conformity with UNCLOS, I cannot see where it would be unable to do so.

In terms of the hard question of how do you get back to the talks and re-establish these mechanisms without appearing to be saying to Russia, "let bygones be bygones," I think what needs to be happening, and I mentioned this at the outset—President Biden is being urged very strongly to get involved in supporting the peace process with respect to the Donbass, based on the Minsk Agreement Principles, which start from the premise of Ukraine territorial integrity and sovereignty. So, that's the starting point, and I think

that even a signal from the United States that it is interested in doing this would make it immeasurably easier for everyone else to take these other steps.

On the other hand, the others speaking up and saying that they want to take these steps, provided that there is a re-invigoration of the Minsk Process and the Normandy Format, would actually help get that launched. It's kind of a chicken and egg, so let's try and do both.

Ernie Regehr

Maybe I'll just comment briefly on the business of giving Russia a free ride. I think it depends a lot on how these forums are structured. If they're structured as the Arctic Council is, for example, that means that participation is not a reward for good behaviour. You participate in it by virtue of being a member of the region, and membership doesn't go away in the event of bad behaviour. There are many international fora—for example, the OSCE and its Vienna Document protocols—that continue to apply, regardless of the nature of a member state's behaviour, and it thus becomes a forum for addressing that behaviour. So, I think if these Arctic dialogue forums were structured with membership being by virtue of geography, then membership and participation continue. The problem with the NATO-Russia Council is that it tends to get suspended when it's most needed to address these things. I think that there are ways around the notion of reward for continuing to participate.

I'm just now going back to the questions in the chat. There is a question on the "threat." Do you think the U.S. and Canadian governments can come to common ground on the categorization of the threat? Who do you think is most likely to compromise? Will the Government of Canada take a harder stance? Will the U.S. soften its stance under President Biden? If they can't, what does the future of NORAD and NORAD modernization look like, if they can't agree on the fundamental threat?

Whitney Lackenbauer

I always prefer posing questions like that, rather than answering them! I think that the questioner framed it very well. Canada will have to come to some sort of a common ground with the United States. This has been our dilemma since the Second World War. At the end of the day, if the United States is unwilling to compromise on its fundamental threat assessment, then Canada will have to carve out whatever niches it wants to fill within the strategic threat environment to which the United States is responding. In essence, I anticipate that President Biden may reconsider, within an Arctic context, a return to more of the messaging under Obama, which left more space for a focus on soft security issues and, in particular, human security- and environmental security-

type issues. This does not require a complete pivot away from what the U.S. National Security Strategy has identified as being the two main competitors: China and Russia. These two actors will continue to feed the U.S. system in focusing on what threats they may represent within the Arctic.

Introducing my own bias directly into this, I hope that U.S. strategic analysts will take a careful look and figure out where, in what domains, and in what areas Russia represents a threat within the Arctic, and where China represents a threat in the Arctic. I think that China, for example, in the medium term at least, poses a much more significant risk in terms of foreign direct investment and political influence activities in the region than it is a military threat (at least in any direct sort of way). On the flip side, the opportunities for practical cooperation with Russia may actually grow over time. For example, the relationships that already exist between U.S. Coast Guard District 17 and its Russian counterparts just across the Bering Strait are very healthy. These services are in communication every single day, according to U.S. Coast Guard District 17. That can be something that could be amplified to say that, while we are competitors globally, within an Arctic space we can balance off that competition with meaningful dialogue and cooperation where it is in our joint interests.

Setting up Russia and China as major threats in order to secure the funding envelopes necessary to respond to those threats has its function. But I do not think that the U.S. has to go and make them a threat everywhere, in all scenarios and all domains, at all times. Over the last couple of years, I have been worried that this is the direction in which we were heading. I hope that is not the case, because I do not think it is helpful. I do not think it leads to good strategic analysis. I do not think it leads to good diplomatic opportunities or space for positive diplomacy, where appropriate, and it limits the range of options. So, Canada might encourage the U.S. to potentially come around to what *Strong, Secure, Engaged* promoted, which is talking about deterrence and dialogue, where we are prepared to defend if needed and certainly deter wherever we can, but that at the same time they can still seize opportunities for collaboration that serve mutual interests—and there are lots of mutual interests within the Circumpolar Arctic. Where appropriate, we can strive to insulate some Arctic-focused interests from tensions in other parts of the world, where we may not have common ground. This logic does not require that we march to the drum of Arctic Exceptionalism, which is a concept that Ryan Dean and I discuss skeptically in a recent chapter. But it does encourage careful analysts to recognize that, when it comes to certain variables, there remains common

ground in the Arctic, and we need to leave space to collaborate in these areas where possible.

