

2016 ARCTIC YEARBOOK



The Arctic Council: 20 Years of Regional Cooperation and Policy-Shaping

Lassi Heininen
Heather Exner-Pirot
Joël Plouffe



Arctic Yearbook 2016

Heininen, L., H. Exner-Pirot, & J. Plouffe. (Eds.). (2016). *Arctic Yearbook 2016*. Akureyri, Iceland: Northern Research Forum. Available from <http://www.arcticyearbook.com>.

ISSN 2298–2418

This is an open access volume distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY NC-4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited and the use is non-commercial.

Cover Image Credit:

Harald Finkler. Arctic Council Ministerial Meeting, Barrow, Alaska (12 October, 2000).

Editor

Lassi Heininen, University of Lapland | lassi.heininen@ulapland.fi

Managing Editors

Heather Exner-Pirot, University of Saskatchewan | heather.exner@usask.ca

Joël Plouffe, École nationale d'Administration publique (Montréal) | joel.plouffe@enap.ca

Editorial Board

Chair

Dr. Lawson Brigham (Distinguished Professor of Geography & Arctic Policy, University of Alaska Fairbanks; Senior Fellow, Institute of the North, United States of America)

Members

Dr. Gail Fondahl (Professor of Geography, University of Northern British Columbia, Canada)

Dr. Ólafur Ragnar Grímsson (President of the Republic of Iceland)

Ambassador Hannu Halinen (former SAO, Finland; Special Advisor to the IIASA Director General and Chief Executive Officer Exploratory and Special Projects)

Dr. Steven E. Miller (Director of the International Security Program; Editor-in-Chief of International Security, Harvard University, United States)

Dr. Alexander Pelyasov (Russian Academy of Sciences; Director of the Center of Northern and Arctic Economics; Ministry of Economic Development & Trade, Russian Federation)

About Arctic Yearbook

The Arctic Yearbook is the outcome of the Northern Research Forum (NRF) and UArctic joint Thematic Network (TN) on Geopolitics and Security. The TN also organizes the annual Calotte Academy.

The Arctic Yearbook seeks to be the preeminent repository of critical analysis on the Arctic region, with a mandate to inform observers about the state of Arctic politics, governance and security. It is an international and interdisciplinary peer-reviewed publication, published online at [www.arcticyearbook.com] to ensure wide distribution and accessibility to a variety of stakeholders and observers.

Arctic Yearbook material is obtained through a combination of invited contributions and an open call for papers. For more information on contributing to the Arctic Yearbook, or participating in the TN on Geopolitics and Security, contact the Editor, Lassi Heininen.

Acknowledgments

The Arctic Yearbook would like to acknowledge the **Arctic Portal** [<http://arcticportal.org>] for their generous technical and design support, as well as the scholars who provided peer review of the academic articles. We would also like to thank Global Affairs Canada – Circumpolar Affairs for their support of the launch event; and the University of the Arctic, with dedicated funding from the Government of Norway, for financial support of its planning and printing.



The Arctic Council: 20 Years of Regional Cooperation and Policy-Shaping

Table of Contents

Section I: Introduction	12
<i>Introduction – The Arctic Council: Twenty Years of Policy Shaping</i>	14
Lawson Brigham, Heather Exner-Pirot, Lassi Heininen & Joël Plouffe	
<i>Year in Review: Timeline of 2016 Events</i>	22
Heather Exner-Pirot & Joël Plouffe	
<i>Commentary – The Arctic Council in Perspective: Moving Forward</i>	28
Hannu Halinen	
<i>Q & A: The 20th Anniversary of the Ottawa Declaration (interview)</i>	34
With Harald Finkler & Robert Kadas	
Section II: The Arctic Council as an Institution	40
<i>Environmental Decision-Making in the Arctic Council: What is the Role of Indigenous Peoples?</i>	42
Michaela Louise Coote	
<i>The Strength of Flexibility: The Arctic Council in the Arctic Norm-Setting Process</i>	62
Camille Escudé	
<i>Understanding Media Perceptions of the Arctic Council</i>	75
Andrew Chater & Mathieu Landriault	
<i>Finding a Place in the Arctic Council for Non-Arctic Actors: A Social Network Analysis of the Arctic Monitoring and Assessment Programme</i>	90
Jennifer Spence	
<i>Shaping Circumpolar Agendas: The Identification and Significance of “Emerging Issues” Addressed in the Arctic Council</i>	108
Dorothea Wehrmann	
Briefing Notes	
<i>Arctic Council Upgrade: WWF Arctic Programme Policy Note</i>	122
Marc-André Dubois, Bill Eichbaum, Alexander Shestakov, Martin Sommerkorn & Clive Tesar	
<i>Lessons Learned from Three Recent Chairmanships of the Arctic Council</i>	128
Douglas Nord	

Commentaries

<i>U.S. Chairmanship of the Arctic Council: Mid-Point</i>	137
David Balton	
<i>The Establishment and Progress of the Standing Arctic Council Secretariat</i>	141
Magnús Jóhannesson	
<i>Arctic Economic Council: Creating Parameters for Sustainable Economic Development in the Arctic</i>	146
Tara Sweeney & Tero Vauraste	
<i>Launching the Norwich Model Arctic Council</i>	150
Anthony Speca	

Section III: Arctic Science, Diplomacy and Policy 154

<i>Science as Catalyst for Deeper Arctic Cooperation? Science Diplomacy and the Transformation of the Arctic Council</i>	156
Clemens Binder	
<i>Circumpolar Legislation on Pollutants: How Effective is Arctic Governance on Global Environmental Threats?</i>	170
Doris Friedrich	

Briefing Notes

<i>The Arctic Council's Task Force on Arctic Marine Cooperation</i>	186
Peter Oppenheimer & Molly Ma	
<i>Arctic Research Across the Baltic States: Re-Integrated in the Northern Europe, Getting Closer to the Arctic Frostbites</i>	192
Zane Šime	
<i>Fulbright Arctic Initiative: An Innovative Model for Policy Relevant Research and Public Outreach</i>	210
Ross Virginia et al.	
<i>The Polar Data Catalogue: A Vehicle for Collaboration, Northern Community Partnerships, and Policy-Making</i>	224
Dana L. Church, Julie E. Friddell & Ellsworth F. LeDrew	
<i>Calotte Academy 2016: Building Arctic Resilience through Open Communication</i>	240
Gerald Zojer & Laura Olsén	

Commentaries

<i>The Arctic Marine Shipping Assessment: Key Arctic Council Framework for Protecting Arctic Communities and the Marine Environment</i>	245
Lawson W. Brigham	
<i>From Inspiration to Action, From Action to Institution: Some Early Interventions of Arctic Collaboration in Sustainable Development</i>	250
Eeva Furman	

<i>The Arctic Council Produces a New Arctic Science Cooperation Agreement</i>	254
Evan Bloom	
<i>Building Partnership for a Sustainable Future</i>	256
Erica M. Dingman	
Section IV: Local and Indigenous Issues in Arctic Governance	260
<i>Greenland and the Arctic Council: Sub-national Regions in a Time of Arctic Westphalianisation</i>	262
Inuuteq Holm Olsen & Jessica Shadian	
<i>Lessons from Dumpcano: Governance Issues in Solid Waste Management in Nunavut</i>	282
Gloria Song	
<i>Barents Region: The Arctic Council as a Stabilizing Magnet</i>	304
Florian Vidal	
Briefing Notes	
<i>Revisiting the Northern Forum: Lessons from Alaska's Involvement</i>	314
Emily Tsui	
Commentaries	
<i>The Arctic Council Permanent Participants: A Giant Step Forward in Capacity and Support</i>	322
Jim Gamble	
<i>The Arctic Council: A Tool for Regional Development and Policy-Shaping</i>	324
Vladimir Vasiliev	
<i>The Role of Regions and Cities in Arctic Cooperation</i>	328
Esko Lotvonen	
<i>Overlooking a Regional Cruc of Vulnerability: Missing Women in the Arctic</i>	332
Rachel Kohut & Tahnee Prior	
<i>Tour of Canadian North Highlights Richness, Diversity, and Challenges</i>	338
Bruce Heyman	
Section V: Arctic Geopolitics & Security	340
<i>Russian Air Patrols in the Arctic: Are Long-Range Bomber Patrols a Challenge to Canadian Security and Sovereignty?</i>	342
Frédéric Lasserre & Pierre-Louis Têtu	
<i>The Arctic as a Geopolitical Bond among the European Union, Norway and Russia</i>	361
Matthaios Melas	
<i>"An Arctic Great Power"? Recent Developments in Danish Arctic Policy</i>	383
Jon Rahbek-Clemmensen	

<i>The Political Economy of Russia's Reimagined Arctic</i>	397
George Soroka	
Briefing Notes	
<i>The Arctic Five versus the Arctic Council</i>	429
Andreas Kuersten	
<i>The EU's Arctic Future Following the Spring of Statements</i>	438
Adam Stepien & Andreas Raspotnik	
<i>Is there Scope for Scotland to develop its own Arctic Policy and What Would it Look Like?</i>	443
Erik Kruse	
<i>Stirred Waters Under the Ice Cap: An Analysis on A5's Stewardship in the Central Arctic Ocean Fisheries Management</i>	453
Leilei Zou	
<i>Arctic Council's Impact on Arctic Shipping</i>	467
Ilker Basaran	
Commentaries	
<i>Crystal Serenity – A New Chapter in Arctic Shipping or Just “Doing it Right”?</i>	474
David (Duke) Snider	
<i>Transdisciplinary Dialogue on Board Between Eurasia and America: The 6th International Meeting of the State-Members of the Arctic Council, State-Observers to the Arctic Council and Foreign Scientific Community</i>	478
Lassi Heininen	
<i>An Arctic Forum for Security Co-operation?</i>	483
Benjamin Schaller	
Epilogue	488
<i>Dressing Up: Arctic Council at 20</i>	490
Klaus Dodds	
<i>Obituary – A Tribut to Alyson Bailes</i>	494
Lassi Heininen	

Section I:

Introduction

Introduction

The Arctic Council: Twenty Years of Policy Shaping

Lawson Brigham, Heather Exner-Pirot, Lassi Heininen & Joël Plouffe

This past Fall, the Arctic Council celebrated the [20th anniversary](#) of the signing of the Ottawa Declaration, which established the Arctic Council as a high level forum for cooperation amongst the Arctic states, indigenous communities and other Arctic inhabitants, particularly with regards to [sustainable development and environmental protection](#). We have chosen to focus this year's edition of the Arctic Yearbook on the Arctic Council as an acknowledgment of the central role it has played in regional governance and stability-building during the past two decades.

The Arctic Council is in many ways a marvel. Perhaps the first true post-modern regional organization, representing a new kind of region-building, it has not so much blazed a trail as invented and occupied a unique space in international relations: one that has [privileged cooperation and consensus](#) to the point that it has withstood broader geopolitical tensions between Russia and the West; has provided meaningful inclusion of indigenous peoples and other non-state actors; and prioritized environmental protection using scientific and traditional knowledges as its evidence base. The Council has precipitated much discussion and speculation among policy-makers, and been a theme for many seminars, workshops and lectures, as well as a subject for many scholarly papers and commentaries, as this Yearbook shows.

It has become commonplace, for these reasons, to speak of the Arctic Council in glowing terms. But the forum has its share of imperfections, many of which are structural. As a consensus based forum with no legal character, and occupying a precarious and undeveloped level of governance, the Arctic Council has had to be satisfied with a policy shaping, as opposed to policy making, role. The Arctic Council was not designed to be effective or productive, and to the extent that it can claim to be, it has been despite its provenance. The Council was designed, rather, to foster and promote shared values and norms. In this way it has shaped the Arctic policies and actions of its members; but it has had no opportunity to push them, or hold them accountable.

In the Beginning

Many authors have recounted the origins of the Arctic Council, from Mikhail Gorbachev's [Murmansk Speech](#) to the Arctic Environmental Protection Strategy ([AEPS](#)), conceived by Finland;

to a Canadian non-governmental panel proposing the specific concept in 1990. Several Arctic Yearbook 2016 articles further provide an overview (see in this volume for example Spence; and Escudé). But the context in which it was created, and the way this has influenced its structure, is often underappreciated. The late 1980s and early 1990s witnessed an environmental awakening on a global scale, epitomised by the Brundtland Commission and the Rio Declaration, and awareness grew that the poles were disproportionately affected by ozone depletion (particularly Antarctica) and Persistent Organic Pollutants (POPs) (particularly the Arctic). The disintegration of the Soviet Empire, and its legacy of nuclear waste and nuclear submarine accidents, caused particular concern for the environment in northern waters, including the North Atlantic and Barents Sea region, while spurring calls for nuclear disarmament and confidence building. Meanwhile processes of devolution, both within the Nordic countries and amongst Arctic indigenous nations, were reaching their apex, and the Westphalian state was being forced to make more room for other actors.

From this perspective, one can easily identify that the vision for the Arctic Council arose as an almost perfect reflection of its political and social context. Its structure did too. The United States was in a period where it was [weary of international obligations and institutions](#), and the burden these imposed uniquely on it. Canada, meanwhile, was embracing itself as a conscientious middle power, respectful of indigenous demands for self-determination, and seeking a [leading role in the prioritization of human security](#) as a concept for global peace and stability. The compromise was a soft law forum for regional environmental protection, but with a new focus on sustainable development, and which should not deal with matters of military security nor demand defined financial contributions of its members.

Path dependency has dictated that the Arctic Council remains relatively weak as an institution, dominated by the agendas of the working groups it absorbed from the AEPS. But at the same time it has far exceeded what were probably modest hopes in 1996.

Knowledge Creation

The importance of knowledge creation by the Arctic Council during the past two decades should not be underestimated. The Council's many assessments and focused studies have addressed such critical and diverse issues as: Arctic climate change, emerging Arctic marine use, biodiversity challenges, persistent organic pollutants, regional human development, and Arctic oil and gas developments. One of the important successes in the conduct of these comprehensive efforts has been the bringing together of experts from Arctic and non-Arctic states, as well as each study's broad engagement with the Permanent Participants (PPs) and a host of stakeholders and actors. Taken together, the Council's policy relevant and science-based assessments represent an unprecedented knowledge base about the Arctic environment and its people. These assessments provide a vision for future human use in the region and identify key links between the Arctic and the global environmental and economic systems.

Several of the Arctic Council assessments have been influential on the global stage. Work in AMAP on persistent organic pollutants (POPs) (e.g. the [AMAP Assessment Report on POPs](#) released in 2002) contributed to the negotiations that led to the Stockholm Convention on POPs adopted in May, 2001 which went into force in May, 2004. The [Arctic Climate Impact Assessment \(ACIA\)](#) released in 2004 is one of the seminal Council achievements and is surely one of the most widely

read Arctic-specific documents in history. ACIA is a key synthesis review of Arctic climate change and its consequences for people, ecosystems and animals. This large effort, involving some 300 scientists, experts, and indigenous representatives, successfully integrated the social and natural sciences in a comprehensive, multidisciplinary assessment of climate change in the Arctic. ACIA found climate change to be more pervasive compared with other regions on Earth and noted fundamental feedbacks between the Arctic and the global climate system. As the world's first in depth regional look at climate change impacts, ACIA results fed into the work of the Intergovernmental Panel on Climate Change (IPCC) (its [Fourth Assessment](#)) and continues to have influence today as it identified significant knowledge gaps in our understanding of the physical changes ongoing in the Arctic. An [overarching ACIA policy document](#) was developed by the Council's Senior Arctic Officials (SAOs), a challenging task given that climate change is essentially a global issue with regional impacts.

The Arctic Human Development Report (AHDR) was also released in 2004, though it did not get the same publicity as the ACIA. It was one of the first human development report focused on a particular region. It involved about 30 scholars (among them the lead authors of the 11 substantive chapters) from the Arctic states, who were selected based on their expertise and represented themselves, not their countries. Though the report was done under the auspices of the Sustainable Development Working Group (SDWG), it does not constitute a negotiated document with contents agreed upon by all the authors. It was an independent scientific assessment on the state of human and regional development in the Arctic region.

The [Arctic Marine Shipping Assessment \(AMSA\)](#), involving more than 200 marine experts, released by the Arctic Ministers in April 2009 presented 17 negotiated recommendations that collectively represent a policy framework for the Council to address measures for the protection of Arctic peoples and the marine environment. The results and recommendations of AMSA have been influential at the International Maritime Organization in moving to mandatory rules and regulations for ships operating in polar waters (the [Polar Code](#)) and in having the Arctic states negotiate (using the Arctic Council structure and process as a 'facilitator') two binding agreements on [Arctic search and rescue](#), and [Arctic oil spill preparedness and response](#). The follow-up to the AMSA recommendations has been a series of AMSA implementation status reports requested by the Arctic Ministers; a fourth report is to be issued in May 2017. The [Arctic Biodiversity Assessment \(ABA\)](#), released in May 2013, has been an important Arctic Council product for providing information to the Convention on Biological Diversity process, with a [preliminary report](#) as a Council contribution to the 2010 United Nation's Biodiversity Target. These select examples reinforce the importance of the Arctic Council assessments to informing and influencing international organizations that are conducting more global decision-making and environmental policy shaping. While many of the earlier Council assessments were strictly scientific reports with no formal negotiated recommendations, later work such as AMSA and the ABA include a key section where consensus was reached by the Arctic states in agreement on key recommendations for how the Council should move ahead on these critical issues.

One of the main achievements of the Council has been the effective use of its working groups to orchestrate large science-based assessments and major studies. [AMAP](#), [CAFF](#) and [PAME](#) have been at the forefront of this process of engaging scientists and experts (both government and academic) as lead authors and contributors, and with lead countries heading the project and

providing base funding. The [Permanent Participants](#) have been involved in these studies as expert participants, at the [Working Group](#) review level, and at the [Senior Arctic Official \(SAO\) meetings](#) where the status of projects is briefed. Arctic Council [Observers](#) from non-Arctic states, NGOs and intergovernmental organizations have been involved as well as commercial and industry experts on occasion, for example within AMSA. In response to the many calls for greater involvement of the non-Arctic Observer states, the Council should consider new mechanisms to enhance the inclusion, expertise and potential funding of future projects under the Working Groups by non-Arctic states (perhaps being a co-lead country for select projects).

In summary, the complexity, comprehensiveness, and authoritativeness of the Arctic Council's major assessments and studies have been success stories given the high degree of international cooperation in their organization and execution.

Reform or Consolidate

Amongst the few issues that have continuously followed the Arctic Council since its establishment is the question of its structure. Should it be a forum or a treaty organization? Should it remain regionally focused and exclusive, or adopt a more global vision with broader non-Arctic representation? Should it limit itself to sustainable development and environmental protection, or should it concern itself with security, business & trade, borders and other matters of regional importance? Many changes have been proposed over the past two decades, but it is not obvious that they would change the Arctic Council for the better.

Who is a Stakeholder?

Amongst the more persistent of puzzles has been who to include as stakeholders, and how. The Arctic Council was established with a proviso for the full consultation and involvement of indigenous peoples in the Arctic, as PPs. In this regard it has been widely acclaimed as both successful and progressive. However the issue of [how to enhance the capacity of PPs](#) to participate in the Arctic Council and its many activities has similarly been longstanding, a challenge that has been exacerbated as the forum became busier and more complex.

Beyond the capacity of PPs to contribute to Arctic Council activities is their capacity to adequately engage and consult with their own indigenous members about the Council's undertakings and priorities. Indigenous peoples are often viewed homogeneously, but there are many diverse perspectives amongst and between different groups. Adequately informing community perspectives, and then reflecting those perspectives accurately, is often difficult to achieve.

Furthermore, questions have arisen as to why only indigenous organizations have been given a special status in the Arctic Council, but not representatives of [northern sub-national units](#), such as [Alaska](#), Greenland, the [Canadian territories](#), the Nordic municipalities, and [Russia's republics](#), territories and autonomous regions. Many of these are ethnically and linguistically unique, with political legitimacy granted by their democratic election; yet there are no mechanisms by which to formally include them in the Council's work.

Finally, has been the question of the role that [Observers](#), and in particular non-Arctic states, can and should play in the work of the Arctic Council. Philosophically, this may depend on whether you see the Arctic through a regional lens, in which case it makes sense to privilege local interests; or a global one, whereby the Arctic has widespread environmental significance and impact that

affects us all. There has been broad acceptance in recent years for non-Arctic states to be involved at the Working Group level, in the realm of scientific contributions. However while select non-Arctic states have made key contributions, participation there has been half-hearted. It is worth asking whether most non-Arctic states are interested in the work of the Arctic Council, or if the Arctic Council just happens to be the best venue by which to keep apprised of – and where [possible influence](#) – Arctic geopolitical trends.

What Should the Arctic Council Do?

The Arctic Council's twin mandates of sustainable development and environmental protection were not natural or inevitable areas of focus, but negotiated ones, and reflective of the time and space in which the forum was established. It is well worth asking after twenty years whether they should continue to be the exclusive focus, or whether other and more issues might be appropriate to address.

On that question, there has been no end of suggestions from the epistemic community, in particular military security issues, border disputes and fisheries. Indeed many of those only superficially acquainted with the work of the Arctic Council seem to think it is the governing body for the region as it is – a significant misunderstanding.

Most Arctic experts and stakeholders are cautious in this matter, and mindful of the limitations the Arctic Council and its current structure impose – as well as the advantages its clear mandate brings. First and foremost, it is a forum, [with no legal character](#) and therefore power to enact or implement laws; furthermore it is a regional-level organization, and should logically focus on those policy issues which can best be solved at the regional level. Oceans and transboundary issues are the most obvious among these, and reflected in the Council's focus on shipping, marine and aeronautical SAR, and marine oil pollution, preparedness and response. In addition, there are mutual gains to be made by sharing and cooperating in scientific endeavours, especially in environmental matters, and sharing data and findings in an efficient and effective manner.

But it remains a puzzle how a regional-level forum can best promote sustainable development in [a region](#) encompassing eight states, several dozen sub-national polities, and many more ethnically distinct indigenous groups. Certainly the Arctic Council has no mandate or funding to implement education, health, social welfare, or infrastructure policy. More recently it has tried to promote work on economic development, but there is a gaping chasm between efforts to finance and regulate billion dollar resource projects on the one hand; and resolve the diverse issues contributing to high levels of unemployment and poverty in the region, especially in rural and indigenous communities.

There has been some momentum for jointly identifying technological solutions to some of the gaps faced in the Circumpolar North, for example in the areas of telecommunications, wastewater treatment, and renewable energy. Innovation in areas contributing to sustainable development is a promising avenue with clear benefits at the regional level, in terms of rapid knowledge transfer and the pursuance of economies of scale by which to commercialize and market technological solutions for rural, remote and off-grid communities.

What is the Role of the Arctic Council?

The Arctic Council has often been conflated with regional Arctic governance in general, as if the forum is the governing authority over all things Arctic. It is not, and should not be, and will not be. So what is the alternative?

The Arctic Council is best imagined as the centre of a web of [regional governance](#), not atop a hierarchy. While it is widely understood as preeminent, it is not peerless. Among alternate fora for regional governance include the [Arctic Coast Guard Forum](#), the [Standing Committee of Parliamentarians of the Arctic Region](#), and the [Arctic Five](#); business-led organizations such as the [Arctic Economic Council](#), the [Association of World Reindeer Herders](#), and the [Arctic Business Forum](#); sub-national organizations such as the [Northern Forum](#), the PNWER [Arctic Caucus](#), and the [Barents-Euro Arctic Council](#); scientific & research organizations such as the University of the Arctic ([UArctic](#)) with its [Thematic Networks](#), the [International Arctic Social Sciences Association](#), and the [International Arctic Science Committee](#); relevant international organizations such as the [Commission on the Limitations of Continental Shelf](#) and the [International Maritime Organization](#); as well as a few international forums that actualize the interplay between science and politics (and business) such as the Northern Research Forum (NRF), Arctic Frontiers, and the Arctic Circle Assembly.

The Arctic Council is best placed to produce, disseminate and act on knowledge, both in respect to environmental systems and protection, and social and economic development for the region's [four million inhabitants](#). It has also been, and should continue to be, an important generator of norms, particularly around the principles of political cooperation and consensus building; inclusivity of indigenous peoples, the scientific community, and other non-state actors; and the need to value and protect our environmental heritage. With this as an overarching framework, the details can be assumed by more specialized or appropriate organizations.

This Year's Arctic Yearbook

This year's Arctic Yearbook provides perhaps the most substantial evaluation of the Arctic Council ever published. In the section on the Arctic Council as an institution, our authors evaluate the Council's ability to norm-set and identify emerging issues; its proficiency in creating space for Indigenous organizations as Permanent Participants, and non-Arctic states and NGOs as Observers; and media perceptions of its work. Taken together, the reader will better understand the constructed nature of the Arctic Council.

The section on the interplay between science, diplomacy and policy helps illuminate how and why science can inform policymaking – perhaps one of the better known and celebrated accomplishments of the Arctic Council. Creating intersections between the three is almost always desirable but rarely easy.

Local and indigenous issues have been a perpetual topic for the Arctic Council, but it has been marked by tension between competing levels – local, national, regional and global – of governance and interests. What can and should the Arctic Council do to make space for different voices, while still making tangible progress on substantive issues?

We round off the scholarly component with a section on Arctic geopolitics and security, the *raison d'être* of the Arctic Yearbook and the joint NRF/UArctic Thematic Network on Arctic

Geopolitics and Security which directs its publication. Throughout the past five years, we have endeavoured to provide pragmatic, robust and sober analysis of the state of relations between the Arctic states, in particular Russia and the Rest. Headlines come and go, and come back again, but our authors provide much needed nuance to what are overwhelmingly superficial assessments of regional security in the mainstream media and corresponding grey literature.

As always, we have paired our scholarly, full-sized articles with both Briefing Notes to provide succinct explanations of Arctic phenomena and issues of contemporary significance; as well as Commentaries by esteemed and influential decision-makers and experts that provide unique insight into the events and trends that captured our interest this past year. We are proud and grateful for the willingness of those in the Arctic epistemic community to contribute their knowledge and insights towards a higher level of dialogue – a defining feature of the work of the Arctic Council and regional Arctic governance more broadly, which we are thankful to also benefit from.

Conclusions

What more can the Arctic Council provide than an example? In the next twenty years, the authors would like to see it use its policy shaping, knowledge disseminating and norm building powers to: (1) address sustainable development issues through innovative applications of technology and engineering to a northern context, including promoting the capacity of northerners themselves to be fully involved in such efforts; (2) better incorporate the voices of sub-national governments in the work of the Council, especially as it seeks a more prominent role in addressing issues of development; and of mitigating rather than simply adapting to climate changes; and (3) to entrench the cooperative relations it has enjoyed between Russia and the other, Western, states, even in the face of incongruent foreign policy actions elsewhere in the world.

Although it faces many challenges, the Arctic Council can be heralded, after twenty years, as a marvel: the world's first, and only, post-modern international organization. It is a model for East-West cooperation; for stability-building and region-building; for creating space for non-state actors' voices; for proactively, and precautionarily, addressing issues of environmental protection; and for incorporating scientific evidence in to its policy shaping structures. It is not perfect; but we would contend that it is the closest thing we have to perfection in international relations.

AY 2016

year in review

Heather Exner-Pirot & Joël Plouffe

2015

October

16th – The third annual Arctic Circle 2015 event was held in Reykjavik, Iceland. [The 2015 Arctic Yearbook is launched](#) at the Embassy of the United States in Iceland. AY2015 is themed *Arctic Governance & Governing*.

23rd – The 8-state [Arctic Coast Guard Forum](#) was established at the U.S. Coast Guard Academy in New London, Connecticut.

November

29th – Norwegian immigration control agents in Finnmark [restricted access to migrants crossing their Russian border](#), after months of large flows of migrants and asylum seekers. Finnish authorities in Lapland did [the same](#) in March 2016.

December

12th – Parties to the *United Nations Framework Convention on Climate Change* 21st session, or COP 21, conclude the [Paris Agreement](#).

2016

January

19th – The Inuit Circumpolar Council initiates the [Pikialaorsuaq Commission](#) to study the North Water Polynya and explore locally driven management options, including a travel corridor. In September they concluded their consultation in Inuit communities and will now make recommendations to their respective national governments.

20th – NASA and the NOAA determine that Earth's 2015 surface temperatures were the [warmest](#) since modern record keeping began in 1880.

25th – The [Indigenous Peoples Secretariat](#) relocates to Tromsø, Norway.

2016

February

20th – The [Arctic Human Development Report II](#) (AHDRII) is published on the tenth anniversary of the first volume, with a theme of *Regional Processes and Global Linkages*.

27th – UK [House of Lords Arctic Committee](#) publish their report on *Responding to a Changing Arctic*.

March

6th – The [Arctic Winter Games](#) are opened in Nuuk, Greenland.

10th – The [U.S.-Canada Joint Statement on Climate, Energy, and Arctic Leadership](#) is announced by President Barack Obama and Prime Minister Justin Trudeau, in Washington DC.

9th – [Cold Response 2016](#), the Norwegian Armed Forces main winter exercise, concludes with 15,000 soldiers from 14 different nations participating.

10-12th – The first [Model Arctic Council](#) was held at the University of Alaska Fairbanks

April

5th – China issues its 365 page [“Guidances on the Arctic Navigation in the Northwest Route”](#) [Northwest Passage].

13th – The [Arctic Economic Council](#) adopted a suite of foundational documents to provide strategic direction for the organization.

27th – The European Commission [released](#) its Joint Communication to the European Parliament and the Council on “An Integrated European Union Policy for the Arctic”.

29th – The three Canadian territories release their joint [“Northern Vision”](#), including a common climate change adaptation strategy, a renewable energy inventory, and a pan-northern approach to science.

May

10th – Shell relinquishes all but one of its federal offshore leases in [Alaska’s Chukchi Sea](#). In June, it further relinquished its 30 offshore exploration permits in Canada’s Lancaster Sound.

30th (*through June 5th*) – [Calotte Academy 2016](#) begins in Rovaniemi, Finland. This year’s theme was “Resilience Related to Sustainable Development in Globalization.”

2016

June

10th – The Arctic Coast Guard Forum heads met for the second time, and signed a [joint statement](#) that establishing the framework for a multi-year strategic plan, avenues to share information, highlight best practices, identify training exercises, and on-the water combined operations.

14th – France launches its first [National Roadmap](#) for the Arctic: “The Great Challenge of the Arctic”.

July

6th – Nine countries plus the European Union gathered in Iqaluit to discuss international regulation of central [Arctic Ocean fisheries](#), following up on a Declaration signed by the “Arctic 5” a year before.

8th – An *ad referendum* agreement on enhancing [scientific cooperation](#) among circumpolar countries and others interested in polar research signed in Ottawa at the meeting of Arctic Council’s Task Force for Enhancing Scientific Cooperation in the Arctic (SCTF).

25th – Alaska and Lapland return to the [Northern Forum](#).

August

9th – [Russia](#) presents its claim to the Commission on the Limits of the Continental Shelf.

29th (*through 2nd September*) – The 6th International Meeting of Representatives of Arctic Council Member States, Observer States and Foreign Scientific Community begins, held on board the Russian nuclear icebreaker [“50 Years of Victory”](#).

September

3rd – The [HMS Terror](#), one of 2 ships lost in Sir John Franklin’s doomed 1845 expedition to find the Northwest Passage, is found in Nunavut’s aptly named Terror Bay.

6th – Russia announces [a ten-year moratorium on new offshore oil and gas](#) licenses for drilling in the Arctic shelf.

16th – [Crystal Serenity](#) completes its luxury cruise through the Northwest Passage.

16th – Russia announces tender for what will be [the world’s most powerful icebreaker](#).

... (September 2016 continued)

September

19th – The [Arctic Council celebrates its 20th anniversary](#). The Ministers of the Arctic states release a joint statement to commemorate the occasion.

28th – A White House [Arctic Science Ministerial](#) is held.

29th – Canadian Foreign Minister Stéphane Dion [delivers a speech](#) celebrating the 20th anniversary of the Arctic Council.

October

5th – The third [Senior Arctic Officials meeting](#) of the US Chairmanship begins – in Maine.

6th – Finland announces its [preliminary agenda](#) for its 2017-19 Arctic Council Chairmanship.

7-9th – The 4th [Arctic Circle Assembly](#) was held in Reykjavik, Iceland.

28th – The [Arctic Yearbook 2016](#) is launched in Ottawa, Canada, where the Arctic Council was founded twenty years ago with the Ottawa Declaration. AY 2016 is themed *The Arctic Council: 20 Years of Regional Cooperation and Policy-Shaping*.

year in review 2016

Commentary

The Arctic Council in Perspective: Moving Forward

Hannu Halinen

Paradoxically, the emergence of Arctic cooperation was assisted, to a large extent, by the fact that the region was a global periphery – albeit a theatre for strategic and geopolitical games between the big powers. The collapse of the Soviet Union contributed to the audacious 1987 speech by Mikhail Gorbatshev in Murmansk, whereby he was envisaging a peaceful and environmentally sound Arctic.

Towards the Ottawa Declaration

Finland picked up Gorbatshev's ideas, to see what could be followed up. Environmental concerns appeared to be the area where common understanding seemed to be wide among Arctic actors. Finland started consultations on operational level with Arctic states, getting Canada as an active partner. The first circumpolar meeting was held in Rovaniemi in 1989, followed by the first intergovernmental Arctic meeting of ministers of the environment of all Arctic states in 1991, also in Rovaniemi, where the Arctic Environmental Protection Strategy (AEPS) was adopted. This then led the way to the Ottawa Declaration and the establishment of the Arctic Council in 1996.

Although the Arctic Council is lead by the Foreign Ministers, the mandate was from the outset heavily environmental. The Council has six permanent working groups – some founded already

Hannu Halinen is the Arctic Ambassador of Finland and former Senior Arctic Official (SAO) in the Arctic Council (2009-2014). He is an Editorial Board member of the Arctic Yearbook.

before 1996, some after that. Four working groups are directly dealing with environmental issues, and looked after by environmental authorities and experts in the eight Arctic states.

The Ottawa Declaration was not framed to restrict the Council's activities but in one regard: military security. This footnote in the Declaration reflected the views of the founding fathers of the day – which still stand today.

A unique feature of Arctic cooperation is the role of indigenous peoples. At the beginning they were invited to the meetings as Observers, but that was not acceptable particularly to North American indigenous peoples. They demanded a position on the level of governments, which then was confirmed in the Ottawa Declaration. Permanent Participants, consisting of six indigenous groups, sit in Council meetings together with governmental representatives; only without the right to vote (but then again, has the Council ever voted?)

The First 20 Years

During its first decade, the Council was consolidating its structures and procedures. Then it started to face a new phenomena: the rapidly growing interest by non-Arctic actors. The exceptional development in 2007 with a record area of melting sea ice in the Arctic led to a new focus on both prospects of off-shore hydrocarbon exploitation and opening sea routes in the Arctic Ocean. Since the Arctic Council had become the pre-eminent Arctic discussion forum, this global interest was channeled through increasing applications to observer status in the Council. The applications came from governments as well as scientific and advocacy organizations, including UN specialized agencies.

During the second decade, the biggest political – and also logistical – challenge for the Arctic Council has been the question of observers. While all member states agreed on the need to strengthen the Council, there was no agreement on the observers. For some observers were part of the solution – an essential element in strengthening the Council – while others considered them as part of the problem and wanted to build up the Council first from inside and then deal with observers from a position of power. Simultaneously, the Permanent Participants were cautious on increasing numbers of observers, fearing that to diminish their voice in the Council. There were references to the earlier understanding that the number of observers should not exceed the number of member states and Permanent Participants.

Hence three consecutive Council Chairmanship periods 2007-2013 were working on this issue, first establishing criteria and a detailed manual for observers and then considering applications on the basis of criteria. During the second half of the Swedish Chairmanship period 2012-13 it is not an exaggeration to say that the Council was at a crossroads: either to make the right decision on the observers or being slowly marginalized. The warning signs were already there; the emerging open and inclusive fora such as the Arctic Circle in Reykjavik or the Arctic Frontiers in Tromsø. So in case the Council wanted to remain a closed club, the alternative fora were ready to step in.

However, the Kiruna ministerial meeting in May 2013 was able to find a solution in the right direction, accepting most of the state applications. Decision on organizations was deferred in block. The sticking point was the European Union (EU).

Canada, supported by Russia, was opposing the EU application on the basis of the seal product ban imposed by the EU. Finally, thanks to U.S. Secretary of State John Kerry's mediating skills, a

compromise solution was found, whereby the EU application was considered affirmatively, but final decision was deferred until the seal issue was settled.

During the second Canadian Chairmanship 2013-15, the Ukrainian crisis was overshadowing the Council deliberations to the extent that although the seal problem with Canada was solved, a consensus on the EU application was not found at the ministerial meeting in 2015.

Another challenge to the Council came from emerging cooperation between the Arctic five coastal states. Two ministerial meetings by the Arctic Five (Greenland 2008 and Québec 2010) were opposed by other Council states Finland, Iceland and Sweden, as well as Permanent Participants. Since then no ministerial meetings by the Arctic Five have been held, however working level meetings have been convened on fisheries, aiming at arrangements regulating fishing in the Arctic Ocean.

One of major achievements of the Canadian Chairmanship was the establishment of the Arctic Economic Council (AEC) in September 2014. The AEC is the child of the Council, but at the same time an independent entity. It still remains to a large extent a work in progress, both internally as well as in its relation to the Council. However, it is significant that the Council, with the establishment of the AEC, acknowledged the importance of taking into account the economic and business considerations in the region. It was a high time, since more and more global companies and financing institutions (not to talk about the World Economic Forum or WEF) are looking at Arctic opportunities.

During its existence, the Council has been changing. The Council and its working groups, task forces and expert groups have produced major assessments on the Arctic. The range of activities has carefully but steadily expanded from environmental agenda to science and research, to maritime issues, and also to legally binding agreements. The two agreements in force on search and rescue, as well as on maritime oil pollution preparedness and response, and those in the pipeline (such as on Arctic scientific cooperation) are not precisely Arctic Council agreements, but agreements between Council member states. However, by them, the growing normative role of the Council is a fact.

Furthermore, steps to strengthen the Council internally have been taken. The Council has now a permanent secretariat and a small administrative budget. Also some operational funds for limited activities have been initiated.

The Way Ahead

A few years ago the Arctic Council was considered to be “the best kept secret success story in the Arctic.” With its communication strategy and action plan the awareness of the Council has been increasing. But with the rapid and largely unpredictable change in the Arctic the question remains: can the Council keep up with the change? How to respond to growing expectations?

There are a number of challenges the Arctic Council is facing:

The Council’s mandate is limited. Environmental, social and scientific issues are covered, but many (such as security, economy and fisheries) are outside. Major changes in this regard are not possible without touching the Council structures and, ultimately, the Ottawa Declaration. And here the *Pandora’s Box* effect comes to the play. Everyone understands that the Council cannot stay complacent, but the progress is slow by necessity.

The decision-making process is complex. Many scientists and NGO's criticize the Council of weak response to emerging Arctic issues. If voting is not customary in the Council proceedings, consensus requirement in all decision-making effectively replaces it. It suffices to have one, at any time, to break the consensus. This principle is at the core of the Arctic Council cooperation, so any changes here do not seem to be in the cards.

An exclusive or inclusive forum. There is no common view among Council members on who is the Arctic stakeholder. This is a question about Observers, but it is also increasingly a question concerning participation. The Arctic agreements are so far open to only Council member states. But there are good arguments to include observers and other Arctic stakeholders in joining the agreements. At the same time, a lot can be done to enhance the interaction between member states, indigenous peoples and Observers within the Council proceedings.

The Arctic in a global context. The Arctic is indisputably a regional issue with a global reach. Also in this respect the Council cannot act in a vacuum, but it has to take into account and collaborate with other international and global institutions and actors. Contacts with IMO – and its Polar Code – are steps into the right direction.

From soft-law discussion forum to a treaty-based organization? There are those who prefer the Council to stay a decision-shaper rather than a decision-maker, and those to whom a new institution is an impediment. Accordingly, there is no consensus on making the Arctic Council an international organization. But at the same time, the Council by its very activities is moving to that direction. Whether – or when – the Council would become a legal entity, is an open question; but a question which warrants careful consideration.

To introduce and carry out changes in the Arctic Council requires long and persistent work. The U.S. Arctic Council Chairmanship (2015-2017) has realized just that, and consequently sought continuity with many issues from the next Chairmanship.

Finland takes the lead in the Council in May 2017 as Chair for the second time. The Finnish record augurs well for the Chairmanship.

Q & A

The 20th Anniversary of the Ottawa Declaration

Interview with Harald Finkler and Robert Kadas

This article is based on an interview conducted by the Arctic Yearbook Editors on October 7, 2016. Responses have been edited and condensed for clarity.

Can you tell us about the first time you heard about the idea of an Arctic Council?

HF: I was involved in my capacity with the [Circumpolar Liaison] Directorate responsible for multilateral and bilateral circumpolar engagement, and two people in my office were primarily involved in supporting Mary Simon (Canada's first Circumpolar Ambassador and first SAO Chair) in the negotiations which concluded in 1996.

I had been involved in promoting Canada-Russia Arctic relations since 1984 [at Indian and Northern Affairs Canada (INAC)], and was involved in the Arctic Council within that context. In 1989, on signing the renewal of the Canada-USSR Cooperation Agreement in the Arctic and North, Prime Minister Mulroney floated the idea of a Council of Arctic states. Given our long-standing involvement with Russia on Arctic cooperation, we were engaged in bringing Russia into the fold, and joining a consensus to move forward.

Watching the negotiations, they were fascinating. Quite a story, and a really unique accomplishment particularly given the time.

RK: I heard about it when it was already established. I came along after the Ottawa meeting, when we were putting the meat on the bones with the Council's Terms of Procedure and such.

Harald Finkler was the Director, Circumpolar Liaison Directorate, for Indian and Northern Development Canada from 1991 to 2013, and Canadian head of the Delegation to the Sustainable Development Working Group. Robert Kadas was Special Assistant to Minister Lloyd Axworthy from 1992-2000, before joining the Circumpolar Affairs unit at the Department of Foreign Affairs and International Trade.

What were the main challenges in getting it off the ground?

HF: In the early days there was a wariness about the nature of Aboriginal participation in the Council; today we see the PPs [Permanent Participants] as pivotal players who, at the outset capitalized on their place at the table to sensitize SAOs on issues important to the Indigenous peoples of the Arctic.

Another big challenge was overcoming U.S. resistance. There was a hiatus in their participation in the negotiations after the first round, which concluded in '93 and had generated some momentum, until '95. They didn't attend any of the meetings between then. However, at the Chrétien–Clinton Summit in February 1995, the US finally agreed to participate in the negotiations and re-engaged in June of that year. Some of their big issues was dealing with non-Arctic states and NGOs, something that is still festering; the nature of Aboriginal participation, and the human dimension, and what that meant for the environmental issues.

With the emergence of other Arctic-focused entities, e.g. IASC and AEPS, albeit scientific in nature, people asked whether we really needed this [the Arctic Council] and what would be its niche, and what role would it play. In other words, what was the value added in establishing the Council.

But the really important buy-in was by Indigenous peoples. Especially the ICC [Inuit Circumpolar Conference] in Canada, and Chief Bill Erasmus with the Dene. Internationally, there had already developed a culture of participation of PPs in the AEPS [Arctic Environmental Protection Strategy], and there were important champions, like Leif Halonen of the Sami Council, and Kuupik Kleist, ICC-Greenland, who later became Premier of Greenland. Among states, Denmark/Greenland was really key, in particular Hans Jakob Helms, Director-General, Greenland Home Rule Government.

However by 1993, the Canadian proposal to create an Arctic Council had lost intergovernmental momentum, no doubt attributed in part to U.S. opposition, as well as preoccupation with the AEPS and the establishment of the Barents Euro Arctic Council. Notwithstanding, the break in discussion from 1993-95 allowed for refinement of the proposal, and further consultations, with the Yukon and NWT governments, CARC [Canadian Arctic Resources Committee], the Working Group on the National Capital Branch of the Canadian Institute of the International Affairs (CIIA), the Arctic Council panel supported by the Gordon Foundation and co-chaired by Franklyn Griffiths and Rosemarie Kuptana. They all played a role.

RK: Once the Council came in to being there were 2-3 immediate challenges. A big question was Russia's involvement. They had signed on, but what did that mean in reality, what were the practical applications of their participation in the Arctic Council? It took a number of years to really get their buy-in at the project level.

Also, having the PPs at the table: it wasn't just the U.S. that had trouble figuring what to do with non-states at the table. It took some time for folks to feel comfortable with one another around the table.

And at the procedural level – there was skepticism about a number of things. This came out in particular with developing the Rules of Procedure, which took the entire first Canadian Chairmanship.

HF: Yes, compared to subsequent chairmanships, the Council's operational framework had not yet been completed in time for Canada's first chairmanship which impeded its ability to advance on a more robust agenda for its term. Moreover, there was some resistance to subsuming AEPS under the Council, precipitating in some uncertainty whether at the end of the day it would be subsumed under the Council or vice-versa. The issue was finally resolved with transition of the AEPS into the Arctic Council completed in time for the AEPS Alta Ministerial in June 1997, but the delay in integration of the AEPS effectively minimized SAO engagement and the direction of the activities of the working group for the remainder of Canada's chairmanship. Given the varying opinions and understandings about the concept of sustainable development, Canada's ability to deliver on a terms of reference for sustainable development would also prove to be a challenge.

RK: That was another two year discussion.

HF: Yes, to get the SDWG Terms of Reference. And there was a lot of time and effort spent on nurturing the development of PP participation – there were the 3 [ICC, RAIPON and SC] at the beginning but we worked on getting the Gwich'in, Aleut and Athabaskans on board. It was important to augment the Council's institutional structure with these key players.

With the Americans, we had to make it such that they couldn't afford not to buy in once we had the other six states lined up.

[U.S.] Assistant Under Secretary Tucker Scully, Acting Deputy Assistant Secretary for Oceans, Department of State, in the end did yeoman's service in getting it right in the drafting, given his experience within the Antarctic treaty system, and was key in the do or die meeting that led to the finalization of the draft Declaration to Establish an Arctic Council.

When the Declaration was signed, of course we were proud, but we were always concerned about how it would play out with the Americans. For example, when the U.S. assumed the Council chairmanship, we were nervous, but had not foreseen the prominent role the State of Alaska, its communities, northerners and Aboriginal organizations would play in partnership with the Department of State in hosting Council meetings and contributing to the delivery of the US goals for its chairmanship. Demonstrating the Council's relevance, its unique governance framework with the pivotal role of PPs, and scope of its activities through outreach and communications also highlighted the US chairmanship.

In regard to the lead-up to the Council's creation, in the Winter [of 1995] and early Spring [1996], we were still bogged down on the idea of Indigenous representation and the scope of the 'sustainable development' mandate. There were also questions of the architecture of the Council, the role of non-Arctic states, and of NGOs. While we had hoped to have it wrapped up earlier, we hosted a major meeting in June '96, and I recall it was June 8th, and at the end of the day there was still no consensus, just disappointment and frustration. And at one point, we said that if there was no movement, Canada would terminate efforts to continue negotiations to establish the Arctic Council. That gave a sense of urgency to the negotiations and led to a do or die effort. People met late into the evening, and I remember even into the early morning. But the next day, we had a draft Declaration to Establish an Arctic Council, subsequently approved in August.

What has been the biggest surprise to you about the Arctic Council, twenty years later?

RK: That it still works! That a forum with no legal personality still commands the attention of Foreign Ministers is pretty remarkable. The fact that the PPs are still there, and fully engaged and becoming even more engaged, is tremendous as well. Another surprise is that it has generated so much international interest – it was envisaged as a modest regional forum and now has caught the attention of folks far and wide. The original intention was just for this modest forum – and now we have seen international arrangements agreed to under its auspices.

HF: We hoped but given all the challenges of the years, we were not really sure the Arctic Council would be able to sustain its *raison d'être* over time, let alone achieve this primary position in the Circumpolar arena. Moreover, it has now concluded 3 legally binding agreements, with the Council becoming what I call a “Consensus+”. Not only did it succeed in filling the institutional gap, it ensured PPs were brought into this unique governance framework. The consensus model has really worked well for the PPs in influencing the discussions, and sensitizing SAOs to the human dimension, along with the environmental. Since the launch of the Council, there has been a period of great consolidation of the PP position within the Council structure, and the SAO recognition of PP perspectives and partnerships with them. When we used to talk about the value of traditional knowledge, SAOs and working group chairs were reticent to recognize its legitimate place in the work of the Council. Now its value is acknowledged, and it's a given in the Council's work and the governance structure.

Where there is still room for improvement is around PP funding to ensure their meaningful engagement in the Council; not just at the SAO, but also at the working group level. While there have been efforts to secure their sustained funding, since the establishment of the Council the issue is still not resolved. Regarding the issue of Canadian-Russian co-operation, it's worth remembering that during the Cold War, the Arctic still remained an area of constructive dialogue. But I am concerned about the impact of geopolitical tensions currently, threatening to sever ties with Russia, a major Arctic player, and isolating accordingly. In my view, this is counterproductive. However, my serious concern rests on the adverse effects this approach may have on the vulnerable situation of the Indigenous peoples in the Russian North. That would be the collateral damage.