Peggy Mason

The only thing I would add to that would be that I think there's clearly sufficient common ground now with President Biden for Canada to focus on upping its game in our traditional area of enhanced domain awareness. That's what we're going to focus on. I frankly think that'll be something that President Biden will be happy with, and that the United States will be happy with. So, I think we don't have to have the exact same characterization of the threat in order to agree on a very useful role that Canada can play, whichever version of the threat you are espousing. But happily, I think the difference has narrowed between the two countries in terms of the characterization of that threat.

Ernie Regehr

Thanks very much. Well, I think we've gone through all of the questions and points, and there have been some additional discussions in the chat. Whitney and Peggy, are there any concluding comments that you'd like to make?

Peggy Mason

Well, I guess a couple of points. Of course, I've read some of what Whitney has referenced, but I must admit, I haven't read everything that he's referenced and so I have to go back and read it. I guess the problem with defence, that both Ernie and I have, and it's got to do with our age in part, is that we started learning all this stuff when Paul Nitze, the negotiator of the Strategic Arms Limitation Agreement (SALT I), was dealing with the Strategic Defense Initiative (SDI), but he made comments and conditions about defence versus offence more generally. He set up the criteria to determine which is more cost-effective at the margins. And frankly, it's impossible for defence to be more cost-effective at the margins, and it therefore sets up incentives for overwhelming those defences, however precise, however limited, with more offensive systems. So, it's an incentive for arms racing that we really have to try and avoid.

So, I wanted to make that point, but I want to end with the point about Northern voices and Northern participation. For me, one of the most telling exchanges was a question that was asked to Bridget Larocque about how she felt about the conversation about the threats emanating to the North American Arctic from some of the Arctic actors, and Russia and China were mentioned. In her answer, she said that she wasn't willing to accept assertions by others of

motivations when there had been no meaningful opportunity for dialogue. She hoped that Canada would bring to bear, and she used the term peacekeeping, but I think she was talking broadly about diplomacy. That, for me, was one of the most telling moments in all of the many good discussions during this series. And so, I would like to end with that.

Ernie Regehr

Thanks very much. Whitney, just before going to you on that, just one more brief comment on ballistic missile defence and Canada's involvement. We need to keep in mind that a major item on the Biden agenda is going to be the follow-on to the New START treaty, which they've just extended. So, that's going to be a preoccupation throughout, and ballistic missile defence has, up to this point, been carved out of the great power competition, in the sense that it's not directed at either Chinese or Russian second-strike capabilities. And any moves that tend to compromise that position will complicate the negotiations of a follow-on treaty very, very much so. That's a very important consideration for Canada to have when it thinks about joining BMD in the future.

But, Whitney, your concluding comments.

Whitney Lackenbauer

My concluding comments are a simple thank you. Thanks to all of you as participants for sharing such wonderful insights in what is inherently a constrained, virtual environment. Thanks for both enriching and directing the conversations with your questions. Thanks to all of the presenters and panellists over the last three weeks for bringing such a diverse array of subject matter expertise to this conversation. If anything, I come away hopeful that we have successfully set a table around which we can continue these conversations in the months to come. I would also like to highlight the importance and timeliness of these conversations. Even in our exchanges over the last hour, we grappled with several core questions that we are going to see playing out in the newspapers in the months to come. We all benefit by exchanging views, and particularly exchanging views with those who do not share the same perspectives or assumptions that we do. We have a great opportunity in this country to actually model how you can continue to have civil, constructive discussions and debates, and even disagreements, because we are all looking for desirable futures. We may come with different ideas about how we get there, or what is realistic and what is possible, but we need to embrace the wonderful opportunities that we have in Canada to engage in these conversations. So, thanks to all of you, for the gifts of your ideas and your time. Thanks, Peggy, and thanks, Ernie, for all

that you have done to make this series possible. And again, thanks to everyone for participating.

Ernie Regehr

Well, thank you, Whitney. That was very well said on behalf of us all to thank all of the participants, to thank, as you've done, all of the panellists, to thank the organizers. Whitney and Shannon in particular have really done a lot of key work on putting this all together. It's been a great few weeks to have had the opportunity to address these issues with people of extraordinary expertise and knowledge on the Arctic. And so, it's a huge privilege. With that, thank you to all.