RK: There are on-going challenges with being more internationally known, and one is ensuring effective communications and relevance to Northerners. The Arctic Council needs to be able to effectively respond and communicate out to Northerners about what it's doing and ensure their voices still play a prominent role in the Council's work. There was a moment in time when it really did become a balancing act because of all the outside interest. Not to knock on Observers, but folks can only do so much with the time that they have, and we can't take our eye off the fact that the Council really is about Northern communities.

How do you hope the Arctic Council will evolve in the next twenty years?

HF: It really has found its niche as an intergovernmental organization for the primary players, the eight states and the PPs, and it's key – and I know there's criteria established – to ensure Observers really contribute to the work of the Council. We need to avoid any proliferation of Observers on the Council – to make sure we don't compromise its unique governance structure or marginalize

the voice of the Indigenous peoples of the Arctic. I think we should cap admissions. There is a clear threat that globalization could change the overall character of the Council.

We need to build on the Consensus+ model and have a broader reach of the human dimension side. If we can fund a Secretariat, we should be able to fund PPs, we need to better address that issue.

We also need more cross-cutting work, more integrated work and less siloed between the WGs. And how to generate that work plan, ensure it's not just within the purview of the incoming chairmanship. Take a more strategic approach, and ask how it responds to the priorities and gaps. And maybe really use the thematic benchmark reports prepared by working groups as frameworks for how we evaluate our work, follow-up and pursue new directions.

RK: The evolution is incremental, and baby steps. You can sort of see in the international discourse the great attention paid to implement the Paris Climate Accords and such, and I don't think it's in our sole interest to have the Arctic Council become a forum for only climate change issues. Working within the Consensus+ format, I think if we can work on having some legally binding agreements that are in the interest of the eight Arctic states, I think that's a good direction to go. In terms of actual programs and policies, having a more integrated approach to the work undertaken in the Working Groups is key, and it has been a work in progress, and I think it's getting better. And what we've seen lately, with the Canadian and American Chairmanships, and what the Finns hinted at yesterday [at the [Portland SAO meeting](#)], the Council seems to be headed toward a couple of particular areas of focus – peoples and oceans. In my mind, that's the right place for the Council to head.

Section II:

**The Arctic Council as an
Institution**

Environmental Decision-Making in the Arctic Council: What is the Role of Indigenous Peoples?

Michaela Louise Coote

The Arctic Council (AC), since it arose out of the Arctic Environmental Protection Strategy (AEPS), can still be seen as mainly concerned with environmental matters. The Council not only provides a discussion platform for the Arctic states, but has also been widely commended on its thorough inclusion of Indigenous Peoples (IPs), through the Permanent Participants (PPs). The PPs have been involved with the Council since its conception, holding full consultation rights in decisions and prior discussions. However, this consultation process is not easy to observe and there are very few studies assessing what full consultation with the PPs amounts to. This study was therefore carried out, drawing on interviews with 10 individuals holding specialist knowledge of the Arctic Council, to ascertain the role of IPs in the AC's environmental decision-making process. Findings suggest that although the PPs have great opportunities in the Council, there are a number of substantial issues concerning the PPs ability to promote their aspirations into final AC agenda and subsequent outputs; ultimately meaning that full consultation with the PPs is not achieved.

The Arctic Council (AC) is a decision-shaping body and a regional organisation dating back to 1996 (Kankaanpää and Young, 2012). The Council comprises eight Member States (Canada, Denmark, Finland, Iceland, Norway, Russia, Sweden, and the US) and includes the voices of the Indigenous Peoples (IPs) of the Arctic, through the Permanent Participants (PPs) (The Parliament of the UK, 2015). The AC is widely seen as providing the best platform for a new, peaceful and collaborative form of Arctic governance (Stokke, 2014).

IPs have lived in the Arctic for thousands of years, managing local resources in a sustainable manner and adapting quickly to environmental changes (Young *et al.*, 2004). Not only are IPs today seen ideologically as protectors of the Arctic region, and as knowledge holders who could shed new light and provide valuable skill-sets for environmental protection measures, but IPs live on the front lines where they will be most affected by environmental changes (Koivurova, 2008; Nuttall and Callaghan, 2000; Lindroth and Sinevaara-Niskanen, 2013). Traditional Knowledge (TK) is a well-known aspect of Indigenous Knowledge (IK). TK can be understood as a dynamic knowledge system that is holistic and includes a multi-causality framework. TK can be characterised as: “[c]laims of those who have a lifetime of observation and experience of a particular

environment... but who are untouched in the conventional scientific paradigm” (Haverkort and Reijntjes, 2010, p. 3).

Environmental changes in the Arctic are a widely studied and debated topic. Coupled with political and business competition, the regime that is being, or should be, set in place to govern the Arctic in the face of such change is also being scrutinised (For example, Stokke and Hønneland, 2006; Berkman *et al.*, 2009, Koivurova, 2010, Young, 2014).

The AC stated the importance of consulting with IPs in its founding Ottawa Declaration (Arctic Council, 1996). The Declaration puts intent and a structure in place for the inclusion of IPs to take part in all levels of its work, including the specialised Working Groups that prepare the bulk of its business. There is therefore *prima facie* reason to suppose that effective involvement of IPs is important for the quality of the AC’s work and its results, as well as for the peoples themselves. No detailed studies, however, have previously been undertaken to trace and assess what is actually happening in this regard.

This study looked at the role and contribution of the IPs of the Arctic through their representatives, as Permanent Participants (PPs), in the Arctic Council to the work and final outputs of the AC as it grapples with current challenges of Arctic climate change, management and governance. The extent of PPs influence was identified and measured using a qualitative interview process, designed to access information from those who are competent to articulate well-informed views on the IPs’ influence in environmental decision-making in the AC. The study attempted to ascertain what the PPs aims and motivations were and whether the AC structure was satisfactory to allow for their inclusion.

Background

In total there are currently six Indigenous organisations in the AC known as the Permanent Participants (PPs): the Sámi Council; Inuit Circumpolar Council; Russian Association of Indigenous Peoples of the North; Aleut International Association; Gwich’in Council International; and the Arctic Athabaskan Council (Figure 1). According to the AC Rules of Procedure, the position of PPs was created “to provide for active participation and full consultation with the Arctic indigenous representatives within the Arctic Council” (Arctic Council, 1996, p. 3). PP status is available to any majority Arctic indigenous constituency, representing a “single indigenous people resident in more than one Arctic State; or More than one Arctic indigenous people resident in a single Arctic State” (Arctic Council, 1996, p. 3).

All of the PPs except the Russian Association of Indigenous Peoples of the North (RAIPON) operate in multiple countries and under the rules of several jurisdictions. This means that the Arctic states do not have equal fiscal responsibilities towards a given PP or, the PPs in general (Walter and Duncan Gordon Foundation *et al.*, 2013).

The Permanent Participants

The Sámi Council (SC) is one of the oldest IP organisations in the AC as it was established in 1956 and operates in four countries (Norway, Sweden, Russia and Finland) representing about 60-100,000 people. The Sámi Council is one of the oldest existing Indigenous Peoples’ organisations, coming to existence in 1956 (Saami Council, n.d).

The Inuit Circumpolar Council (ICC), formerly the Inuit Circumpolar Conference, was established in 1977 and represents about 160,000 Inuit living in Alaska, Canada, Greenland and Chukotka (Russia) (Inuit Circumpolar Council, n.d). The ICC's activities are divided regionally and there is an office in each of the states where the ICC is active. The ICCs' former International Chair, Sheila Watt-Cloutier, was instrumental in the creation of the international Stockholm Convention on Persistent Organic Pollutants, in 2001 (Watt-Cloutier, 2016).

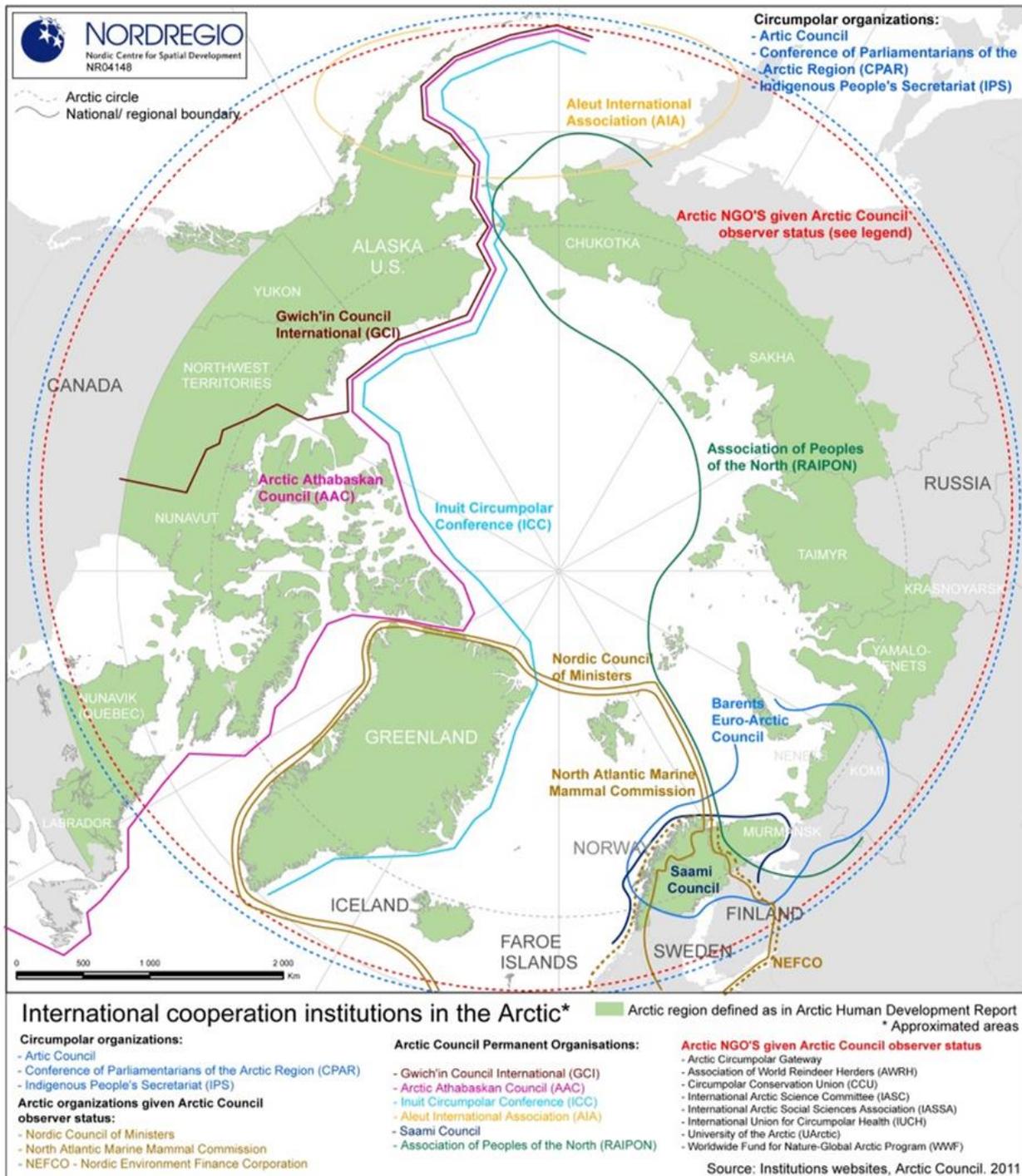


Figure 1: Regional Distribution of PPs (Sterling, 2015).

RAIPON, founded in 1990, is an umbrella organisation for about 41 indigenous peoples, organised into 34 regional and ethnic associations all within the state of Russia, and representing approximately 250,000 individuals (RAIPON, n.d). RAIPON was recently shut down and reopened and there is some criticism that it may now be a puppet organisation, with those in charge selected to approve the government's decisions (Berezhkov, 2012).

The Aleut International Association (AIA) was formed especially for work in the AC in 1998, making it one of the younger Indigenous Peoples' organisations, and represents both Russian and Alaskan Aleuts numbering approximately 12,000 people. It has one office in Alaska where the operation is based. The AIA was formed by the Aleutian/Pribilof Islands Association, which was itself created from the Alaska Native Claims Settlement Act of 1971, and from the Association of the Indigenous Peoples of the North of the Aleut District of the Kamchatka Region of the Russian Federation (Aleut International Organisation, n.d).

The Gwich'in Council International (GCI) was formed in 1999 and represents the Gwich'in in Alaska (USA) and the Northwest Territories (NWT) and the Yukon (Canada). The GCI represents 9000 people and their secretariat rotates between the Vuntut Gwitchin First Nation in Old Crow, Yukon and the Gwich'in Tribal Council in Inuvik, NWT (Gwich'in Council, n.d).

The Arctic Athabaskan Council was established in 2000, making AAC the youngest PP, and represents 45,000 Athabaskans in Canada and the United States of America. Day to day running of the AAC is shared between the AAC executive directors in Canada and Alaska (Arctic Athabaskan Council, n.d).

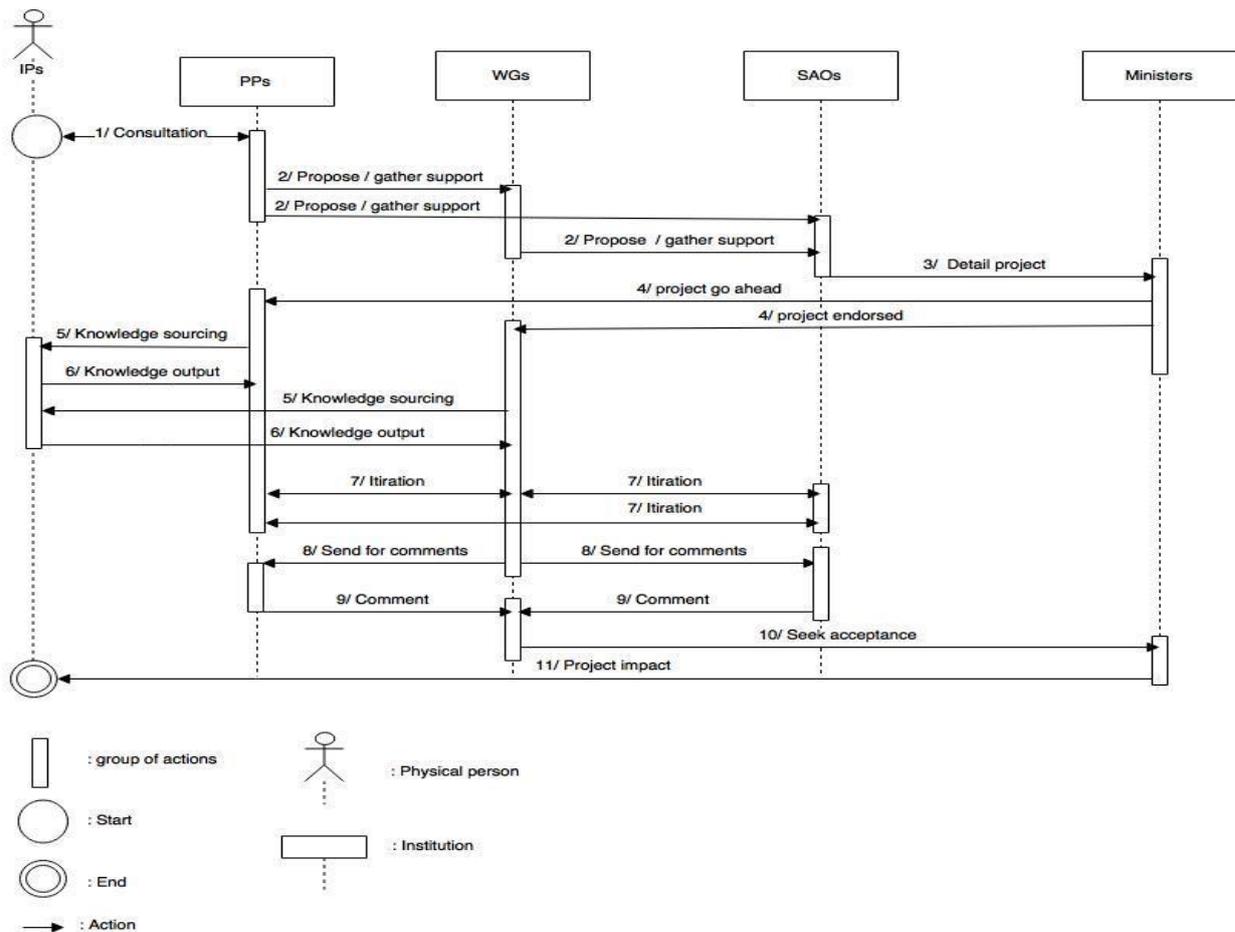
Before evaluating the PPs' ability to engage in environmental decision-making and subsequent outputs of the AC, it is important to gain a clear picture of who the PPs are. The individual PPs are not structured in the same way, nor established at the same time: they have different funding capabilities, links to external organisations and motivations for their activities in the Arctic Council (See AAC, 2007 and Gamble, 2015). They are representing different peoples who face different environmental and social issues due to different geographies, histories, cultures and local resource extraction practices (See Nuttall, 2000 and Koivurov and Stepien, 2008). At the same time, the PPs are a central component of the AC system as AC activities rely in significant part upon the IPs to set the agenda and to provide a rationale for scientific and policy output and the PPs have the ability to sway the focus of decision-making in the AC and the related outputs on environmental issues (See Kankaanpää and Young, 2012 and Fenge, 2015)

The Decision Making Process

After introducing the Permanent Participants (PPs) it is necessary to provide some explanation of how they are formally engaged in Arctic Council (AC) environmental decision-making. The PPs have access to all of the AC activities and meetings and they can communicate with other members of the AC system both through channels provided for in the AC Rules of Procedure (Primary) and those processes that have become available *because* of the AC structure or activities (Secondary) (Arctic Council, 1998).

Primary communication will occur predominantly in AC meetings – where PPs can raise a point of order which will be decided upon immediately by the Chair – and through other activities such as Working Group (WG) and Task Force projects where PPs have the right to participate fully. In

these activities, the PPs are supposed to be consulted by other AC members in decision-making,



1. Continual consultation is occurring between the PPs and the IPs they represent.
2. When embarking on a project, the PPs must gather financial and practical support for the projects. The projects must fit in with the Arctic states ambitions. The PPs may speak to the SAOs or WGs to ascertain whether a project is likely to be accepted and then make pathways to create a project outline.
3. The SAOs send a detailed outline of the project for Ministers to approve.
4. If the Ministers approve the project, the project will go ahead.
5. The PPs and the WGs will likely source skills for the project from the Indigenous Community, either working together or separately.
6. The IPs will contribute to the project, most likely in the fashion of TK or observation sharing.
7. As the project continues, the WGs will hold numerous consultation sessions with the PPs and the SAOs to gather their input.
8. Once the project is completed; the PPs and the SAOs will be informed and asked to comment on the finished result.
9. The PPs and SAOs may comment.
10. Once the comments are addressed, the project is sent to the Ministers to be endorsed and therefore accepted as an AC project.
11. The impact of the project is felt, or not, by IPs in regards to their environment.

Figure 2: Possible Avenues to Influence Decision Making

for instance on what should be included in a project, and have the chance to make suggestions before an action is undertaken. The PPs, however, have no voting rights within the Council (Arctic Council, 2012).

The PPs can also make proposals for projects or programs to be directed by a given PP itself, or collectively by more than one PP group. The PPs have access to all documents and decisions of

the AC, placing them in a unique position to influence decisions both within and external to the Council system. (Arctic Council, 1998). Due to the complexity of the procedures a PP may undertake to have an idea brought to fruition, a Unified Modelling Language (UML) sequence diagram (Figure 2) was created to show the simplified pathways an idea may take from an IP and to an AC report. The diagram should be read from the top left and finishing at the bottom left, following the arrows. Each transaction is numbered and an explanation provided in the box below.

Secondary communication is likely to occur in multi-lateral or bi-lateral communications, between the PPs themselves, the PPs and state representatives such as the Senior Arctic Officials (SAOs) and the PPs and Arctic member states. This could be in the form of electronic communication or through informal conversations at conferences, for example.

Aside from the top-level AC meetings, an enquiry into the PPs' influence on outcomes needs to consider what ways they have of accessing and affecting discussions in the permanent Working Groups and ad hoc groups and task forces. It can also be assumed *prima facie* that when they attach real importance to an issue, the PPs (and/or the IP groups that they represent) will consider other channels for exerting influence, starting with direct lobbying of their own national government, or possibly of other national constituencies (e.g. national oil/gas and shipping companies, environmental and civil rights movements). Cases could be imagined where IPs in one country try to lobby the government in another, e.g. if it holds the AC Chair or if it is threatening to obstruct some decision that they favour. Most IPs also have access to, and may be quite skilled in, modern media routes for publicising their views and seeking wider support, using both their own media and interviews with sympathetic journalists.

Methodology

The research was qualitative in nature and carried out through interviews with those who have expert knowledge in the Arctic Council. In total ten individuals who either represent or work alongside IPs were interviewed (See Table 1.) using a semi-structured interview guide (see Hennink et al., 2010). A narrative interview (NI) format was used within the semi-structured process, whereby the interviewer refrains from guiding the conversation as much as possible, encouraging the expert to tell the story in their own way (Bauer, 1996). Five informants were currently in, or had previously been in, a leadership position in a PP organization. In addition, one expert affiliated with the PPs was interviewed, as well as one high-level member of the Arctic Council Secretariat, and three experts in a leadership position in the Council's Working Groups. The interviewees were selected using the AC online staff lists and through word of mouth, to target potential knowledge

Name of Interviewee	Position	Country
Chief Gary Harrison	Alaska Chair of Arctic Athabaskan Council.	Alaska
Chief Michael Stickman	International Chair and President of Arctic Athabaskan Council.	Alaska
Dmitry Bereztkov	Former Vice President of RAIPON.	Russia

Name of Interviewee	Position	Country
Terry Fenge	Known for his long-standing knowledge of the AC, Terry is an Ottawa-based consultant.	Canada
James Gamble	Executive Director for AIA.	Alaska
James Stotts	President and ICC Chair of ICC Alaska.	Alaska
Jutta Wark	International Chair, Arctic Council Sustainable Development Working Group.	Canada
Lars-Otto Reiersen	Executive Secretary of the Arctic Monitoring and Assessment Program.	Norway
Magnus Johannesson	Director of the AC Secretariat, former Secretary General for the Ministry for the Environment and Natural Resources in Iceland.	Iceland
Tom Bary	Executive Secretary, Conservation of Arctic Flora and Fauna International Secretariat.	Iceland

Table 1: Study Interviewees

holders. Interviews were analysed using a simple coding method in which a series of themes were selected from the background information. From this, phrases were selected from all the interviews that related to the key themes and analysed (Hennink *et al.*, 2010). All interviewees were consulted about using their names and quotations in this article.

Results

Four key thematic areas were drawn from the analysis of the interview results identified four key thematic areas regarding the contribution of the PPs to environmental policy through the AC (aspirations of the PPs, the PP's relation to the home-state, structural set up on the PPs and, their ability to operate in different procedural contexts). The results of the study are summarised below.

Aspirations of the PPs

The primary thematic area looked at here is the basic rationale for IPs to make inputs into the AC: what motives do they have, and what goals do the PPs set themselves when working with the Council? The aspirations of the PPs give the basic rationale for their communication and it can be supposed the extent that the PPs are able to achieve their motivations can form the basis of a judgement of successful inclusion in environmental decision-making.

All of the PPs interviewed said that the preservation of a subsistence lifestyle was their main goal. Issues of development came up in the majority of the interviews as a key area that the PPs would like to address. Wark, International Chair of the Sustainable Development Working Group, summarised the general attitude of the feelings of the PPs towards development, echoing other interviewees who saw a need for a degree of compromise:

I think they are much more attuned to the implications of development. I think they are very sensitive about environmental impacts and I don't think any of them are anti economic development, I think there is a basic understanding that in the current context, it is not possible to entirely go back to a traditional way of life, but there is that important power sharing that needs to go on so IPs have a choice about what kind of economic development is being done and how.

Echoing previous research, this study has confirmed that the PPs representing different IP communities have different aims and motivations in terms of environmental protection. Or, in other words, what is important to each Indigenous Community may be different from the next. Fenge, a consultant who held a vast knowledge of the AC, summarised this point:

They have different interests. For example, the Athabaskans are particularly concerned about terrestrial species, the Inuit about marine species. Now the environmental issues associated with these species can be quite different. For example... the biomagnification of certain POPs (persistent organic *pollutants*) is greatest in the marine food chains as opposed to terrestrial.

In addition to environmental protection, cultural protection was cited in the interviews as a key motivation for IPs' activities in the AC. A key finding from this study was the comment made by a large number of PPs that in order to 'continue their way of life', the promotion of projects and activities supporting culture may offer an easier and less politically sensitive way to forward their agenda upon the international stage; and secondly that the PPs may be more successful in protecting the culture of the IPs rather than the environment *per se*.

Fenge suggested that there could be a difference in the ability of PPs to articulate matters when it comes to environment or culture by explaining that "[w]hen you are talking about, and if it is closest to culture, closest to health, then my sense is that those are the issues upon which the PPs do the best job".

All of the PPs spoke of their ambitions for TK to be utilised for AC environmental outputs. Moreover, all PPs agreed that they saw the AC as a place to present their own experiences or those of the IPs they represent to a global audience. Berezhkov, former Vice President of RAIPON, explained that the "main aim is to implement Indigenous agenda or Indigenous issues and challenges into the work of the AC on environmental issues. Indigenous peoples describe their experience and ideas and also hopes and risks for Indigenous style of life, Indigenous culture, TK etc. to the experts and to states and stakeholders".

All of the PP interviewees felt that they were mostly successful in getting their views across when the matters were in line with motives of the Arctic states. Historically, IPs have less experience of engaging with the political system of the Arctic Council than do the Arctic states. Nevertheless, Wark stated, supported by other respondents, that the IPs have a good ability to engage at a political level because "[t]hey [meaning the PPs] are extremely politically astute and I think very knowledgeable and I think they know how to operate in the Council".

Strengthening relationships was commonly cited as a reason for the PPs to utilise the AC as a channel to influence environmental decision-making. The related aims were two-fold: first, to strengthen existing networks of IPs, and secondly, expanding this network to include other key stakeholders. For Stickman, developing these personal connections was the "most important thing" and it was the indirect means of communication that had the most bearing: "You go there and sit

down at the meeting but I think the most important conversations are the side conversations that you have”. Berezhkov concurred that indirect means of communication was a very important rationale for utilising the AC: “Maybe 50% of the effectiveness of the AC meetings and work for Russian IPs, for RAIPON when I worked there, was first of all and simply the place to meet with concrete people”.

Relation to the Home State

The next set of findings concerns the way in which the PPs’ relationship with their home state(s) influences the way they utilise the AC to influence environmental policy. IPs have different histories and different opportunities that also affect the relevant PPs’ ability to gain funding. As Harrison, Chair of Arctic Athabaskan Council, argued when talking about project and PP funding, some PPs may not have the same abilities as others:

None of the Arctic Athabaskan villages have that kind of money, when you talk about it you have to have people who are able to provide for their families when they are doing this kind of work and we just don’t have the funding for that and the states are not willing to make the resources available to the IPs of the countries and when you ask the other countries they say well, you belong to one of the richest countries in the world, what’s the problem?

Barry also explained that “[c]ountries fund the different groups differently, some more, some less and I suppose that reflects their national interests”. Some participants suggested that this problem lead to some competition amongst the PPs for funding in cases where a host state did not provide the support needed and the PP concerned had to seek resources from other Arctic states. This was especially relevant in Russia, where this study suggested that only those loyal to the government could apply for funding and no Russian funding would be given to any persons/groups that were critical of practices regarding environmental or Indigenous rights. The majority of interviewees suggested that partnership approaches with businesses and observer states might provide some solutions for capacity issues.

A number of reasons were noted why a good relationship with the home state can have a positive influence on the ability of PPs to engage in decision-making. One interviewee pointed to the benefits of having the ability to gather information from those actors in the state that may be advising the Senior Arctic Official (SAO) in their decisions; this gives the PPs the opportunity to make suggestions that are in line with the state’s values, and thus more likely to be supported by the state. In addition, good communication was found to be a key factor in the PPs’ ability to lobby governments to act in accordance with their goals. In addition, as the agreements in the AC are mostly ‘soft’ in nature and not enforceable, one interviewee argued that a close relationship is crucial for guiding the states in their activities relating to follow-up of AC positions and declarations. If the relationship is lacking with the home state, or the PP is focusing on issues that are not in line with the priorities of the home state, interviewees mentioned that approaching other governments is another avenue to take. As Gamble, Executive Director at Aleut International Association, highlighted that “[w]e might be interested in talking to other Arctic States about issues because sometimes you recognize a similarity of opinion, so even though there is not an opposition from our home state we may notice that a particular Arctic state may be more likely to see our perspective on an issue”.

One of the core complexities cited in the interviews was the interference of state priorities with the motivations of the PPs. As Stotts, Chair of the Inuit Circumpolar Council Canada explained, supported by other interviewees that “[t]here are some cases where a country, they have some priority or some national interest and they are just like, ‘we don’t talk about it’, you know, and we’ve been trying to have the issue of commercial fishing in the Arctic raised as something to talk about but “we don’t talk about that.”

A key reason cited was the ACs aversion to stepping into regulatory regimes in national systems or negotiated bilateral agreements. This echoes the general finding of Bailes (2014) that one reason for states’ failure to truly address the needs of the IPs reflects reluctance by the relevant governments to interfere in the internal affairs of other Arctic states. The AC was seen by all PP interviewees as a place where issues could be resolved that were problematic with the home state.

Structural Set-Up of the PPs

The next findings concern the way that differences in the PPs’ structural set up were found to have a bearing on their ability to operate. The PPs represent diverse opinions to some extent, by representing either communities existing within different states or numerous communities within the same state. RAIPON is alone amongst the PPs in belonging to the latter group. Operating in numerous countries was also shown to present certain opportunities and difficulties. Berezhkov explained the opportunities and challenges regarding the management of diversity:

If you bring this knowledge from different parts so it’s the richness of the AC and in input of the PPs into this work and of course it’s a challenge because we have different opinions, we have different languages, we have different distances and timing etc. so it’s very difficult to gather people and discuss so this is two sides of this.

But as Stotts, explained, this complexity can bring financial benefits: “The other thing that ICC has going for it is its members, it’s mostly member funded, we get most of our money on our own, from ourselves. We do get government funding here and there but we are able to at least our core operations, fund by ourselves, so we don’t have to compromise to get the money”.

In addition, bearing in mind that the PPs operate at an international level and must do in order to get projects accepted, the benefit of having a good relationship across multiple states becomes clear. As Gamble explained:

For it to be an AC project it almost always has to operate in more than one Arctic State, it can’t just be in one of the countries, and so in reality the more circumpolar the better: and on the other side of that is that it also helps to have a willingness from one or more of the Arctic states to be involved in the project to co-lead, also it helps to be aware where some of the funding for the project might come from. So we have to sort of put all the pieces together.

Ability to Operate in Different Procedural Contexts

At the heart of this research is an analysis of what type of influence the IPs may have in different AC contexts and what the final outcome may be. This last results section looks at the main tools and methods of potential influence including input into discussions; engagement in and initiation of projects; effects upon recommendations to states, and the influence on the implementation of

these recommendations on the states' environmental activities of influence the IPs may have in different AC contexts and what the final outcome may be.

The Chairmanship's priorities were found to have a large influence on the type of environmental topic on which a PP may choose to enter into discussions. All of the interviewees agreed that the IPs' greatest strength in the AC was their ability to influence discussion. As Johannesson, Director of the Arctic Council secretariat stated:

There is a good atmosphere in the work of the Council in the meetings of the SAOs. Also, I have been in meetings of the WGs, the SAO meetings where the SAOs and the PPs have been at the same table and I would say it's a good atmosphere and, as I said earlier, the PPs presence broadens the discussions, they come up with new local knowledge which helps to make the discussions broader and very often leads to, I would say, a better conclusion.

All of the PPs agreed that although the AC was seen as offering a great opportunity to create projects to aid IPs and the environment, the complexity of getting a project accepted by the AC in collaboration with the WGs and the states made it challenging. The primary reasons given concerned the difficulties of having states support the projects; gaining finances for the projects; and coping with the different structural set-ups of the WGs. Harrison explained that he felt the existing system led to a sort of power imbalance, where the states had an unfair advantage over the PPs in getting projects started:

It's pretty hard to get a project through in the AC for several reasons. The PPs have to have a lead country so you have got to convince a country that your project is good, you have to figure out where the resources are coming from for the project and seeing as how most of the IPs in the AC don't have resources like the countries, because the countries are the ones who have confiscated all of our resources so it's hard to get a project started.

The inclusion of TK was also highlighted as a difficult area to pursue for the PPs. Barry, said: "There is no perfect example of the AC work where you can point to and you can say yes, this is where TK has been included. But very often it's easier to include indigenous perspectives rather than TK". The necessity of including the PPs early into projects was shown to be of high importance in this study. Wark explained the benefits of early engagement:

It refines the questions to be pursued under a project or under an initiative. And then it also ensures that they are interested and engaged...in order to have more TK included in the work it has certain resource implications and capacity implications. And it's very useful for the AC working groups to understand those at the beginning because that means they can adjust budgets accordingly and timelines accordingly rather than having the TK component as an add-on later on with sort of an artificial chapter or commentary that gets inserted an already existing product.

PPs were considered to be very successful when contributing to WGs and Task Forces, yet severely hindered by capacity. The PPs themselves agreed that their hope was that their testimony would enable change in policy either nationally or internationally. A number of the interviewees stated that SAO meetings were the location within the AC where it was most important to be present in order to influence policy. The SAOs' meetings bring together a number of national and

international key actors (including observers) that may allow the PPs to further their aims. Once the agenda is set through the AC and recommendations to policy makers produced, it is of course down to the individual states to enforce these policies.

A number of the interviewees took the view that the AC's work has considerable impact, ensuring the creation of international environmental agreements such as the Stockholm Convention and the Polar Code for shipping; however, most also highlighted the difficulties in judging this with any certainty due to the lack of a standardised AC monitoring system to be used by the states. As Johannesson commented: "I think that is perhaps not clear and obvious, but it is perhaps one of the shortcomings of the AC that decisions taken by the Council, which are to be implemented by the states and there is sort of no reporting obligation of the states to the Council on the implementation so I feel this is something that is lacking in today."

The interviewees, at the time of interviews, all saw the fact that only the states had the power to vote on AC decisions as an element weakening IPs' voices in the AC process.

Analytical Summary

Looking back at the different procedural stages where IPs may intervene to secure a change to an environmental output in the Council, as discussed above and presented in Figure 2, with the interview results, it is possible to offer some systematic analysis of the PPs' engagement at each of the process stages in project creation and inaction. Table 2 presents a summary of the strengths and weaknesses of the PPs' engagement, as outlined in the interviews.

Stage of Process	Strengths	Weaknesses
1/Consultation between the IPs and the PPs	The PPs have a wide range of methods for consultation with the IPs, many of which take on a personal communication style and involve the consultation of a vast number of stakeholders.	There is no standardized method for consultation nor are there the means for assessing the extent and impact of these interactions through the AC monitoring system as best practice in an environmental management system.
2/Gathering support	The PPs are respected and listened to. They have the ability to be present at all discussions and have access to all information giving them knowledge that may aid them.	They do not have the human or financial capacity to always be present and, may only be able to work within the political aspirations of the states themselves either in their relationship with the home state or, through the AC.
3/Outline by SAO to Ministers	/	/
4/Project approved	The PPs feel they have good opportunities to create projects through the AC.	Projects that do not fit the AC's mandate or take on rights based discourses are not likely to be accepted.

Stage of Process	Strengths	Weaknesses
5/Sourcing the skills from the IPs	The WGs and other AC members see great benefit in the inclusion of TK.	There have been some issues with including TK into AC outputs and often skills are outsourced from outside of the PPs.
6/The contribution of PPs to the project	The PPs have the ability to engage to their best ability.	The PPs may not always have the financial capacity or the skills to fully participate.
7/Consultation within a project	The PPs have the ability to engage to their best ability.	The PPs do not always have the capacity to engage in all areas of a project.
8/PPs Asked for comments on the finished project	/	/
9/Comments given	The PPs can highlight issues and necessary changes before publication.	At this point, if the PP has not been engaged early, they may not be able to a great impact at this stage.
19/Project endorsed	The PPs may contribute to a document that benefits the IPs they represent.	If the PPs have not worked closely enough with the SAOs during the process, the project may not be accepted as the states may not want to give their support.
11/Project impact on IPs	/	It is difficult to ascertain the extent of benefit without a robust monitoring system.

Table 2: Summary of PP Influence in Environmental Decision-Making in the AC.

Summary

As the interviews for this study confirmed, the PPs' influence in decision-making and the related outputs of the AC does not extend to full participation, and they face a number of barriers to engagement. Yet the PPs are often very successful in manoeuvring within the framework allowed to them. Interviews suggested that the PPs start from a strong position in influencing the direction of discussions in the AC, as they are respected, listened to, and their opinions are considered of high worth. However, due to a lack of capacity, the PPs are not always able to be present at relevant discussions to give their opinions.

Capacity issues, including lack of human resources, hinder the PPs' ability to influence discussions in several ways; the PPs sometimes lack the technical skills they need to fully engage in WG discussions, or lack the in-house staff to send as experts to AC activities on certain topics such as TK. Most of the PPs cover more than one state's territory and their home state or states have a crucial role in supporting, or hindering, the PPs' operational and political capacity through the provision of funding and of knowledge, which can go to inform their discussion points. In agreement with previous studies such as, Koivurova (2010), this study has underlined how the lack of a central, regular and neutral funding mechanism for the PPs leaves their activities susceptible to political interference, further complicating the PPs' formulation and pursuit of their goals. Other obstacles are posed by the collective stance of the AC states on what they are, or not, prepared to

discuss at the AC (See Pedersen, 2012). If the PPs wish to engage in a discussion on fisheries, security, or rights-based discourses – which are not formally within the Council's competence and/or not acceptable to certain states – their point of order is not likely to be taken up for serious discussion at the meeting. If the PPs' position is looked at from a Realist perspective (See Korab-Karpowicz, 2012) it is clear that, as the weaker players, they have less chance to get their decisions enacted through the Council than the larger and financially more powerful states.

According to the interviews, the most pressing set of issues on which the PPs hope to achieve influence were shown to involve support for IPs in their ability to practice subsistence living. Given that the states and the IPs may have different attitudes towards development, the conversation may turn to one of rights and sovereignty as ownership and control of land in order to achieve one's aims becomes crucial. There can be seen another inherent conflict in the fact that while PPs wish to protect a subsistence lifestyle, many directly related and important questions regarding rights to resources and associated issues of sovereignty are banned from the AC agenda. PPs looking to engage in such discourses must therefore find another avenue to exploit, such as the United Nations (UN) or, by the creation of partnership approached with multi-national corporations. If IPs are becoming increasingly despondent with the mechanisms in place to promote fair business interaction, which the interviews hint at, the IPs may wish to move past the structure of the AC to create new resource governance partnerships with other powerful non-state actors (See European Council of the European Union, 2008).

The study found that, the PPs were found to have a strong institutional knowledge of the AC and they can provide other members with historical and current knowledge of the workings of the AC. Given the finding in this study on the importance of network formation for the PPs who participate in the AC, the people-based forum provided by the AC forms a mutualistic help mechanism for furthering the Arctic environmental agenda. The human nature of the forum was found in this study, to make up its strength and provides the main rationale for many PPs to pursue the AC as an avenue to help IPs live in a subsistence manner. As another reflection of this human factor, the PPs were found to have the most influence in AC discussions when they related the environmental issues to consequent cultural issues such as knowledge loss or suicide amongst IPs. Given this people-centric nature of the AC decision-making system, it is perhaps not surprising that the PPs find it easier to communicate, and their colleagues find it easier to understand, the struggles faced by IPs on a human level rather than by addressing the environmental issues that may have caused these cultural issues and which policy makers may have no direct observational understanding of, due to perhaps living in a non-Arctic location or not having environmental knowledge. By channelling the views of the IPs in this way, the PPs can offer scientists and policy-makers a kind of mouthpiece for the environment, allowing the environmental issues of the Arctic to be understood from the human perspective of PP representatives with direct observational knowledge. The PPs' institutional knowledge and strong communicative abilities could also offer particular benefits for informing and guiding the AC's observer nations (See Arctic Council, 2011), particularly the newer ones invited to join in 2013 who are further away from Arctic realities. As highlighted in the interviews, in return these nations such as China and Japan may offer new possibilities of practical support and publicity to further the PPs' aims.

Interviews showed that there are a number of complexities for PPs wishing to initiate AC projects: they need to gain support from the states financially and ideologically, whilst navigating the

numerous different templates of the Working Groups (WGs). Supporting a previous study aimed at building capacity amongst the PPs by the Walter and Duncan Gordon Foundation et al., (2013), the interviews confirmed that the PPs are not able to keep up with the increasingly large body of work that the WGs undertake, and are forced to select which projects best suit their aims within the bounds of their capacity. When engaged in projects, the PPs may only be able to engage at a cursory level, inputting their thoughts at the end of a project. Their limited capacity means they must rely on the financial contributions of states including the technical abilities of the WGs to achieve their goals. When seeking the knowledge and support required for project acceptance, this study found that, the PPs benefit the most by communicating informally through bilateral or multilateral channels with their PP or WG colleagues or with state officials in the know. The environmentally based projects that the PPs propose were shown to, most likely, have the best chance of acceptance if they are in line with the current Chairmanship's priorities, or coincide with areas of constant work within the AC mandate such as TK.

This study found that, the PPs' position within the AC framework allows them to contact other states if they are not happy with their own state's environmental progress, and also to contact non-governmental organisations or non-Arctic states if they cannot find a solution among the Arctic states. From a Constructivist perspective (See Fearon, 1999), IPs are endowed with an identity as environmental witnesses and guardians with specialist knowledge of their environment: this gives them potentially great political power, as the PPs can lobby beyond the nation-state in order to create pressure from external sources supporting their goals.

Conclusions

Environmental governance, as it becomes increasingly complicated by globalisation, climate change and numerous other factors, requires dynamic solutions that go beyond historic approaches linked with the hierarchical and unequal benefits of development. As the Arctic environment undergoes change, IPs may need to place increasing pressure on the states to maintain their subsistence existence. The states may be hesitant to give power to IPs to pursue their own aims in the region, but ultimately states can only achieve environmental protection in a comprehensive and balanced manner by allowing a new way of being to be integrated into environmental governance. This study has managed to identify some specific issues with the institutional decision-making process, and to suggest some remedies: but additional critical study is needed to design the necessary institutional reforms to allow for PPs' full participation alongside other state and non-state actors, and to create a more grounded and holistic environment decision-making process.

Acknowledgments

Without the support of my academic supervisor Alyson J. K. Bailes this study would not have been possible. The research was funded by the The Ministers of Foreign Affairs of Iceland and Norway. With thanks to the expert knowledge of the interviewees.

References

- Aleut International Organisation. *About Aleut International Association, Inc.* (n.d.). Retrieved from: <http://aleut-international.org/about-us-2/>
- Arctic Athabaskan Council (2007). *Improving the Efficiency and Effectiveness of the Arctic Council: A Discussion Paper.* Publication by the Arctic Athabaskan Council.
- Arctic Athabaskan Council (n.d.) *About Us.* Retrieved from: <http://www.arcticathabaskancouncil.com/aac/?q=about>
- Arctic Council. (1996, September 19). Declaration on Establishment of The Arctic Council. *Joint Communiqué on the Governments of the Arctic Countries on the Establishment of the Arctic Council.* Ottawa, Canada.
- Arctic Council Founding Documents (1998). Updated Rules of Procedure - Brochure Format. *Arctic Council.* September 17-18. Retrieved from: <http://www.arctic-council.org/index.php/en/document-archive/category/4-founding-documents?download=2267:arctic-council-updated-rules-of-procedure-brochure-format>
- Arctic Council (2011). *Arctic Council Observer Manual for Subsidiary Bodies.* 2011. Retrieved from: <http://www.arctic-council.org/index.php/en/document-archive/category/425-main-documents-from-kiruna-ministerial-meeting?download=1780:observer-manual>
- Báiki. *About Báiki* (n.d.). Retrieved from: <http://www.baiki.org/content/about.htm>
- Bailes, A. J. (2014). Understanding The Arctic Council: A 'SubRegional' Perspective. *Journal of Military and Strategic Studies*, 15(2): 31-49.
- Barry, T. (2015, April 10). Executive Secretary, Conservation of Arctic Flora and Fauna International Secretariat. (M. Coote, Interviewer).
- Bauer, Martin (1996, October). The Narrative Interview: Comments on a technique for qualitative data collection. *Papers in Social Research Methods, Qualitative Series no 1.* London: London School of Economics and Political Science Methodology Institute.
- Berezhkov, Dmitry (2012, November). *The Russian Government shuts down the Russian Association of Indigenous.* Retrieved from: http://www.iwgia.org/news/search-news?news_id=710
- Berezhkov, D. (2015, February 20). Former Vice President of RAIPON. (M. Coote, Interviewer).
- Berkman, P. A., & O. R. Young (2009). Governance and Environmental Change in the Arctic Ocean. *Science*, 324 (5925): 339-340.
- Coote, M. L. (2015). *Environmental Decision-Making in the Arctic Council: What is the Role of Indigenous Peoples?* (Master's thesis, University of Iceland). Reykjavik.
- Fearon, J. D. (1999). *What is identity (as we now use the word).* Unpublished manuscript, Stanford University: Stanford, CA.
- Fenge, T. (2015, March 30). Principal of Terry Fenge Consulting. (M. Coote, Interviewer).
- Fenge, T. (2015, March 15). Session 4: Arctic economic and political cooperation: Between global and regional driving forces. *High North Dialogue Conference Series.* Retrieved from: <http://mediasite.uin.no/Mediasite/Catalog/Full/54b654225af64a76a72758e336d8544921>
- Gamble, J. (2015, March 15). Executive Director at Aleut International Association. (M. Coote, Interviewer).

- Gamble, J. (2015). The Arctic Council Permanent Participants: Capacity & Support – Past, Present & Future. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *The Arctic Yearbook 2015* (pp. 385-388). Akureyri, Iceland: Northern Research Forum.
- Gwich'in Council International (n.d.). *Gwich'in Council International*. Retrieved from: <http://www.gwichin.org/>
- Harrison, G. (2015, April 20). Alaska Chair of Arctic Athabaskan Council. (M. Coote, Interviewer).
- Haverkort, B. & C. Reijntjes (2010). Diversities of knowledge communities, their worldviews and sciences: On the challenges of their co-evolution. In S. M. Subramanian, & B. Pisupati (eds.). *Traditional knowledge in policy and practice: Approaches to development and human well-being* (pp. 12-30). Tokyo: United Nations University Press.
- Hennink, M., I. Hutter, & A. Bailey (2010). *Qualitative Research Methods*. London: Sage Publications Ltd.
- Inuit Circumpolar Council (n.d.) *About Us*. Retrieved from: <http://inuit.org/en/about-icc.html>
- Inuit Circumpolar Council (2010) *Charter*. <http://inuit.org/en/about-icc/charter.html>
- Jóhannesson, M. (2015, April 29). Director of the AC Secretariat, former Secretary General for the Ministry for the Environment and Natural Resources in Iceland. (M. Coote, Interviewer).
- Lindroth, M., & SinevaaraNiskanen, H. (2013). At the Crossroads of Autonomy and Essentialism: Indigenous Peoples in International Environmental Politics. *International Political Sociology*. 7(3): 275-293.
- Kankaanpää, P., & O. R. Young (2012). The Effectiveness of the Arctic Council. *Polar Research* 31 (n/a).
- Koivurova, T. (2010). *Environmental Impact Assessment in the Arctic: A Study of International Legal Norms*. Saarbrücken: Lap Lambert Academic Publishing.
- Korab-Karpowicz, W. J. (2010). Political realism in international relations. *Stanford Encyclopaedia of Philosophy*. Retrieved from: <http://plato.stanford.edu/entries/realism-intl-relations/>
- Nuttall, M. (2000). Indigenous peoples, self-determination, and the Arctic environment. *The Arctic: Environment, People, Policy*, 377-409.
- Nuttall, M. & T. Callaghan (2000). *Arctic: Environment, People, Policy*. Amsterdam: Harwood .
- Parliament of the U.K.(n.d.). *Select Committee on the Arctic - Report of Session 2014–15*. <http://www.publications.parliament.uk/pa/ld201415/ldselect/ldarctic/118/11802.html>
- Reiersen, L.O. (2015, April 29). Executive Secretary of the Arctic Monitoring and Assessment Program. (M. Coote, Interviewer).
- Russian Association of Indigenous Peoples of the North (n.d.) *About RAIPON*. <http://www.raipon.info/about/>
- Saami Council (n.d.) *About Saami Council*. Retrieved from: <http://www.saamicouncil.net/?deptid=2178>
- Sterling, J. (2011). *International cooperation institutions in the Arctic*. Retrieved from: <http://www.nordregio.se/en/MapsGraphs/07>
- Stickman, M. (2015, April 6). International Chair and President of Arctic Athabaskan Council. (M. Coote, Interviewer).