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Bridget Larocque is an Indigenous resident of the NWT with comprehensive knowledge of research methods, Indigenous and gender issues in the North. A Métis leader from Inuvik, Bridget has served as Executive Director of Gwich'in Council International (a Permanent Participant at the Arctic Council) from 2007-12; manager of self-government for the Gwich'in Tribal Council in Inuvik (2015-16); implementation coordinator at Indigenous and Northern Affairs Canada in Ottawa (2016-17); assistant negotiator with the Executive and Indigenous Affairs branch of the Government of the Northwest Territories (2017-18); as Executive Director of the Fort Norman Métis Community (2019-20); and as a policy advisor and researcher on contract with the Arctic Athbaskan Council (a Permanent Participant at the Arctic Council) since 2017.

A former Canadian Ambassador for Disarmament to the UN and an expert on the political/diplomatic aspects of UN peacekeeping training, since June 2014 **Peggy Mason** has been the President of the Rideau Institute, an independent, non-profit think tank focusing on research and advocacy on Canadian foreign and defence policy. She brings a progressive voice to issues ranging from the

imperative of nuclear disarmament to the centrality of UN conflict resolution, appearing regularly in the blogosphere, in print media, on radio and television and, since March 2020, in virtual webinars. She is Vice-Chair of the Canadian Pugwash Group.

Paul Meyer is Fellow in International Security and Adjunct Professor of International Studies at Simon Fraser University in Vancouver (since 2011). Previously, Mr. Meyer had a 35-year career with the Canadian Foreign Service, including serving as Canada's Ambassador to the United Nations and to the Conference on Disarmament in Geneva (2003-2007). He is a Senior Advisor to ICT4Peace and the current Chair of the Canadian Pugwash Group. He teaches a course on diplomacy at SFU and writes on issues of nuclear non-proliferation and disarmament, space security and international cyber security.

John Mitchell of Dawson City, Yukon, has recently stepped down as the patrol commander of the Dawson Canadian Ranger patrol – an elected position in which served continuously for three decades (1991-2021). He continues to serve as a Ranger and works closely with the Junior Canadian Ranger program. He was appointed a Member of Military Merit (M.M.M.) on 22 September 1997 and invested at Rideau Hall on 29 May 1998. He is the recipient of the Yukon Commissioner's Award for Bravery for his actions in the spring of 1999 that saved the life of six-year-old Corey Taylor of Dawson City, who had been attacked by two dogs, as well as a Yukon Community Safety Award in 2012 for his work as a youth mentor. Mitchell is the president and search manager of Klondike Search and Rescue Association, a non-profit organization of volunteers working in partnership with the Emergency Measures Organization of Yukon Government and the Royal Canadian Mounted Police to provide ground and inland water search and rescues. He has been involved in search and rescue since 1991, and has been trail manager of the Canadian portion of the Yukon Quest dog sled race for nearly as long.

Heather Nicol is the Director of the School for the Study of Canada and a Professor in the School of the Environment at Trent University in Peterborough, Ontario (Canada). Her northern research interests lie in the critical geopolitics in the circumpolar North and the relationship between the interests of nation-states and peoples of the North. The geopolitical context of the North and the contemporary issues raised in the North which create puzzles for sovereignty and governance have fuelled Prof Nicol's interest in the North. Prof Nicol is also involved in the Thematic Network on Geopolitical and

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Ernie Regehr is Senior Fellow in Defence Policy and Arctic Security with The Simons Foundation Canada and Research Fellow at the Centre for Peace Advancement, Conrad Grebel University College, University of Waterloo. He is co-founder and former Executive Director of Project Ploughshares. His publications include books, monographs, journal articles, policy papers, parliamentary briefs, and op-eds. Ernie has served as an NGO representative and expert advisor on Government of Canada delegations to multilateral disarmament forums, including Review Conferences of the Nuclear Non-Proliferation Treaty and UN Conferences on Small Arms. In that context he also served as adviser to the Government of Kenya in the development of the regional small arms initiative, the Nairobi Declaration. He is an Officer of the Order of Canada.

Elizabeth Riddell-Dixon has spent four decades researching and writing about law of the sea policy. She is a Distinguished Senior Fellow with the Bill Graham Centre for Contemporary International History, University of Toronto, and Professor Emerita in the Department of Political Science at Western University. Her recent books include *Canada and the Maritime Arctic: Boundaries, Shelves, and Waters* (with Whitney Lackenbauer and Suzanne Lalonde) and *Breaking the Ice: Canada, Sovereignty, and the Arctic Extended Continental Shelf*.

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Beyond The Cooperation- Conflict Conundrum

Edited by P. Whitney Lackenbauer and Peggy Mason

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