- Stokke, O. S. (2014). Asian Stakes and Arctic Governance. *Strategic Analysis*, 38(6): 770-783.
- Stokke, O. S., & G. Hønneland (2006). *International Cooperation and Arctic Governance: Regime Effectiveness and Northern Region Building*. Abingdon, UK
- Stotts, J. (2015, March 18). President and CC Chair of the Inuit Circumpolar Council Canada. (M. Coote, Interviewer).
- Pedersen, T. (2012). Debates over the Role of the Arctic Council. *Ocean Development & International Law*. 43(2): 146-156.
- Watt-Cloutier, Sheila (2016). *The Right to Be Cold: One Woman's Story of Protecting Her Culture, the Arctic and the Whole Planet*. Canada: Penguin.
- Wark, J. (2015, April 13). International Chair, Arctic Council Sustainable Development Working Group. (M. Coote, Interviewer).
- Young, O. R., & N. Einarsson (2004, November). *Arctic Human Development Report*. Retrieved from http://www.svs.is/images/pdf_files/ahdr/English_version/AHDR_chp_1.pdf
- Young, O. R. (2014). Arctic Governance-Pathways to the Future. *Arctic Review*, 1(2). Available at: <https://arcticreview.no/index.php/arctic/article/view/15>

The Strength of Flexibility: The Arctic Council in the Arctic Norm-Setting Process

Camille Escudé

In the Arctic, the thaw of East-West relations in the 1990s led to deeper regional and sub-regional cooperation, and a strengthening of the stability of the region through the establishment of standards. This led in turn to the formation of a patchwork of standards that overlap and intersect: the proliferation of soft law standards was then the only way to put the states and other stakeholders around the table, in a region that has not yet been cleared of past tensions.

Few observers would have predicted that a body which so many limitations would have reached such results in terms of norm-making, considering that the Arctic Council (AC) is only 20 years old. The AC has often been viewed as politically ineffective, with lots of talk but little action on issues relating to its mandates of environmental protection and sustainable development. The AC is very far from being a perfect forum but despite or thanks to its “soft” structure, it offers a large place for local voices, which ensures its legitimacy, and it can better adapt over time by facilitating compromise.

This paper explores the central role of the AC in Arctic norm setting, stressing the specificities of the Council among the wide range of Arctic-norm producers, and demonstrating how its successes are linked to its soft law structure, as a major factor of legitimacy and socialization, and finally of normative power in the Arctic. It is the flexibility of the AC that contributes to its strength. Thus, despite the absence of any ‘hard’ power, the AC is the major norm setting instrument in the Arctic.

Introduction

It has become a cliché to describe the changes that the Arctic region¹ has been facing for thirty years now, both physically (Jakobsson, Ingólfsson, Long & Spielhagen, 2014), and politically (Stokke, 2011, 2013; Underdal, 2013; Young, 2009). The environmental challenges, economic changes, and geopolitical disruptions created a functional need, serving as a catalyst for the creation of standards in the Arctic to prevent the struggle for economic and political worldwide interests. But unlike the Antarctic, there is no comprehensive legal regime governing the Arctic region. The thaw of East-West relations in the 1990s, however, led to a strengthening of regional and sub-regional cooperation in the Arctic, as well as increased stability of the region through the development process of dialogue and joint establishment of standards.

Camille Escudé is a PhD candidate in International Relations at Sciences Po-CERI, France.

Norm production in the Arctic is still in its infancy and has not yet established a coherent body of social practices for the stakeholders in the region. In fact, the profusion of standards and the variety of norm producers is striking in the Arctic. A wide variety of circumpolar and external actors in the region communicate, influence or participate in the process of standards making. Different level of stakeholders and therefore levels of standards coexist: international standards that apply in the region but also national or regional standards created on different levels, in forums or parliaments, which explains their low binding nature in general. In the profusion of standards created over the last thirty years, the importance of soft law compared to hard law is clear. But in this special area, could the creation of standards be set up differently? Without going into the debate, we can broadly agree that soft law is soft in nature, flexible in function and free from strict formalities (Hasanat, 2007). That is, soft law creates non-treaty agreements – such as the Ottawa Declaration (1996) - while protecting states from internationally legally binding obligations. Soft law is therefore in many ways a facilitator of norm-making.²

More importantly, the establishment of standards, even those non-binding as soft law, legitimates the standards producer in the Arctic – a region where symbols take up much space in the debates.³ This is particularly the case when the producer of standards lacks the ability, or willingness, to produce hard law. The profusion of soft law in the Arctic reflects this search for legitimacy - the central issue in this region - which is at the heart of the concerns of internal and external actors: states and organizations but also companies, epistemic communities, civil societies. Moreover, the production of ever-increasing standards, even “soft” ones, limit the actors’ room for maneuver.

The Arctic is governed by an internationally recognized regime resting on the Arctic Council (AC) intergovernmental cooperation and the UN Convention on the Law of the Sea (UNCLOS). The AC has taken over from the Arctic Environmental Protection Strategy (the AEPS) (Nord, 2015) in 1996 as a “high-level forum” (AC, 1996). The AC has no legal personality or authority to develop regulatory arrangements: it is only the place for Arctic countries, as well as for other countries aspiring to legitimacy in the region to express diplomatic and political positions. The AC is quite a unique cooperation model in terms of political representation, including both representatives of the eight sovereign states in the Arctic as well as six indigenous peoples’ organizations, who have to be “consulted” on all matters (Graczyk, 2011; Koivurova & Heinämäki, 2006). Other states and stakeholders such as international organizations and NGOs may apply as Observers. The mandate of the AC is focused on the concept of environmental protection and sustainable development as stated in the First Article of its Establishment Declaration (AC, 1996). Although its agreements have no binding force, the Council is at the heart of standards production in the Arctic. Yet, the Council has a lot of limits and a low level of normativity. It is a place of social practices much more than articulation of norms, a place where one reduces uncertainty rather than a place where decisions are actually made, a facilitating body much more than a regulatory one.

The traditional theoretical frameworks often offer explanations of the strength of the Arctic based on realistic theories of international relations and “power politics” wherein a traditional concept of power-struggle ensures the stability of the region. As Ingrid Medby (2015) underlines:

“However, adherence to the present regime of governance is not just a matter of material or strategic importance for the eight Arctic states (A8). Rather, regime adherence in the Arctic is also a matter of status, pride, and identity. (...)

Accordingly, the regime's strength lies not so much in provisions per se, nor in any ability to bind and govern actors in a top-down manner, but in its discursive power."

The AC intergovernmental cooperation is very far from being a perfect forum but despite or thanks to its "soft" structure, it offers a large platform for local voices and can better adapt over time by facilitating compromise. This paper explores the central role of the AC in Arctic norm setting, stressing the specificities of the Council among the wide range of Arctic-norm producers, and demonstrating how its successes are linked to its soft law structure, as a major factor of legitimacy and socialization, and finally of normative power in the Arctic. In this paper, we would like to stress the political and symbolic dimension of the AC's legal production, following in the footsteps of scholars who are emphasizing the importance of the discourse on normative and discursive power in the Arctic (e.g. Medby, 2015): it is the flexibility of the AC that contributes to its strength. Thus, despite the absence of any 'hard' power, the AC is a major instrument of norm setting in the Arctic.

The paper mainly follows the documentary analysis method, which examines the instruments of and documents produced under the AC, along with some international agreements formed under the auspices of the AC. The study also covers a review of existing literature, including the writings of leading scholars. Finally, this paper is based on knowledge gained by (anonymously) interviewing members of the AC, Working Groups of the AC and individuals working at the Secretariat of the AC in Tromsø, Norway in 2015.

First, we will see how the AC cooperation process has reached a central place in the mosaic of the norm-making process in the Arctic for about thirty years, and the ways the AC builds standards. We will then observe the political vision that underlines the norm production in the Arctic, and how this is deeply linked to the soft law concept. This will allow us to see how the production of standards reflects the normative influence, and finally the strength of the AC in its "soft" legal structure.

The Arctic Council at the Heart of the Arctic Norm-Making Process

A Multitude of Norm-Producers in Search of an Arctic Legitimacy

The Westphalian approach of sovereignty, according to which no state recognizes an authority beyond her own, has long prevailed in the Arctic. But it gave way over time to cooperation and obligation initiatives. In the twentieth century, the standards established in the region were set up by associations of states in order to answer very specific questions. However, no standard on the general scheme of the area of protection was established in the Arctic during this period, while, the South Pole has been protected by the Antarctic Treaty since 1959: the Arctic did not seem to be a fertile breeding ground for international cooperation.

However, with the thaw of East-West relations, the Arctic experienced a sudden change in status. Indeed, the 'Détente' period of the early 1970s was conducive to standards production between opposing blocks, parallel to the increased exploitation of oil and gas in the 1960s and 1970s, the rise of environmental mobilization and interest of the epistemic community, and intensification of indigenous peoples' claims. Bilateral and multilateral gradual regional cooperation initiatives culminated in the Arctic in the 1980s, mainly due to growing environmental concerns which were then on the world's agenda (World Commission on Environment, 1987; Meadows, 1972).

Today, the emerging picture of standards in the Arctic is characterized by a patchwork of regulatory mechanisms, placed within a jurisdictional framework of international law (Dodds, 2013) thanks to the UNCLOS. There are many domestic regulations for the protection of the Arctic, but there is no single comprehensive and integrated regime covering an array of issues that constitute the region's policy agenda. Most of these plans are based on soft law, taking essentially preventive measures. Besides, most of the goals remain unclear, leaving much space for legal interpretation (Gladun, 2015).

As a matter of fact, sub-state, inter-state, multi-state, trans-state, and supra-state actors interact with one another in a highly multilateral system of governance. The Arctic has become a region whose governance is complex, and where the powers of the bilateral and multilateral agreements, forums and councils, tend to overlap (Dittmer, Moisiu, Ingram & Dodds 2011; Young, 2005). In many ways, the production of standards in the Arctic can be celebrated as a symbol of the emergence of the Arctic as an international political region. This period is that of region-building (Keskitalo, 2007: 194) where the Arctic is no longer the center of a security paradigm but becomes a place of low politics (Nilsson, 2012), where cooperation prevails and the establishment of standards becomes possible. The scientific work of the epistemic community (Haas, 1992) in the region is central, being an indirect standards designer. Conceptualizing the region through the normative and scientific work makes it possible to build and strengthen the legitimacy of Arctic actors.

The Arctic Council at the Heart of Arctic Norm Setting

Although it is far from the only institution of political significance in the Arctic, the AC is the political pillar of Arctic governance and pre-eminent forum in the region (Keskitalo, 2004; Pedersen, 2012; Dodds, 2013). The standards in the AC are established by consensus, which requires slow decision-making, when rapid economic and political changes sometimes call for a firmer approach. Moreover, the consensus seems to be established at the cost of the eviction of security issues (AC, 1996). Some authors stressed the importance of the concept of stewardship (Wilson, 2016) in order to analyze the AC. From this perspective, stewardship is political, because it aims to 'shape norms' (Griffiths, 2012: 4).

Several researchers have tried to measure the effectiveness of the AC (Ronson, 2011; Kankaanpää & Young, 2012). We rather want to look at the evolution of the way the Council is implementing its standards and how successful that evolution is. Primarily dedicated to the publication of high-level scientific reports without real normative value, the Council has seen its prerogatives evolve over time. The comprehensive scientific reports of the AC make up the most of its achievements; the use of science reports in the Council helps highlight important issues and places them on top of the political agenda of the countries of the Arctic region, but also worldwide. As a soft-law body, the AC could contribute little in terms of mitigating climate change. But the AC's reports have had some influence on the international scene, and in general the Council has greatly contributed to the overall science of climate change by generating high quality reports, drawing the attention of researchers and politicians on certain issues, and highlighting the close links between the Arctic environment and the global system.⁴

Few observers would have predicted that a body with so many limitations would have reached such results in terms of norm-making, at the young age of 20. The production of scientific reports has

undoubtedly strengthened the role of the AC as a standards producer by bridging the gap between science and politics (Gladun, 2015). Research on climate change intensified through expert groups that have carried out an inventory of protected natural areas, and studied environmental problems. International cooperation in the Arctic has indeed played a role in the protection of the Arctic and the global environment by influencing at once the measures in response to a global pollution problem and the way national and international standards apply the specific conditions of the Arctic – such as the “Arctic Offshore Oil and Gas Guidelines” in 2009 (PAME, 2009).

In addition, the ministerial meetings of the Council offered a discussion platform for the Arctic future including a wide range of participants. The Council has enabled increased Arctic cooperation and influenced the coordination of national and international policies, in order to become the main cooperative platform in the Arctic. Even from the perspective of actors outside the region, the importance of the AC is growing. This trend is highlighted by the recent wave of applicant countries and actors for observer status, such as Asian countries (Su & Lanteigne, 2015; Leiv Lunde, Yang & Stensdal, 2016). Levels of interest and responsibility in the Arctic concern the global civil society as well as non-Arctic states and indigenous peoples organizations. Since the creation of the AEPS, “Observer” states are present in regional Arctic fora. However, within the AC, the arrival of six new countries in 2013 (China, India, Italy, Japan, South Korea and Singapore), a symbol of the globalization of Arctic issues, has met with strong resistance from some member states who feared an increased influx of external actors and a dilution of their historical authority. As regional cooperation increases and the range of stakeholders have expanded worldwide (Bennett, 2014), the maintenance of state sovereignty is a key priority for the Arctic states (Heininen, 2012; Knecht & Keil, 2013; Steinberg & Dodds, 2013).

Many Shades of Norm Making in the Arctic Council

The AC has managed to establish treaties and standards with diverse degrees of obligation. Before the launch of its first hard law agreements, the AC published an important number of soft law agreement lacking formal legal rigor, yet with a certain political impact (Hough, 2013). But slowly policy-making is emerging from Arctic cooperation, even if all observers point at the difficulty of this development. Timo Koivurova and David VanderZwaag did a balance sheet of the Council’s achievements after ten years of existence (2007: 191), in the light of the Council’s limited role as a discussional and catalytic forum. The adoption of the first legally binding agreements under the auspices of the Ministerial meetings of Nuuk (2011) and Kiruna (2013) changed the picture. The first agreement concerns Search and Rescue (SAR) in marine and air spaces (AC, 2011), the second tackles the fight against marine pollution by hydrocarbons (AC, 2013). These texts are intergovernmental agreements negotiated and adopted within the framework of this forum.

The Arctic Search and Rescue Agreement (SAR) was the first legally-binding instrument negotiated and adopted under the auspices of the AC. The agreement plans and organizes the conditions for sea, land and aviation rescue in the polar region, which requires a coordination of rescue means, including military, and cooperation among Arctic states. Its objective is to strengthen search and rescue cooperation and coordination in the Arctic (Rottem, 2014). As Anton Vasiliev – Co-Chair of the Task Force on Search and Rescue between 2010 and 2011 – explained in his article “The agreement on cooperation on aeronautical and maritime search and rescue in the Arctic – A new chapter in polar law” (2013: 64), mandatory status agreements had been actively debated for the first three sessions before Member States decided that it should be legally binding and not purely

political. It is a political document above all, still an opportunity for collaboration between Arctic coast guards and all authors and observers agree in emphasizing the importance of this pioneering agreement (Koivurova & VanderZwaag, 2007; Kao, Pearre & Firestone, 2011; Vasiliev, 2013). In addition to being a major contribution to polar law, the agreement demonstrates a new level of trust and cooperation between the Arctic states and illustrates their increasing ability to come to an agreement. In this sense, the SAR agreement paved the way for binding agreements to come in other areas where the AC could establish itself as the leading institution.

A second binding agreement was set up following the work of the EPPR in 2013: the “Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic”, which aims at promoting cooperation, coordination and assistance relating preparation and response in case of oil spill leaks. The objective of this Agreement is to strengthen cooperation, coordination and mutual assistance among the Parties on oil pollution preparedness and response in the Arctic in order to protect the marine environment from pollution by oil (Arctic Council, 2013). It provides a mechanism for information of the parties in case of serious leakage and an obligation to provide assistance to countries that ask for advice, provision of equipment and personnel.

The signing of these agreements is a step forward in the transformation of the AC towards a more formal cooperation, and demonstrates the surprise of many that the Council should have been to create a new form of governance, with a soft law status that can adapt to emerging problems through legal instruments to produce effective governance. These recent significant advances show that even if the Council is not an international organization, political means were strengthened, which many observers describe as the passage from a policy shaping to policy making body.

The Strength of Flexibility: Soft Law as a Norm-Making Facilitator

A Short History of Soft Law and Norm-Making in the Arctic

Soft law has been a very controversial concept for at least four decades, parallel to its growing usage in international law in order to respond to new forms of cooperation. In the case of the AC, soft law created the governance regime: the AC as permanent cooperation forum was created thanks to a soft law process. But the provisions of soft law instruments are legally non-binding even though they are politically or morally binding.

Most of international law is characterized by low intensity and only a few international institutions approaching the idea of legalizing “hard”. The hard law is associated with the ability to implement mechanisms capable of imposing sanctions if the law is not respected (Hasanat, 2009). But in the soft law process, legalization is not completely absent. The panorama of norms goes from binding rules to a simple forum for negotiations. Soft law therefore corresponds to a process where actors try to create standards, even if these standards do not correspond to a legally binding treaty. The word “standard” therefore, covers a very fluid and flexible reality.

Besides, the notions of soft law and hard law do not preclude a binary approach, but rather provides a gradual spectrum of possibilities, where the cursor can be placed according to different variables. In this regard, one could imagine in the Arctic a spectrum of standards that would range purely political statements that do not have the force of law (such as the Copenhagen agreement in 2009 on climate change), to codes of conduct, down to ministerial statements and formal agreements and treaties.

It is important to observe that most legally binding international agreements formed under the auspices of the AC, such as the SAR and the Oil Spill agreements are fairly open-ended and do not establish any strict regulation (Hasanat, 2007). Since the Council was formed by a declaration, it cannot operate separately from the eight Arctic states or require states to take specific measures: even the SAR agreement, which was celebrated as the first binding agreement signed in the Council, could only be set up from the goodwill of the states. The Council's recommendations in terms of environmental protection therefore have very little chance to influence national governance systems. Facing climate change, the collective response of the Council members was more to produce a number of scientific reports related to the problem, rather than implement binding measures, while the eight Arctic countries are responsible for almost half of global greenhouse gas emissions, and the Arctic region is surely one of the most visibly affected by the problem.

Nevertheless, with no decision-making abilities, but only 'soft' power, concerns have been raised that the AC remains a weak institution, severely lacking power to influence national governments (Heininen & Nicol, 2007; Koivurova, 2010; Koivurova & VanderZwaag, 2007; Young, 2012). The AC structure of soft law makes it unable to take formal decisions that would be legally binding for Member States in order to react to the climate urgency in the Arctic. The AC is in thus far more a decision shaper than a decision maker (Hasanat, 2009). The Council has also not been conceived as an operational tool, and while many guidelines are produced by the Working Groups of the Council, the impacts of these are difficult to determine, since the Council has no mechanisms to assess the monitoring of the recommendations. As such, the AC has been repeatedly criticized (see e.g. Huebert & Yeager, 2008; Koivurova, 2010; Koivurova & Molenaar, 2010). Only the signatory states are able to implement the standards and there is no sanction for non-compliance, which begs the question of the norm implementation (Dingman, 2015). The AC does not and cannot enforce and implement guidelines, assessments or recommendations: that responsibility belongs to each Arctic individual state.

In the current discussion about the form that standards should take in the Arctic, most of the reform proposals recommend a formal legal instrument (Pharand, 1991; Koivurova, 2000; Hasanat, 2013). The European Parliament had thus proposed the creation of an Arctic Treaty in 2008, which was an anathema to the circumpolar governments. On the contrary, Oran Young supports the development of arrangements on specific topics (Young 2009; Young, 2011: 331), which appears to be the most pragmatic solution, as establishing hard law standards does not seem to be politically feasible. The British researcher and diplomat Alyson Bailes stressed, "trying to force it [the AC] into a "stronger" mould (...) would most likely undermine these positive qualities while guaranteeing no useful results" (2013: 17).

The Strong Sides of Soft-Law

Soft law is often viewed as a step in the development of the standard that would evolve in time into hard law. On the contrary, our approach considers soft law as a particularly effective method to implement standards. It is the "soft" structure that allows the legalization of social cohesion, in particular by including a wide variety of players at the heart of negotiations. The main advantage to establish a framework for international governance without a harder structure is that it offers more room to include non-state actors. In particular, local voices need to be included in the governance process. Those bottom-up initiatives bring the additional legitimacy, expertise, and other resources required for making and enforcing new norms and standards, and provide an

effective means for direct civil society participation in global governance. Because of its soft law structure, the AC can't develop regulatory arrangements but includes indigenous peoples in the cooperation process.

Soft law is a product of state practice when conducting an international treaty is not possible at all. The actors can then have confidence in the agreement and know that it will not be used to impose policies with which they disagree, and they are assured that there will be no limitation in their ability to act in their national interest. Soft law provides much more ways to manage uncertainty, and can better adapt over time by facilitating compromise and mutual effects of the cooperation between the different values and interests of the actors, with different degrees of power and different time scales. In this perspective, Ingrid Medby stresses the importance of the normative influence of the AC: the AC does not conduct state's political practices, since it has no binding power. Nonetheless, the AC lead the Arctic stakeholders to conduct themselves in certain ways: "The major successes of the AC may be the sheer interaction of states and other actors on an equal playing-field; in particular states whose officials are otherwise prone to bilateral dialogue-aversion." (2015: 331). Although it holds no hard power to force the states in the region to any behavior, the AC is a powerful instrument to oblige them politically by setting soft-law norms.

It is a complex balance to achieve for the AC, between efficiency, that is promoting "harder" agreements, and legitimacy, that is offering a larger place for locals in the decision process. The AC is not a perfect forum, but despite, or perhaps *thanks* to its internal limitations, the AC has scored a lot of successes, primarily by placing non-state actors at the heart of the negotiations. The AC binds players just a bit, *thus* it binds them together. It is this ability to bend without breaking, this strength of the flexibility that seems particularly valuable in the operation of the AC.

Conclusion

The key to the success of the Council lies in its generative role. Over the years the AC's intergovernmental cooperation has built a foundation of shared norms and values, and it has significantly increased the level of socialization and interaction between the Arctic states, even for the most reluctant to cooperate.

For some authors, the soft law nature and restricted mandates of the AC have limited its capacity to respond to new issues emerging from climate change, particularly those related to the exploitation of oil and gas reserves, commercial shipping through the region, effects on wildlife, and impacts on indigenous peoples' homelands and culture. (see e.g. Kao, Pearre & Firestone, 2011). In the face of the criticism often directed at soft law, it must be repeated that it is always preferable to a total lack of cooperation structure or even control, and one wonders what such a fragile region as the Arctic would look like if it were delivered to the national interests of power politics.

The British researcher and diplomat Alyson Bailes rightly stressed the importance of not criticizing the AC by comparing it to an ideal type (2013). For her, it is unfair to evaluate the AC's strengths and weaknesses by the standards of institutions of fundamentally different types – for instance by comparison with the Antarctic regime, when it resembles more closely the sub-regional organizations of Europe. By their standards, the AC has no unusual major weaknesses, and it shares all their typical strengths, which are especially relevant for handling the Arctic in a time of rapid evolution and architectural ambiguity.

Despite its many imperfections in the norm-making process, the AC is the source of many successes: the first indigenous participation in the cooperation process, or the interactions between politics and science that produced innovative and influential research reports. The Council played a pioneering role in the field of environmental protection against organic pollutants, and by analyzing the consequences of climate change in particular. But non-binding standards do not imply a much less robust system. The AC is not based on hard-law standards and agreements but it has built a foundation of shared norms and values. Regional standards around environmental protection and the inclusion and respect of local and indigenous perspectives have been institutionalized in the AC and beyond. For us it is the flexibility of the current system of emerging standards that contributes to its robustness.

Yet, the Council is a place of social practices much more than articulation of norms, a place where one reduces uncertainty and not where the decisions are made, a facilitating body much more than a regulatory one. But facilitating cooperation, social practices and thus the establishment of standards, is already a lot especially in the Arctic. The strength of the AC is to have managed to remain flexible with its flexible structure and organization of soft law, which could be a visionary and promising medium to cooperate in the global field of environment, given the relative failure of current environmental international negotiations. Ironically, the AC's greatest weaknesses are also its greatest strengths.

Notes

1. The Arctic is a region with a large number of definitions. In this paper, we will use the AC's reliance on the Arctic Circle's latitude (66° 33' north) the most widely accepted definition, where the eight states with territories north thereof are recognized as Arctic states: Canada, Denmark/Greenland, Finland, Iceland, Norway, Russia, Sweden, and the United States.
2. We are aware that the dichotomy of soft/hard law is challenged by some legal experts (Trubek et al., 2006). Without going into the details of these discussions, we consider these concepts as useful tools in our demonstration.
3. The high-profile event of the Russian flag planted in 2007 in the Arctic Ocean has essentially a symbolic value, but reminds the international community the submissions in the CLCS and then demarcation negotiations over areas where these coastal states have fairly limited rights. Canada has made similar statements, although more discreet for the Northwest Passage.
4. While the Intergovernmental Panel on Climate Change (IPCC) had already noted in 2001 that the effects of climate change tended to be more noticeable in the Arctic is the ACIA that sets up the flagship of Arctic as a witness of global warming, as that region is warming twice as fast as the rest of the world. In addition, an important element that the ACIA has highlighted in a new way is the impact of climate change on Arctic inhabitants, particularly on indigenous peoples. This report illustrates the scientific cooperation at the highest level, given the number of scientists involved, from eleven countries.

References

- ACIA (2005). Impact of a warming Arctic: Arctic climate change impact assessment. Cambridge, Cambridge University Press. Retrieved from: <http://www.amap.no/arctic-climate-impact-assessment-acia>
- Arctic Council (1996). Declaration on the Establishment of the Arctic Council. Retrieved from: http://library.arcticportal.org/1270/1/ottawa_decl_1996-3..pdf
- Arctic Council (2009). Arctic Marine Shipping Assessment. Retrieved from: http://www.arctic.noaa.gov/detect/documents/AMSA_2009_Report_2nd_print.pdf
- Arctic Council Offshore Oil and Gas Guidelines report. (2009). Retrieved from: <http://www.pame.is/index.php/projects/offshore-oil-and-gas>
- Arctic Council (2011). Agreement on cooperation on aeronautical and maritime search and rescue in the Arctic. Retrieved from: <http://www.ifrc.org/docs/idrl/N813EN.pdf>
- AMAP (2007). Oil and Gas Activities in the Arctic - Effects and Potential Effects. Retrieved from: <http://www.amap.no/documents/doc/assessment-2007-oil-and-gas-activities-in-the-arctic-effects-and-potential-effects.-volume-2/100>
- Bailes, A. (2013). Understanding The Arctic Council: “A Sub-regional” Perspective. *Journal of Military and Strategic Studies*, 15(2): 31-49.
- Bennett, M. (2014). North by Northeast: Toward an Asian-Arctic region. *Eurasian Geography and Economics*, 55(1): 71–93.
- Byers, M. (2010). *Who Owns the Arctic?: Understanding Sovereignty Disputes in the North*. Vancouver: Douglas & McIntyre.
- Dingman, E. (2015). AC Environmental Initiatives: Can the United States Promote Implementation? In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *The Arctic Yearbook 2015* (pp. 86-101). Akureyri, Iceland: Northern Research Forum.
- Dittmer, J., S. Moisiso, A. Ingram, A., & K. Dodds (2011). Have You Heard the One About the Disappearing Ice? Recasting Arctic geopolitics. *Political Geography* 30(4): 202–214.
- Dodds, K. (2013b). The Ilulissat Declaration (2008): The Arctic States, “Law of the Sea,” and Arctic Ocean. *S AIS Review of International Affairs*, 33(2): 45–55.
- Exner-Pirot, H. (2012). New directions for governance in the Arctic Region. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *The Arctic Yearbook 2012* (pp. 224-246). Akureyri, Iceland: Northern Research Forum.
- Gladun, E. (2015). Environmental protection of the Arctic region: effective mechanisms of legal regulation. *Russian Law Journal*, 3 (1): 92-109.
- Griffiths F (2012) Stewardship as concept and practice in an Arctic Context. Retrieved from: http://www.cyberdialogue.citizenlab.org/wpcontent/uploads/2012/2012papers/CyberDialogue2012_Griffiths.pdf
- Haas, P. M. (1992). Introduction: Epistemic Communities and International Policy Coordination. *The MIT Press*, Winter: 1-35
- Hasanat, W. (2013). Reforming the Arctic Council against increasing climate change challenges in the north. *Michigan State International Law Review*, 22 (1): 195-240.
- Heininen, L. (2012). State of the Arctic Strategies and Policies – A Summary. In L. Heininen, H. Exner-Pirot, & J. Plouffe (eds). *The Arctic Yearbook 2012* (pp. 2–47). Akureyri, Iceland: Northern Research Forum.

- Hoel, A. H. (2009). Do We Need a New Legal Regime for the Arctic Ocean? *The International Journal of Marine and Coastal Law*, 24: 443–456.
- Hough, P. (2013). *International politics of the Arctic: coming in from the cold*. London; New York: Routledge.
- Huebert, R. and Yeager, B. B. (2008). *A New Sea: The Need for a Regional Agreement and Management and Conservation of the Arctic Marine Environment*, Oslo, Norway: WWF International Arctic Programme.
- Iulissat Declaration. (2008). Retrieved from: http://www.oceanlaw.org/downloads/arctic/Iulissat_Declaration.pdf
- Jakobsson, M., Ingólfsson, Ó., Long, A. J., & Spielhagen, R. F. (2014). The Dynamic Arctic. *Quaternary Science Reviews*, 92: 1–8.
- Kao, S-M., Pearre, N.S., Firestone, J. (2012). Adoption of the arctic search and rescue agreement: A shift of the arctic regime toward a hard law basis? *Marine Policy*, 36 (3): 832-838.
- Kankaapä, P. & O. R. Young (2012). The Effectiveness of the Arctic Council. *Polar Research*, 31: <http://dx.doi.org/10.3402/polar.v31i0.17176>
- Keskitalo, C. (2007). International Region-Building: Development of the Arctic as an International Region. *Cooperation and Conflict*, 43: 187-205.
- Knecht, S., & K. Keil (2013). Arctic Geopolitics Revisited: Spatializing Governance in the Circumpolar North. *The Polar Journal*, 3(1): 178–203.
- Koivurova, T. (2000). Alternatives for an Arctic treaty – evaluation and a new proposal. *Review of European Community and International Environmental Law*, 17 (1): 14-26
- Koivurova, T. (2010). Limits and Possibilities of the Arctic Council in a rapidly changing scene of Arctic governance. *Polar Record*, 46(2), 146-157.
- Koivurova, T. & L. Heinämäki (2006). The participation of indigenous peoples in international norm making in the Arctic. *Polar Record*, (42): 101-109.
- Koivurova, T. & E. Molenaar (2010). *International Governance and Regulation of the Marine Arctic: Overview and Gap Analysis*, report prepared for the WWF International Arctic Programme, Oslo.
- Koivurova, T. & D. VanderZwaag (2007). The Arctic Council at 10 years: retrospect and prospects. *University of British Columbia Law Review*, 40(1): 121-194.
- Lunde, L., Jian, Y., & I. Stensdal (eds) (2016). *Asian Countries and the Arctic Future*, World Scientific Publishing Co. Pte. Ltd., Singapore, 2016
- Meadows, D. H., Meadows, D. L., Randers, J., Behrens, W. W. III. (1972). The limits to growth, *Universe Group*. Retrieved from: <http://www.donellameadows.org/wp-content/userfiles/Limits-to-Growth-digital-scan-version.pdf>
- Medby, I. A. (2015). Big Fish in a Small (Arctic) Pond: Regime Adherence as Status and Arctic State Identity in Norway. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *The Arctic Yearbook 2015* (pp. 313-326). Akureyri, Iceland: Northern Research Forum.
- Nilsson, A. E. The Arctic environment – from low to high politics. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *The Arctic Yearbook 2012* (pp. 179-193). Akureyri, Iceland: Northern Forum.
- Nord, D. C. (2016). *The Arctic Council: Governance Within the Far North*, Routledge.

- Nuttall, M. (1998). *Protecting the Arctic: Indigenous Peoples and Cultural Survival*. London Routledge.
- Pedersen, T. (2012). Debates over the Role of the AC. *Ocean Development & International Law*, 43(2): 146–156.
- Pharand, D. (1991). Draft Arctic Treaty: An Arctic Region Council. *Canadian Arctic Resources Committee*. 19(2).
- Ping, S. & M. Lanteigne (2015). China's Developing Arctic Policies: Myths and Misconceptions, *JCIR*, 3(1): 965-990.
- Ronson, A. (2011). Political Climate Change: The Evolving Role of the AC. *The Northern Review*, 33: 95-111
- Rottem, S. V. (2014). The Arctic Council and the Search and Rescue Agreement: the case of Norway. *Polar Record*, 50(3): 284-292.
- Steinberg, P. E., & K. Dodds (2013). The Arctic Council after Kiruna. *Polar Record*, 51(1): 108–110.
- Stockholm Convention on Persistent Organic Pollutants. (2001). Retrieved from: http://www.pops.int/documents/convtext/convtext_en.pdf
- Stokke, O. S. (2011). Environmental Security in the Arctic: The Case for Multilevel Governance. *International Journal*, 66: 835–848.
- Sunstein, Cass R. (1996). Social Norms and Social Roles. *Columbia Law Review*, 96 (4): 903-968
- Trubek, D. et al. (2006). Soft Law, 'Hard Law' and European Integration, Toward a Theory of Hybridity. In Gráinne de Búrca & Joanne Scott (eds). *Law and New Governance in the European Union and the United States*. Oxford: Hart Publishing.
- Underdal, A. (2013). Meeting Common Environmental Challenges: the Co-evolution of Policies and Practices. *International Environmental Agreements: Politics, Law and Economics*. 13(1): 15–30.
- United Nations. United Nations Declaration on the Rights of Indigenous Peoples (UN-DRIP). 61/295. (2007). Retrieved from: http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf
- Vasiliev, A. (2013). The agreement on cooperation on aeronautical and maritime search and rescue in the Arctic – A new chapter in polar law. In Loukacheva, Natalia (ed.). *Polar Law Textbook*, Norden, Nordic Council of Ministers.
- Wilson, P. (2016). Society, steward or security actor? Three visions of the Arctic Council. *Cooperation and Conflict*, 51(1): 55–74.
- World Commission on Environment , Our Common Future ('Brundtland report'), Gro Brundtland and others (1987). Retrieved from: <http://www.un-documents.net/our-common-future.pdf>
- Young, O. R. (2004). Review of Negotiating the Arctic: The Construction of an International Region, by E. C. H. Keskitalo. *Polar Research*, 23(2): 211–213.
- Young, O. R. (2005). Governing the Arctic: From Cold War Theatre to Mosaic of Cooperation. *Global Governance: A Review of Multilateralism and International Organizations*, 11(1): 9–15.
- Young, O. R. (2009). Arctic in Play: Governance in a Time of Rapid Change. *The International Journal of Marine and Coastal Law*, 24: 423–442.

Young, O. R. (2011). If an Arctic Ocean Treaty is not the Solution, What is the Alternative? *Polar Record*, 47 (4): 327-334.

Understanding Media Perceptions of the Arctic Council

Andrew Chater & Mathieu Landriault

In this paper, we study media representations of the Arctic Council in North American national newspapers. The Council is the Arctic region's foremost international institution, charged to promote environmental protection and sustainable development. Past research on media and the Arctic has focused on public perceptions of the region and its issues. Research on the Council focuses on its role in regional governance. We find that the Council's outreach efforts are reasonably successful, though there is room for improvement. The overall assessment of the Council in the media is positive and descriptions of its purpose are accurate. However, few articles focus on the Council explicitly. We examine 241 articles about the Council found in six national newspapers, all published between 1996 and 2016. Three measures direct our inquiry. First, the frequency of Council mentions and the occurrences of the Council as primary focus measures issue saliency. Second, descriptions of the Council evaluate whether reporting on the institution is positive and accurate. Third, opinion texts reveal whether editorials and guest columns on the Council are positive or negative. This chapter presents a case to understand the importance of media framing. We concluded that media attention for the Arctic Council increased after 2009, peaking between 2013 and 2015 and that the dominant framing in both countries is that the Arctic Council stands for co-operation amid tension.

The Arctic Council is the region's premier governance institution, but is unfamiliar to many Canadians. A 2015 EKOS poll found that only 34 per cent of southern Canadians had even vaguely heard of the Council (Walter and Duncan Gordon Foundation, 2016: 48). This group is particularly important to examine as past governmental practices in Canada, for example, have responded to concerns about Arctic security and sovereignty raised by non-Arctic residents of Arctic states.¹

The Arctic region itself is inconspicuous; just more than 107,000 people call the Canadian Arctic home. This article will study representations of the Arctic Council in the media. Understanding how news media report on the Council provides insight into the effectiveness of the institution's communications strategy and an understanding about overall awareness of the institution. It is important to interrogate understandings of the Council and its role, as it is the region's premier environmental governance body, consisting of all of the Arctic states, as well as six indigenous peoples' organizations and 32 observers.

Andrew Chater is at the School of Humanities (Political Science), Brescia University College. Mathieu Landriault is at the School of Political Studies, University of Ottawa.

The paper shows that the Council's outreach efforts are reasonably successful in North America, though there is room for improvement. The media describe the Council's mission and purpose accurately and the overall assessment of the institution in the news is positive. Attention on the Council has increased across time. Yet, few articles focus specifically on the Council or its activities, rather equating the forum with regional efforts to combat climate change or as a bright spot of co-operation amidst competition over Arctic resources. This article surveys the two Canadian national newspapers and four national newspapers in the United States to uncover trends among the 241 articles that mentioned the Arctic Council between March 1996 and March 2016. It quantitatively examines the content of articles to evaluate the accuracy and frequency of descriptions of the Council. The first section of this article discusses the media theory employed in this analysis, as well as the contribution to literature. The second section discusses the method employed in this article. The third section provides an overview of the results of the quantitative article analysis and the fourth section analyzes these results.

Theory and Literature

This article contributes to literature on the Arctic Council in three ways. It is the first to study media representation of the Council systematically. The development of a regional institution for the Arctic has been the focus of great scholarly effort, tracking the evolution of the Arctic Council, as well as the relations between states and key civil society groups, such as Indigenous peoples. Most studies of the Council focus on the institution's role and influence in regional governance (Fenge, 2012; Huebert 1998; Koivurova & Heinamaki, 2006; Nord, 2016; Schram Stokke, 2007; Schram Stokke, 2005; Young, 2005). However, the media coverage of this region has seldom been studied in a systematic and comprehensive fashion. Nicol (2013) represents an exception to this pattern, having analyzed media coverage of the Arctic region in Canada over the span of four decades. Recent studies have tried to fill this gap. Gritsenko (2016) found that Russian media coverage of the Arctic between 2011 and 2015 focused mainly on either the development of hydrocarbon resources or security/geopolitical dynamics, reflecting closely shifts in governmental policies (11). Wilson-Rowe (2013) reached a similar conclusion, finding that Russian media framed the Arctic as a zone of cooperation rather than one of conflict, between 2008 and 2011 (239). However, the main focus is the Arctic region, but not the Arctic Council per se. Steinberg et al. (2014) offered the most in-depth analysis of media representations of this circumpolar forum. Media references increased significantly after 2009, spiking notably in 2013 and 2014 (Steinberg et al., 2014: 276). Russian and Canadian media adopted a more protectionist stance, highlighting the dangers of a greater non-Arctic state presence in the regional governance infrastructure and more specifically the Arctic Council. On other Arctic states, media chose to frame that the region has experienced increased inter-connectedness, requiring further cooperation and engagement (Steinberg et al., 2014: 279-282).

This article builds on this work by examining media coverage of the Arctic Council over a longer period of time. As Steinberg et al. (2014) focused on the reactions to the 2013 Kiruna meeting, this study will analyze twenty years of media coverage. In order to study such an extensive timeline, the number of cases was limited to only Canadian and American newspapers.

Second, this article contributes a case to literature that seeks to understand the importance of media framing. The media have been the object of important scholarly attention in recent decades. In

fact, researchers have found that the media, especially new media, can impact political behavior by increasing participation, but only in some contexts (Minard & Landriault, 2015; Norris, 2003). Additionally, the media have the potential to shape public knowledge and perceptions about specific political events, actors or institutions, hence undermining or fostering their legitimacy. In turn, the media can represent an important source of political information, making for more informed citizens (Kushin & Yamamoto, 2010; Bailard, 2012).

Studies have focused on how the media contribute to agenda-setting, increasing issue saliency by devoting great attention to specific events. News selection, an intrinsic part of all traditional and new media's filtering processes, influences issue saliency (Parlour, 1978; Soroka, 2002). From this standpoint, the media lead the public agenda and can dictate which stories should be considered salient. Media agenda-setting is more likely on matters that individuals do not experience firsthand and on a daily basis; environmental problems and foreign policy are two prime examples of such unobtrusive issues (Soroka, 2002: 268; Soroka, 2003). In order to evaluate if agenda-setting occurs, an assessment of the media attention for specific events or subject matters is in order.

More importantly, the media also decide how events and actors are covered (Gidengil & Everitt, 2003: 561). With regards to this aspect, the technique of framing has been extensively studied (Bauder, 2005; Trimble, 2007; Vucetic, Malo & Ouellette, 2014). An issue frame refers to "a theme, story line, or label suggesting a preferred interpretation of some policy question" (Richardson & Lancendorf, 2005: 75). Hence, for any given event, issue or actor, a multiplicity of interpretations could be in order; specific interpretations about the intentions of the actor or the nature of the issue will be decided by the journalist. Framing also is performed when specific aspects of a news story are underlined while others are absent or marginalized. This technique can be found both in opinion texts and reporting pieces, although it is easier and more explicit in the former. For the purpose of this article, studying framing is defined as measuring whether specific frames are more present than others and if the frames chosen simplify reality or rather offer an accurate picture of the dynamics at play.

Third, this article indirectly assesses the success of Arctic Council's media outreach, an institutional initiative. It is clear that the Council leadership does not wish to exist below the radar, as it communicates with the media extensively. The Council issues press releases following nearly every Council meeting and invites journalists to media events (for example, Arctic Council 1999a, 1999b, 2000, 2000b, 2013). These press releases emphasize the environmental and sustainable development work of the Council, listing projects and describing the nature of the institution. For example, the press release from the May 1999 Council meeting says, "More than 140 delegates actively discussed and debated co-operative measures to promote environmental protection and sustainable development in the Arctic region" (Arctic Council, 1999b: 1). This press release contains no references to security issues or regional tensions. In addition, the Council holds public events around its meetings. For example, in April 2000, the Lieutenant Governor of Alaska, Fran Ulmer, hosted a discussion at the University of Alaska on "Contaminants and Human Health," which the Council streamed on the Internet (Arctic Council, 2000b: 2). In some cases, the working groups that complete Council projects between meetings create specific media strategies and issue press releases, emphasizing the findings of their scientific assessments and audiences that might find the work useful (for example, Protection of the Arctic Marine Environment, 2013; Arctic

Monitoring and Assessment Programme, 2013; Conservation of Arctic Flora and Fauna, 2013). The Council's outreach efforts are reasonably considerable.

Recently, Council leadership has attempted to enhance the institution's communications. In 2007, the Norwegian chair issued a discussion paper describing outreach issues in the Arctic Council. It noted that the creation of a permanent secretariat would aid in communication, which states subsequently created in 2011. The discussion paper also advised the creation of new brochures and fact sheets to promote the work of the Council (Arctic Council, 2007: 4-5). In 2010, the Council considered an evaluative report on its outreach efforts, based on a questionnaire of Council working groups, states and indigenous peoples' organizations. It listed many issues with communication and outreach, such as unclear responsibilities for outreach and inconsistent branding (Arctic Council 2010: 3-12). In response, the Council released communication guidelines in 2011. In these guidelines, the chair is responsible for distributing communication, while the secretariat is responsible for organizing and maintaining information, with the aid of a full-time staff member (Arctic Council, 2011: 1). It also called for consistent branding of the Council logo on its products (Arctic Council, 2011: 2). The Council secretariat now plays two key roles in communication, namely 1) maintaining the Council's website, as well as social media, and 2) collecting Council documents into an online archive. It also provides these services for some working groups. This article contributes to academic literature because it illuminates the fruits of the Council's efforts to raise the profile of the institution and improve its communication.

Method

This article employs quantitative content analysis. We focus our attention on national newspapers printed in Canada (*Globe and Mail*, *National Post*) and the United States (*New York Times*, *Washington Post*, *Wall Street Journal*, *USA Today*). National newspapers were selected for the breadth of coverage they offer to their readership. Since they must adopt such a broad perspective, an empirical investigation of these publications offers the analyst a glimpse at agenda-setting at a country level; we can assess if the Arctic Council is considered a subject of national attention.

The data comes from online sources. Using the database Factiva and the keyword "Arctic Council," 252 hits were first reported. After discarding repeated articles and indexes, 241 articles were gathered on a 20-year period, from March 15, 1996 (the time of the first mention) to March 15, 2016. As expected, the use of the "Arctic Council" keyword casts quite a wide net.

A subsequent analysis was performed to differentiate between articles or editorials in which the Arctic Council was the primary focus of the document, a secondary topic of interest or a tertiary issue. We included in the former category articles or editorials for which the dominant focus was the Arctic Council or initiatives piloted by the body. The secondary category was comprised of texts dealing with Arctic issues without focusing on the Arctic Council. The last category included articles/editorials in which the Arctic Council was named but as a peripheral object of interest in a broader discussion (American foreign policy or global climate change, for example). Coding was conducted by one of the authors. Then, a second coder² was asked to code 10% of texts (24 texts, randomly-selected) in order to ensure the reliability of the initial coding. Intercoder reliability reached 83% similarity, confirming that the coding parameters were valid.

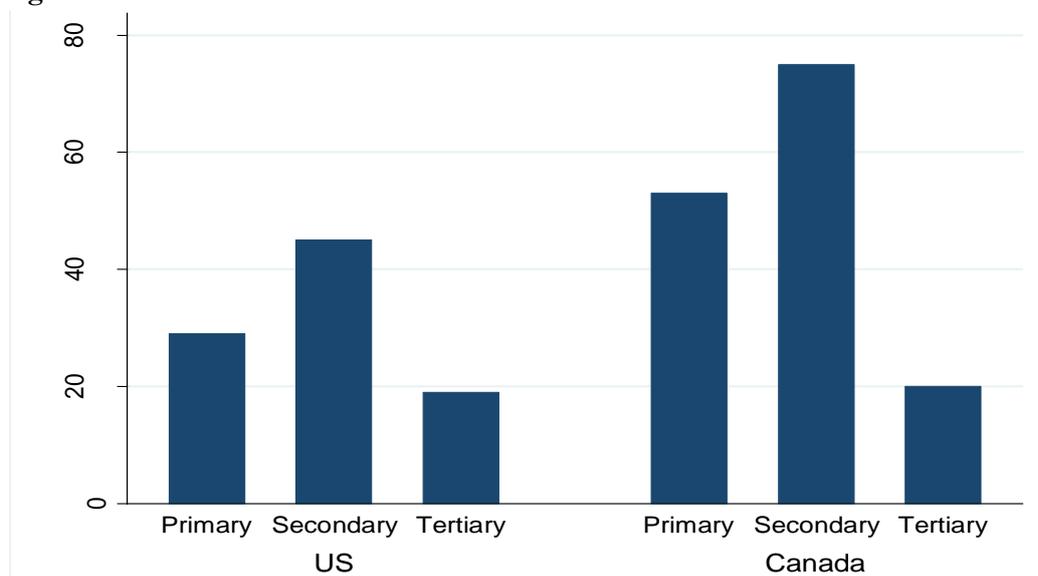
We studied the articles according to three main measures. First, we evaluated media agenda-setting by assessing the frequency of Arctic Council mentions and the occurrences of the Arctic Council

as a primary focus in order to measure issue saliency. We hypothesize that Canadian attention will be greater as the Arctic is a subject of national interest and historically, territorial disputes were intensely covered by the Canadian media. Second, we explored media framing by focusing on how the Council is described in reporting articles in order to evaluate if the media are spreading misconceptions about the Arctic Council's mandate and functions. We hypothesize that there will be persistent misconceptions, as the Council is a fairly low-key institution. Opinion texts and journalistic articles were not distinguished on these first two inquiries since we wanted to assess the level of overall media attention (first measure) and media framing. On this latter point, journalistic articles and opinion texts alike deploy issue frames. Finally, we focused our attention on opinion texts (guest columns, letters to the editor and editorials) to uncover whether the opinions printed were critical or supportive of the Arctic Council actions and role. We hypothesize that the opinions expressed in the Canadian media will display a greater level of support for the Arctic Council, as Canadian public opinion is generally highly supportive of norms of multilateralism and of international organizations (Paris, 2014).

Results

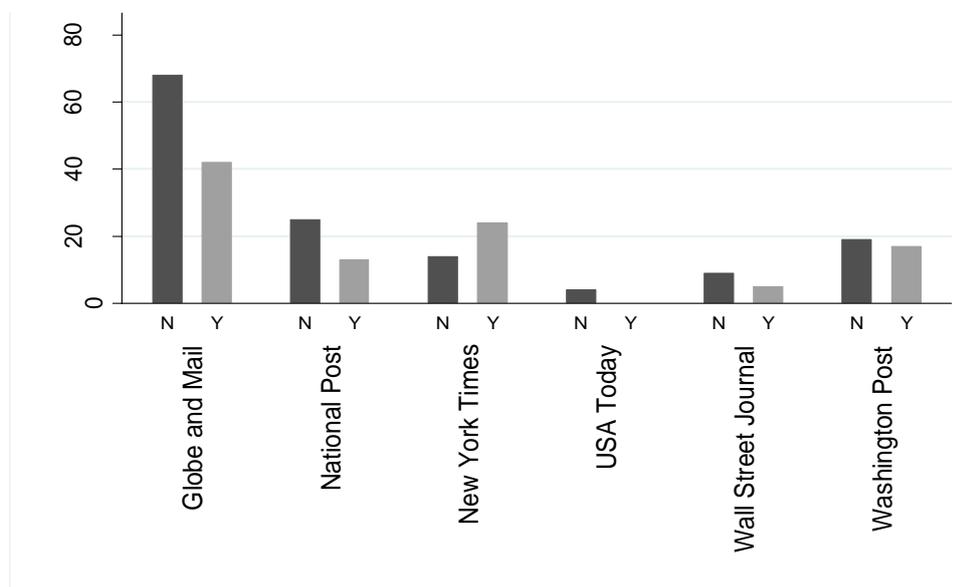
As per the first measure, how frequently do newspapers mention the Arctic Council? It is clear that the Council receives more coverage in Canada than in the United States. Of our sample, 148 articles are in Canadian newspapers and 93 articles are in United States newspapers. The majority of articles in Canada did not offer a description of what the Council does, ($n = 55/148$), while half of the American articles included a description of the Council ($46/93$). This could indicate that editors or journalists assume a certain level of pre-existing knowledge by the Canadian public, indicating issue saliency. The difference is statistically significant ($\chi^2 = 3.8363$, $p = 0.05$). Articles in the United States, on average, mentioned the Arctic fewer times, compared to Canada (mean of 2.14 in Canada, mean of 1.73 in the United States). The difference is statistically significant ($t = -1.66$, $p = 0.05$). In both cases, articles rarely mentioned the Council in the headline (6 instances in the United States, 14 instances in Canada). As for the level of focus in the articles, the Council is the secondary focus in the majority of articles in both Canada and the United States (see Figure 1). The difference in this case is not statistically significant ($\chi^2 = 2.1080$, $p = 0.349$).

Figure 1: Level of focus on Arctic Council in Canadian and American national newspapers



There are significant differences in the coverage of the Council between individual newspapers. Canada's *Globe and Mail* wrote more than twice as many articles about the Council compared to any other newspaper (110 articles). The rest of the newspapers wrote about the Council on roughly the same basis, even the other Canadian national newspaper. The *National Post* featured as many articles as *The New York Times* and *Washington Post* (38 articles). Most articles in all papers did not offer a description of the Council and its responsibilities, indicating that most editors assume people have certain knowledge of the Council, or that knowledge of the Council is not important in the context of the story. The exception was articles found in *The New York Times*, which frequently made mention of the Council's role in regional governance. Based on this measure, the Council is a more salient issue in Canada, compared to the United States, but only in one paper.

Figure 2: Frequency of factual description of the Arctic Council in newspaper accounts



As per our second measure, do articles accurately describe and evaluate the Council? In Canada, the majority of articles offered an accurate description of the Council, as a research institution or intergovernmental forum that promoted co-operation on environmental issues. The tones of the articles were either neutral or positive. One article about the Council offered a debatably negative description of the Council. A *Globe and Mail* article from August 10, 2015, said the Council was an “unchallenged regional forum, although not formal or powerful.” The Arctic Council has a formal structure, with a permanent secretariat. Only two articles about the institution offer slightly inaccurate descriptions of the institution. First, a *Globe and Mail* article from October 17, 2013, said the Council has the “powers to negotiate treaties,” while in reality, the Council is merely a venue in which states can negotiate international agreements. Second, a *Globe and Mail* article from August 11, 2007, called the Council an “untested international regime,” when no international agreement exists that establishes the powers of the Council.

In the United States, the majority of articles offered an accurate description of the Council, as an intergovernmental forum that promoted co-operation on environmental issues or a research institution. The tones of the articles were either neutral or positive. Only one article about the Council offers a debatably negative description of the Council. Namely, a *Washington Post* article

from August 22, 2015, said the Council helps address boundary issues, while its mandate focuses on environmental and sustainable development issues, as well as economic issues. As per our second measure, it is clear that newspapers present a fairly accurate picture of the Council's job.

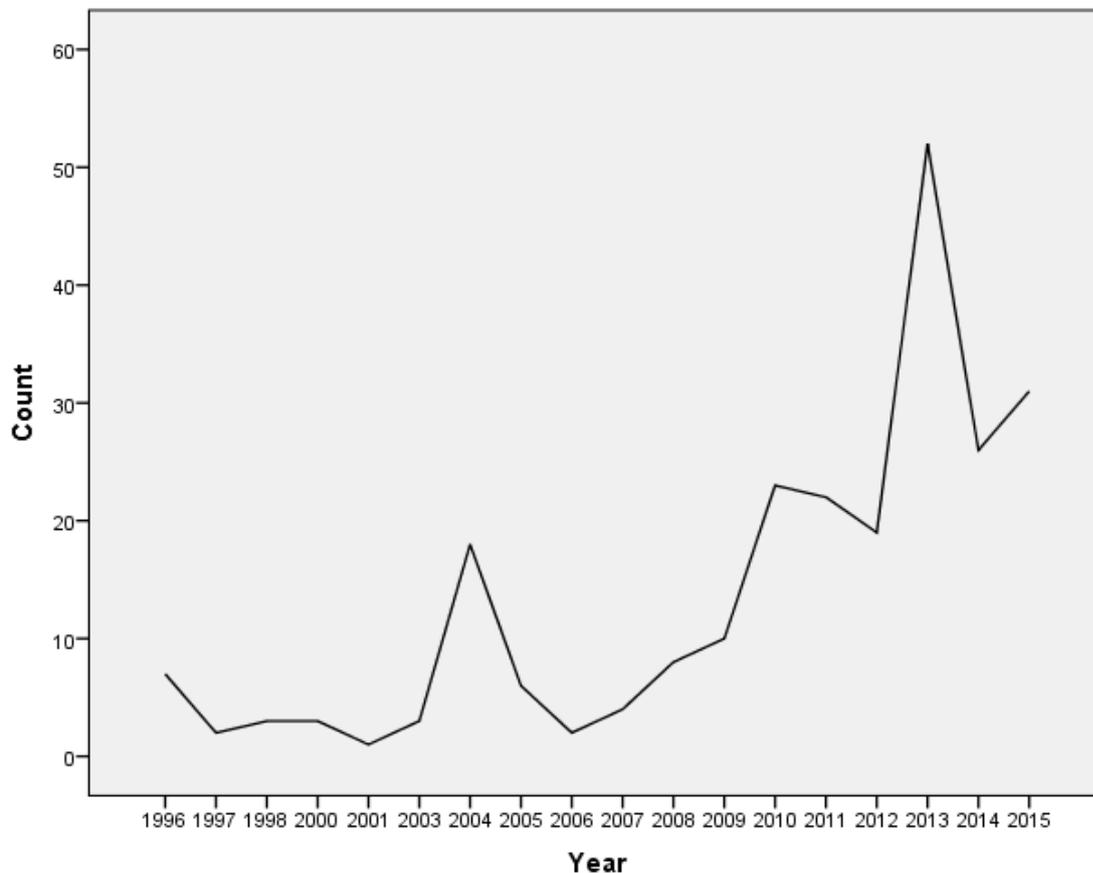
Articles on the Arctic Council discussed a relatively small group of issues. The majority of articles discussed the institution in stories about climate change (n=48 articles). The largest group of the articles (75) discussed the Council in the context of discussions of some sort of Arctic conflict, such as threats from Russia, China, Arctic Ocean conflict or conflict more generally. The Arctic Council is not an institution that deals with security issues. In fact, its mandate says specifically that it should not address security issues (Arctic Council, 1998: 1). The difference between newspapers in Canada and the United States was not statistically significant. Overall, newspapers discuss the Council in regards to only a few specific set of issues.

Table 1: Main focus of articles mentioning the Arctic Council

Issue Equated	Frequency
Climate Change	48
Canadian Foreign Policy	28
Arctic Issues (General)	27
Russian Threat	25
Chinese Threat	12
Arctic Issues (G5)	11
Other	91

The coverage of the Council has increased across time, with some spikes in the frequency of newspaper articles. Each year before 2004 saw fewer than 10 articles about the Arctic Council. Coverage greatly increased in 2004, though decreased until 2011. There have been more than 20 articles about the Council each year after 2010. Four months in particular saw increased coverage of the institution. The first spike in coverage was in November 2004 (n=15), due to the release of the *Arctic Climate Impact Assessment*, a major Council report on climate change. It contained many notable facts about climate change, such as that "The average extent of sea-ice cover in summer has declined by 15-20 per cent over the past 30 years" (Arctic Council 2004: 10). There was a spike in January 2014 due to special series of articles by the Globe and Mail (n=15). There were also spikes in May 2011 (n=14) and May 2013 (n=24). In May 2011, the Council released the *Agreement on Co-operation on Aeronautical and Maritime Search and Rescue in the Arctic*, the first formal international agreement negotiated in the Council. In May 2013, the Council released *Agreement on Co-operation on Marine Oil Pollution Preparedness and Response in the Arctic*, another international agreement. China also became an accredited observer in the Council. These events were clearly of interest and increased the profile of the Council. Canada (from 2013 to 2015) and the United States (beginning in 2015) assuming chairmanship of the body explain the heightened levels of interest from 2013 to 2015. Rather than the specific achievements of the Council, the print media are more apt to cover foreign policy and geopolitical considerations. In this light, the Council serves more as a backdrop against which state interests and positions can be described. Figure 3 illustrates these trends.

Figure 3: Distribution per year of Arctic Council mentions in six national newspapers in Canada and the United States from 1996 to 2015



Few articles mentioning the Arctic Council were published in strategic locations, such as the front page of a newspaper or the first page of a specific section. Only 33 articles (14 per cent of all mentions) were printed on these pages, of which seven primarily focused on the Arctic Council itself.

As for the third and final measurement, we wanted to know if the Arctic Council was generally supported or criticized. Overall, 85 opinion texts mentioning the term “Arctic Council” were gathered, the first one being written in 1998. Of the 85, only 26 (31%) had the Arctic Council as a primary focus of interest. We analyzed these documents, as the contributions dealing with the Arctic Council as a secondary or tertiary concern did not express opinions on the Council per se. Out of these 26 texts, 22 take a clear position on the Council. As expected, a minority of opinion pieces positioned themselves as critiques of the Council; indeed, only two (8% of all expressed opinions) expressed reservations in regards to the Council. Neither of these opinion pieces express any hostility toward the institution. Rather, in the first instance, the author articulates a climate-skeptic position, questioning the validity of the *Arctic Climate Impact Assessment*, warning that “the Arctic study is surrounded by the same doubts and questionable science that dogs the main scientific reports” (Corcoran, 2004: A4). The second critical contribution, by John Higginbotham, addresses the American policy toward the Conference on Global Leadership in the Arctic: Cooperation, Innovation, Engagement and Resilience (GLACIER). The conference is presented as a challenge to the “Arctic Council’s delicate regional governance architecture” and as part of a “strong, new and welcome U.S. focus on the Arctic” (Higginbotham, 2015: A11).

All in all, voices in support of the body clearly outnumbered the negative perceptions. Opinion texts casting the Council in a positive light represented 80% of all opinions expressed in editorial pages. Hence, the Council gathers near consensual support. However, 40% of these supportive contributions advocated for a strengthened role for the organization, which can be construed as a call for change. The most frequent reform proposal is for the council to deal with military security matters. Voices as diverse as political scientist Rob Huebert and political strategist Thomas Axworthy have advocated for different reasons and at different times to put military issues on the Council's agenda. For Huebert, such a reform is necessary to address "the growing militarization of the Arctic", as well as "for the troubling signs that both Russia and the United States have begun to view the region through a geopolitical lens" (Huebert, 2013: A12). Janice Stein and Axworthy both advocated for the same outcome, citing co-operation and constructive engagement present in the region and significant public opinion support for such initiative as central reasons to do so (Stein and Axworthy, 2011: A12). It would appear that experts perceiving both a pessimistic and optimistic view of Arctic relations supported strengthening the Council's mandate. Comparing Canadian and American newspapers (see Table 1), we can observe that most contributions calling for a strengthening of the Council were published in Canadian publications. Additionally, 75% of these reform calls were formulated by experts from academic and political circles; they also on average occupy more space (757 words) in the opinion section than do contributions only expressing a positive perception of the Council (495 words). Table 3 summarizes these results.

Table 3: Positions on the Arctic Council in editorial pages by country

	Critical	Positive	Strengthen	N/A
Canadian Newspaper	2	5	6	3
American Newspaper	0	8	2	0

Analysis

The Arctic Council is a low-profile institution, but interest is clear. Our findings are consistent with Steinberg et al. (2014). Media coverage of the Arctic region increased after 2009, peaking in 2013. As per our first hypothesis, is attention to the Council greater in Canada, compared to the United States? The Council is of greater interest in Canada, compared to the United States. There are more articles written about the Council in Canada (148 versus 92 in the United States), which discuss the Council more frequently (2.14 average mentions vs. 1.73 average mentions in the United States). This fact is not to say that the Council's strategy on communication has not had an impact in the United States. Most Canadian articles occurred in one newspaper, the *Globe and Mail* (110/148).

Is support for the Council greater in Canada versus the United States, as per our second hypothesis? It is not accurate that Canadian newspapers show a greater level of support for the Council. Papers in both countries offer positive assessments of the Council, contrasting with Steinberg et al. (2014) who concluded that Canadian and American media framing of the Arctic regional governance were quite different. Overall, the articles discussed the Council in the context of conflict (75 in total). The narrative is that the Council stands for co-operation amid tension. It is not accurate to say that there is a definite potential for conflict in the Arctic. Many academic articles have accounted that

states manage disagreements well and tensions in the region are low, especially compared to other regions (for example, Riddell-Dixon, 2011).

Are opinions expressed in the Canadian media more supportive of the Arctic Council than opinions in the United States? It is not accurate to say that Canadian perspectives expressed more support for the Council than American perspectives. Editorials in both Canada and the United States are generally supportive of the Arctic Council. Only two Canadian editorials expressed even a mildly critical view of the Council, although calls for strengthening of the institution are common in both countries.

This article contributes to the academic literature because it examines the perception of the Arctic Council. There are two main narratives about the Council. First, articles equate the Council with responses to climate change. As such, this observation fits with other investigations of media perceptions of the Arctic region, framing the AC in relations with broader global dynamics. There is a perception that the body is part of an international effort to combat global warming. This perception is accurate, as environmental protection is a major activity of the Council. Second, articles equate the Council with potential Arctic conflict over issues such as resources or boundary disputes. The second narrative is debatable, as tensions between states are quite low. In addition, the Council is not a venue to discuss military matters or boundary issues.

As for the contribution of the media to agenda setting, overall, we cannot refer to the attention devoted in editorial pages as substantial or amounting to agenda-setting. Few events were able to generate sustained interest. Agreements (on search and rescue for example) or reports (such as the *Arctic Climate Impact Assessment*) were one-off, instantaneous phenomena. In addition, they do not create controversies or intense debates, receiving consensual, although soft support (or indifference) since they are technical and require a high level of knowledge to grasp their importance. The Council ministerial meetings did not generate attention in opinion pages. In fact, strategic interests and geopolitical interstate relations gathered a heightened level of attention. Exactly 15 articles were published right before and near the end of the Canadian and American chairmanships of the forum. Media interest in both countries is linked to their respective government involvement and broader foreign policy objectives. Without the nation's foreign policy as a primary frame, the Arctic Council did not sustain much interest as a subject of debate in opinion pages.

Conclusion

The Arctic Council exists reasonably under the radar; yet, the Council itself has spent considerable efforts to raise the profile of the institution. This article finds that the Council's outreach efforts are reasonably successful. This success is apparent in that the media describe the Council accurately and positively. Attention on the Council is increasing over time. There is room for improvement, because relatively few articles focus on the Council. Articles often equate the Council with international conflict, which is not an accurate characterization of events. Persistence on the part of Council policy-makers to increase the profile of the Council likely will pay dividends. There was a spike in attention with the release of the *Arctic Climate Impact Assessment*; cutting-edge research presented in an effective manner will attract attention for the institution.

A shortcoming of this paper is that it only focuses on North American newspapers, which future research can address. The Arctic Council is an international body. Media analysis of the Council's

coverage in Denmark, Finland, Iceland, Norway, Russia and Sweden would provide a fuller, international perspective on perceptions on the Council and the relative success of the institution's outreach efforts.

Acknowledgments

The authors wish to acknowledge Kenny Ie and Rachel Côté for their suggestions and assistance with this research.

Notes

1. See for example Coates et al. (2008). Southern Canadians' anxieties compelled the Government of Canada to react forcefully to the 1969 Manhattan and the 1985 Polar Sea transits for example.
2. The second coder graduated from a Québec university with a degree in English and Intercultural studies and was unfamiliar with Arctic issues.

References

- Arctic Council. (2010). *Analysis of Arctic Council Communication and Outreach*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (2004). *Arctic Climate Impact Assessment: Impacts of a Warming Climate*. Cambridge: Cambridge University Press.
- Arctic Council. (2011). *Arctic Council Communications and Outreach Guidelines*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (1999a). *Arctic Council Meetings Held in Washington, D.C., November 17-19, 1999*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (2000a). *Arctic Council Ministerial Meeting Held in Barrow, Alaska, October 12-13, 2000*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (2013). *Arctic Council Presents Vision for Future of Co-operation in the Arctic*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (2007). *Draft Discussion Paper by the Norwegian Chairmanship: Improving Effectiveness and Efficiency of the Arctic Council*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (1998). *The Iqaluit Declaration*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (1996b). *Press Release: Arctic Council Meetings Held in Anchorage, Alaska, May 3-6, 1999*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Council. (2000b). *Press Release: Arctic Council Meeting Held in Fairbanks, Alaska, April 26-28, 2000*. Tromsø, Norway: Arctic Council Secretariat.
- Arctic Monitoring and Assessment Programme. (2013). *Scientific Findings of New Arctic Ocean Acidification Assessment Released*. Tromsø, Norway: Arctic Council Secretariat.
- Bailard, Catie Snow. (2012). A Field Experiment on the Internet's Effect in an African Election: Savvier Citizens, Disaffected Voters, or Both? *Journal of Communication*, 62: 330-344.

- Bauder, Harald. (2005). Landscape and Scale in Media Representations: The Construction of Offshore Farm Labour in Ontario, Canada. *Cultural Geographies*, 12: 41-58.
- Coates, Ken, P. Whitney Lackenbauer, William Morrison and Greg Poelzer. (2008). *Arctic Front*. Toronto: Thomas Allen Publishers.
- Conservation of Arctic Flora and Fauna. (2013). *The Arctic Biodiversity Assessment Released at Arctic Council Ministerial*. Tromsø, Norway: Arctic Council Secretariat.
- Fenge, Terry. (2012, April). Canada and the Arctic Council: Our Turn to Conduct the Arctic Orchestra. *Policy Options*, pp. 63-67.
- Gidengil, Elizabeth and Joanna Everitt. (2003). Conventional Coverage/Unconventional Politicians: Gender and Media Coverage of Canadian Leaders' Debates, 1993, 1997, 2000. *Canadian Journal of Political Science*, 36: 559-577.
- Gritsenko, Daria. Vodka on ice? Unveiling Russian media perceptions of the Arctic. *Energy Research and Social Science*. 16: 8-12.
- Higginbotham, John. 2015. Is Canada Ready for the Latest Twist in Polar Geopolitics? *Globe and Mail*, August 10, 2015, p. A11.
- Huebert, Rob. (2013, May 6). It's Time to Talk about Arctic Militarization. *National Post*, p. A12.
- Huebert, Rob. (1998). New Directions in Circumpolar Co-operation: Canada, the Arctic Environmental Protection Strategy and the Arctic Council. *Canadian Foreign Policy*. 5(2): 37-57.
- Koivurova, Timo and Leena Heinamaki. (2006). The Participation of Indigenous Peoples in International Norm-Making in the Arctic. *Polar Record*. 42(2): 101-109.
- Kushin, Matthew and Msahiro Yamamoto. (2010). Did Social Media Really Matter? College Students' Use of Online Media and Political Decision Making in the 2008 Election. *Mass Communication and Society*, 13: 608-630.
- Nicol, Heather. (2013). Natural News, State Discourses and The Canadian Arctic. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *Arctic Yearbook 2013* (pp. 211-236). Akureyri, Iceland: Northern Research Forum.
- Norris, Pippa. (2003). Preaching to the Converted? Pluralism, Participation and Party Websites. *Party Politics*, 9(1): 21-45.
- Protection of the Arctic Marine Environment. (2013). *Protection and Outreach Plan for the Arctic Ocean Review*. Tromsø, Norway: Arctic Council Secretariat.
- Soroka, Stuart. (2002). Issue Attributes and Agenda-Setting by Media, the Public, and Policymakers in Canada. *International Journal of Public Opinion Research*, 14: 264-285.
- Soroka, Stuart. (2003). Media, Public Opinion and Foreign Policy. *The International Journal of Press/Politics*, 8(1): 27-48.
- Stein, Janice and Thomas Axworthy. (2011, January 25). The Arctic Council is the Best Way for Canada to Resolve its Territorial Disputes. *Globe and Mail*, p. A12.
- Stokke, Olav Schram. (2007). A Legal Regime for the Arctic?: Interplay with the Law of the Sea Convention. *Marine Policy*. 31(4): 402-408.
- Olav Schram Stokke. (2014). Arctic Stakes and Arctic Governance. *Strategic Analysis*. 38(6): 770-783.
- Malo, Janelle, Valérie Ouellette and Srdjan Vucetic. (2014). Simplifying Terrorism: An Analysis of Three Canadian Newspapers, 2006-2013. *Canadian Political Science Review*, 8(2): 59-73.

- Nord, Douglas C. (2016). *The Arctic Council: Governance Within The Far North*. New York: Routledge.
- Paris, R., (2014). Are Canadians still liberal internationalists? Foreign policy and public opinion in the Harper era. *International Journal*, 69(3): 274-307.
- Parlour, J.W. and S. Scatchow. (1978). The Mass Media and Public Concern for Environmental Problems in Canada, 1960-1972. *International Journal of Environmental Studies*, 13:9-17.
- Richardson, John and Karen Lancendorf. (2004). Framing Affirmative Action – The Influence of Race on Newspaper Editorial Responses to the University of Michigan Cases. *Journal of Press/Politics*, 9: 74-94.
- Riddell-Dixon, Elizabeth. (2011). Meeting the Deadline: Canada's Arctic Submission to the Commission on the Limits of the Continental Shelf. *Ocean Development and International Law*, 42(4): 368-382.
- Steinberg, Philip, Johanne Bruun and Ingrid Medby. Covering Kiruna: a natural experiment in Arctic awareness. *Polar Geography*, 37:273-297.
- Trimble, Laura. (2007). Gender, Political Leadership and Media Visibility: *Globe and Mail* Coverage of Conservative Party of Canada Leadership Contests. *Canadian Journal of Political Science*, 40:969-993.
- Walter and Duncan Gordon Foundation. (2016). *Rethinking the Top of the World: Arctic Public Opinion Survey Vol. 2*. Toronto, Ontario.
- Walter and Duncan Gordon Foundation. 2011. *Rethinking The Top Of The World: Arctic Security Public Opinion Survey*. Toronto, Ontario (EKOS Research Associates).
- Wilson-Rowe, Elana. (2013). A dangerous space? Unpacking state and media discourses on the Arctic. *Polar Geography* 36(3): 232-244.
- Young, Oran. (2005). Governing the Arctic: From Cold War Theater to Mosaic of Co-operation. *Global Governance*, 11(1): 9-15.

Finding a Place in the Arctic Council for Non-Arctic Actors: A Social Network Analysis of the Arctic Monitoring and Assessment Programme

Jennifer Spence

In recent years, the Arctic Council has received a growing number of applications from states, intergovernmental organizations (IGOs) and non-governmental organizations (NGOs) to obtain Observer status. This has generated a diverse commentary about the impact of increased involvement from non-Arctic actors, what influence they could have, and the role that they should play. An underlying assumption in all of these debates is that the Arctic Council has been an exclusive club that now must open its doors to non-Arctic interests and ideas. But is this in fact the case? Has the Arctic Council been a closed forum? The Arctic Monitoring and Assessment Programme (AMAP) is one of six Arctic Council Working Groups. Its mandate is to “monitor and assess the status of the Arctic region with respect to pollution and climate change issues” (Arctic Climate Impact Assessment, 2016). Using the AMAP as a case study, this article uses social network analysis (SNA) to visualize the network of experts and officials from Arctic and non-Arctic states that have participated in shaping climate and pollution science prepared for the Arctic Council. This article examines the key features of the AMAP’s networks and uses data available between 1998 and 2015 to consider how these networks have evolved and changed over time. This article finds that actors from non-Arctic states have been present in the work of the AMAP since its inception. Furthermore, there has been a growth in their involvement in the AMAP since 2006; although, non-Arctic actors have remained peripheral in the AMAP networks.

As the Arctic Council celebrates 20 years since the signing of its founding declaration (Arctic Council, 1996), those involved at its inception consistently marvel at how much the Council has evolved and the prominence it has achieved both within the Arctic region and internationally. As scientists, governments and the general public (with help from the media) increasingly link the rapidly changing environment in the Arctic to the environmental, economic and social fates of the world, the Arctic Council has been positioned as “the preeminent forum for international diplomacy on Arctic matters” (Ziff, 2015).

As the Arctic Council gains prominence, it is not surprising that the interest of a variety of state and non-state actors to be involved with the Council has also grown. In 2013, the Council received international media attention for granting Observer status to China, India, Italy, South Korea, Japan, and Singapore; while deferring a decision to grant Observer status to the European Union and remaining silent on applications for Observer status from a number of intergovernmental organizations (IGOs) and non-governmental organizations (NGOs). Since that time, demand by states and organizations to be involved in the Arctic Council has continued to grow and there has

been increasing commentary in both the academic and popular literature on the role Arctic Council Observers can and should play – in particular larger states like China and the European Union. These debates often raise difficult issues about the power, influence and motives of different states seeking to gain access to the Arctic Council and participate in its discussions and activities. There is no question the involvement of new Observers raises important issues that many international institutions must grapple with and the Arctic Council will have decisions to make about how it will evolve to engage a broader community. However, underlying these debates is the assumption that the Arctic Council has been an exclusive club that only recently has faced the need to consider how it will involve new actors, in particular non-Arctic states (Lackenbauer, 2014; Wilson, 2013). But is this in fact the case? Is the idea of involving actors from non-Arctic states new? Has the Arctic Council functioned as a closed forum? This article considers these questions by focusing on the participation of actors from Arctic and non-Arctic states in on one of the Arctic Council's longest established working groups – the Arctic Monitoring and Assessment Programme (AMAP).

Using the AMAP as a case study, this article uses social network analysis (SNA) to visualize the network of experts and officials that have participated in shaping the climate and pollution science prepared for the Arctic Council. SNA is a relational methodology that places attention on the features of a network with a particular focus on highlighting the relationships between actors and the patterns of relationships that exist within a network. This article analyzes the people, organizations and states that have participated in the AMAP's work and examines key features of the AMAP's networks of experts and officials by using data available between 1998 and 2015 to consider how these networks have evolved and changed over time. This analysis finds that actors from non-Arctic states have always played a role in the work of the AMAP and their role has increased in the last decade as the Arctic has gained in prominence. However, this article also finds that Arctic Council Member states have consistently made up the core of the AMAP's networks of experts and officials; while non-Arctic states have held peripheral positions.¹

The History of the AMAP

The AMAP is one of six Arctic Council working groups. It is often directly credited with raising the profile of the Arctic Council with the release of its Arctic Climate Impact Assessment Report (Arctic Monitoring and Assessment Program, 2005),² which helped to place the Arctic at the center of growing public acceptance of global climate change in the mid-2000s (Fenge, 2012; Huebert, 2009; Young & Kankaanpaa, 2012). It is also often credited with influencing the international negotiation processes that led to the 2001 Stockholm Convention on Persistent Organic Pollutants and the 2013 Minamata Convention on Mercury (Fenge, 2012; Huebert, 2009; Stone, 2016; Watt-Cloutier, 2015).

What is less well understood in certain circles is that the AMAP is one of four working groups³ that pre-date the establishment of the Arctic Council. The need for the AMAP was recognized early on as a critical component of a Circumpolar negotiation process initiated by Finland in September 1989 – often called the Finnish Initiative or the Rovaniemi Process. These negotiations were focused on developing multilateral cooperation around pollution prevention and response, which culminated in the creation of the Arctic Environmental Protection Strategy (AEPS) in June, 1991. The initial mandate assigned to the AMAP through the AEPS was a critical aspect of the newly established regional agreement because it provided the mechanisms necessary for multilateral

sharing of environmental data and a means for experts and officials to collaborate in the analysis of that data with the express purpose of informing domestic, regional and international policy decision-making. This working group was at the heart of this fledgling effort at multilateral cooperation between the region's governments and its work was positioned to be the foundation for informed action to respond to the multiple pollution issues observed in the region.

From its inception, the AMAP was strongly supported by all of the Arctic states (although some states were more engaged than others). Furthermore, from the beginning the AMAP benefited from the support of a secretariat that was hosted by Norway and from strong, experienced leadership capacity. The other working groups identified in the AEPS have also done important work over the years; however, the founding declaration of the AEPS did not provide the same dedicated support and their ability to deliver on their mandates early in their formation was consequently weakened. The mandate and working groups of the AEPS were integrated into the Arctic Council when it was officially launched in 1996. As a result of its long standing capacity and the significant body of work that it has been able to produce, the AMAP serves as a useful case study to understand how different experts and officials from both Arctic and non-Arctic states have participated in shaping the climate and pollution science prepared by the Arctic Council.

Methodology & Data

During a series of interviews with Arctic Council officials and staff between 2014 and 2015, the role of Arctic Council Observers was specifically discussed. Representatives from Arctic Council Member states, Permanent Participants, and state and non-state Observers consistently acknowledged that Senior Arctic Official (SAO) meetings no longer provide a forum for "real" participation by Observers. As one official noted: "They are Observers. They are there to observe the meeting" (personal communication, January 16, 2015). However, these discussions also indicated that most interviewees were aware that, despite the title of "Observer," many states and organizations that had acquired this title were interested in a more substantive role. In several cases, the solution proposed by interviewees was that "Observers need to get involved where the work is really getting done. Their best opportunity to participate in the work of the Arctic Council is through the working groups" (personal communication, September 16, 2014). Given the structure of the Arctic Council, this advice seems intuitively sound. However, to date, there has been no research done to confirm that Observers should expect to play a more meaningful role at this level. As a result, this article seeks to empirically assess the role that actors from Arctic and non-Arctic states have played at the working group-level.

This article will use social network analysis (SNA) as a methodological tool. SNA is a methodology initially applied by sociologists to study the relationships between people and the structures of social networks (Scott, 2013). Overtime, other social sciences have adopted SNA as a tool to map the relationships between different actors, organizations, states and issues to study the features of different types of networks. It provides a useful analytical tool to organize and present relational data. SNA enhances our ability to empirically analyze the relationships between actors and the structures of networks by visually presenting relationships in network maps. SNA places the focus on the dynamics that exist in a network. These maps use nodes to represent the person or item of interest and ties (or edges) to link or show a relationship between nodes.

For the purposes of this article, SNA is used to present data related to the individual-, organization- and state-level of involvement in the work of the AMAP with the goal of analyzing the structures of the networks that has supported the work of this working group and how it has evolved over time. To support this analysis, data was collected on the authors⁴ that contributed to the AMAP's 19 scientific assessments published between 1998 and 2015.⁵ Data was also collected about participants at the AMAP meetings from the minutes of the 18 AMAP working group meetings that took place between 1999 and 2015.⁶ This data is complemented with material from interviews with Arctic Council officials and staff that are, or have been, involved with the Arctic Council that were conducted by the author between May 2014 and June 2016.

As part of this analysis, two key tools of SNA are applied to further enhance our understanding of the AMAP's networks of experts and officials. First, the centrality measure of "betweenness" is used to highlight those actors that are important for linking together other actors in an AMAP network. The measure of "betweenness" is used to highlight those actors that have the potential for "controlling flows through the network" emphasizing their importance to the network and their ability to filter or translate information passing through the network (Borgatti, Everett & Johnson, 2013: 175). The second SNA tool applied in this article is a core-periphery analysis. In a network that has a core-periphery structure, those nodes at the core of the network have strong ties to each other and also have connections to the peripheral nodes; whereas peripheral nodes are mainly connected to the network through the core with little or no connection to other peripheral nodes (Borgatti et al., 2013: 223). Again, this tool provides us with useful insights about the flows of information within a network.

Analysis

Although the existing literature about the Arctic Council will often differentiate between the types of work undertaken at the SAO-level versus the work done in the working groups, for the purposes of this analysis it is important to recognize that the working groups perform multiple tasks. The work of the AMAP can be differentiated into two distinct functions. The first component of its mandate is to "monitor and assess the status of the Arctic region with respect to pollution and climate change issues" (Arctic Climate Impact Assessment, 2016). This function draws on the data, experience and expertise of a network of specialists in areas such as acidification, persistent organic pollutants, human health and radioactivity. The main products of this work are a collection of peer reviewed scientific assessment reports. The second component of the AMAP's work is to summarize and translate the findings in these scientific assessments into advice for policymakers. This second function is the responsibility of the working group members and results in a variety of products, including summary reports, presentations, and policy advice to other Arctic Council working groups, the Arctic Council SAOs and Ministers, and other regional and international institutions.

With these distinctive functions in mind, it is useful to separate the analysis in this article into two parts. The first section will focus on an analysis of the network of experts that participate in the AMAP scientific assessments. The second section will focus on those actors involved in translating expert analysis into policy advice.

AMAP Network of Experts

The data collected from the AMAP's scientific assessment reports indicates that 896 unique authors have contributed to its 19 reports. These authors represent 273 different organizations, including national government departments and agencies, sub-national government departments and agencies, universities, public and private research institutes, Indigenous organizations, IGOs, NGOs, private consulting firms, and industry representatives. These authors also represent the participation of 22 different states.⁷

This confirms that the AMAP has drawn on a large network of experts to produce its scientific assessment reports, but it tells us very little about the nature of the relationships that exist between these experts or the structure of the network that shapes how these experts work together. To enhance our understanding of these networks, SNA is used to present the data collected at the author-, state- and organization-levels.

The Authors Network

Of the 896 authors that have participated in AMAP reports, 86.7% of the authors contributed to only 1 AMAP report; while 11% contributed to 2-3 reports, 1.6% contributed to 4-5 reports and only 0.5% contributed to between 6-8 reports. Figure 1 maps this network of authors with each node representing an individual author and the complex collection of ties between the nodes representing authors that have worked together on individual reports. Blue nodes represent authors from Arctic states and yellow nodes represent authors from non-Arctic states. Certain nodes in Figure 1 are larger. These nodes represent those authors that are central to the network of authors using the measure of betweenness. These authors are identified as critical nodes that link authors in the network together. Those authors represented by larger, square nodes at the centre of the network map are identified as central to the production of AMAP reports because of the number of reports they have been involved in. Whereas authors represented by larger, diamond-shaped nodes that rest more at the periphery of the network are recognized as important to the network of authors because they are identified as the link between the central core of the author network and a collection of authors that are only connected to the larger network of authors through them.

This figure provides an interesting presentation of the network of authors that have participated in writing the AMAP scientific reports. It confirms that these reports draw on the expertise of a large network of people and also highlights that there are a relatively small group of authors who are central to the network because of the role that they play in linking together the broader community of experts (diamond-shaped nodes). Not surprisingly, most of the authors that are recognized as central to the network of experts are from Arctic states (blue nodes); however, there is a good distribution of authors from non-Arctic states (yellow nodes) throughout the network and there are authors from non-Arctic states with high betweenness measures because of the number of reports they have contributed to (larger square nodes) and because they join peripheral authors to the network (diamond shaped nodes).

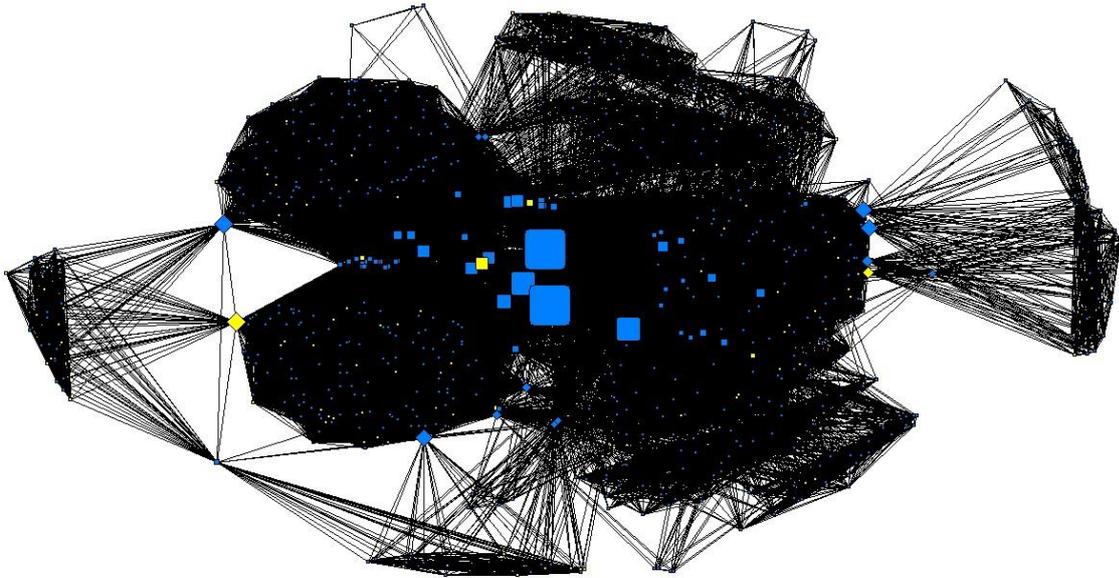


Figure 1: The network of authors that contributed to AMAP reports from 1998 to 2015. Blue nodes represent authors from Arctic states and yellow nodes represent authors from non-Arctic states. The size of each node represents an author’s centrality in the network using the measure of “betweenness.” Larger square nodes represent authors that have been involved in a larger number of reports and diamond-shaped nodes represent nodes that are important to join peripheral authors to the network. The ties between the nodes represent authors that have worked together on specific AMAP reports.

Figure 1 confirms that non-Arctic actors have been and can be meaningfully involved at the individual-level. This SNA map also highlights that there are a relatively small number of authors that are well positioned to influence the flow of information across the network and between AMAP reports and, by extension, these few authors may be well positioned to engage and connect new actors to the existing AMAP network of experts. Figure 1 is less helpful in explaining how and where non-Arctic states and organizations have been involved in the AMAP’s work to date.

The State Network

To more directly consider the question of the role that non-Arctic states have played in the AMAP’s network of experts, the data collected on authors was organized and rolled up to the state-level. This does not mean that an expert is a state representative; it only captures the state where the expert was located at the time that they contributed to a particular AMAP report. To further refine the analysis, the author data has also been segmented into two distinct time periods. The first time period presented in Figure 2 is from 1998 to 2005 that includes 7 published reports, including the acclaimed 2005 Arctic Climate Impact Assessment (ACIA). It is commonly accepted that this was a period when global interest in the Arctic and the Arctic Council was relatively limited. The second time period presented in Figure 3 is 2006 to 2015. This is the period when the Arctic and the Arctic Council grew in prominence globally. During this period, the AMAP published 12 reports.

Figure 2 shows us that authors from all of the Arctic Council Member states (represented by green circles) were involved in the two largest reports prepared by the AMAP during this period – the first AMAP assessment published in 1998 and the 2005 ACIA. However, 3 Member states, Canada, Norway and the United States, rest at the center of the network. They are the only states with authors that contributed to all the AMAP reports published during this period and the thickness

of the ties between these three states and several of the reports indicate that they, in many cases, were also the largest contributors to individual AMAP reports.

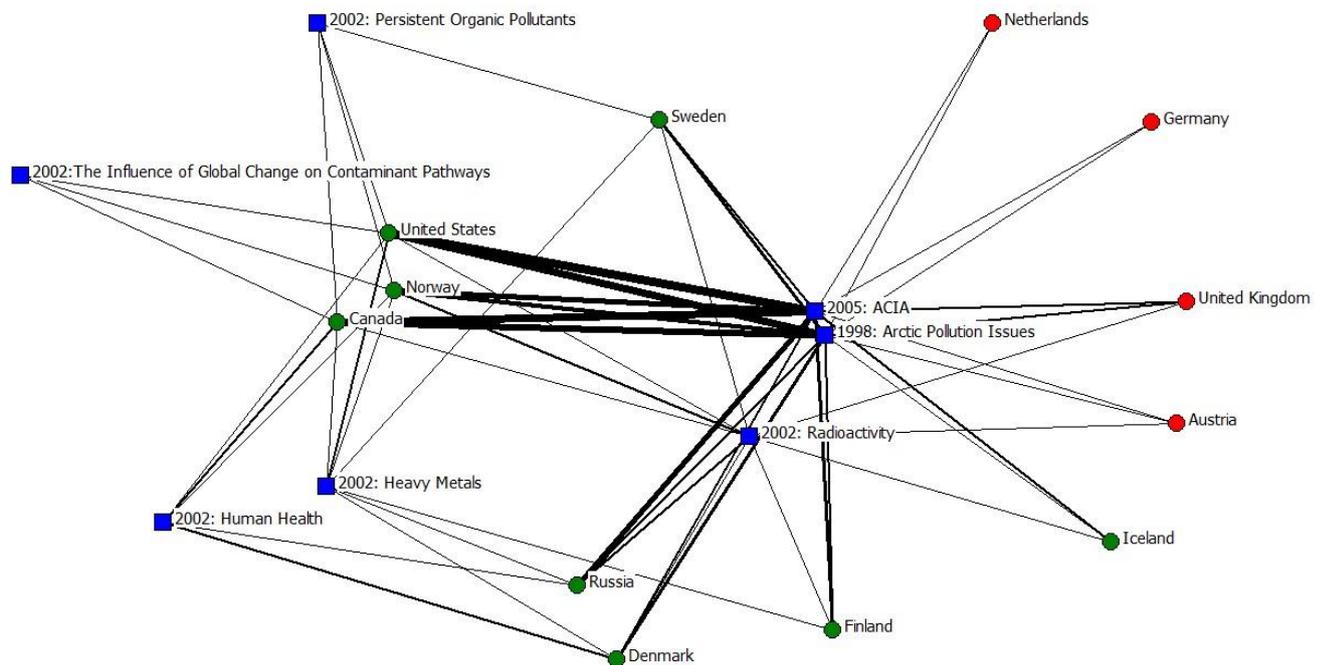


Figure 2: State-level participation in the authorship of AMAP reports from 1998 to 2005. Blue square nodes represent AMAP scientific assessment reports published during this period, green circle nodes represent Arctic Council Member states and red circle nodes represent non-Arctic states. The thickness of the ties between nodes indicates the strength of the relationship of a state to a report measured by the number of contributing authors.

A core-periphery analysis of the network confirms that the United States, Canada and Norway are the core of the network that produced the AMAP reports during this period with Russia and Denmark also holding notably strong positions in the network. Surprisingly, Finland, who is credited with launching negotiations towards the AEPS and the creation of the AMAP, is not identified as central in the network based on the number of authors from this state.

This figure also shows that authors from four non-Arctic states contributed to AMAP reports during this period (represented by red circle nodes). This map indicates that in the early years of the AMAP, the involvement of authors from non-Arctic states was limited to a collection of European states with long histories of interest and involvement in the Arctic region.⁸ The Netherlands, Germany and the United Kingdom all requested and received Observer status in the Arctic Council at its inception. Interestingly, Austria did not have Observer status during this period and still does not have this status. This confirms that Observer status in the Arctic Council was not a requirement to contribute to AMAP scientific reports. During interviews with staff and officials involved with the AMAP, interviewees confirmed that the criteria for selecting authors is based on engaging the best experts in the world on a particular topic with no consideration to the location of this expertise. However, these officials also confirmed that the leads of the scientific assessment look to Member states and the existing network of experts to identify potential authors

for any given AMAP report. This serves to maintain the central position of authors from Arctic Council Member states in the network of experts and reinforces the existing structure of the network by relying heavily on previously established relationships between experts. Based on the process for identifying authors for AMAP scientific reports, the opportunities for an expert with no connection to the existing network of experts to engage in the work of the AMAP is limited.

Furthermore, one official explained that efforts to engage experts from non-Arctic states are at times limited by the funds available. Funding provided by Arctic Council Member states to the work of the AMAP often is specifically linked to ensuring the participation of the funding states' expertise. The AMAP secretariat must often scramble to secure funds to support the involvement of experts from non-Arctic states (personal communication, June 13, 2016).

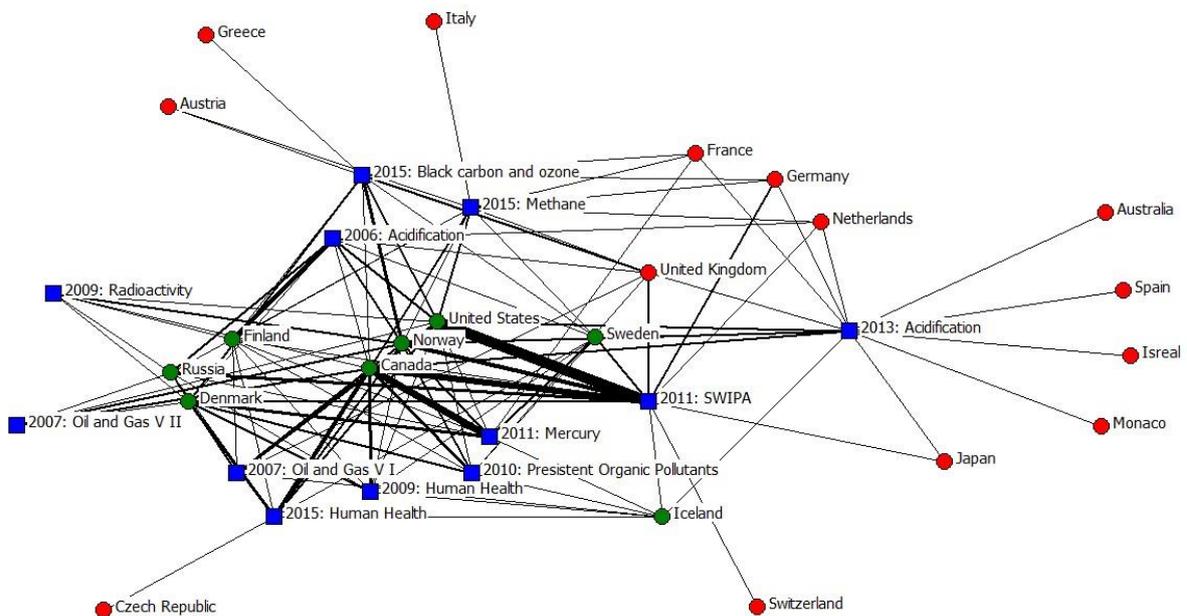


Figure 3: State-level participation in the authorship of AMAP reports from 2006 to 2015. Blue square nodes represent AMAP scientific assessment reports published during this period, green circle nodes represent Arctic Council Member states and red circle nodes represent non-Arctic states. The thickness of the ties between nodes indicates the strength of the relationship of a state to a report measured by the number of contributing authors.

Figure 3 illustrates that the network of states involved in AMAP scientific reports grew and changed in the period after 2006. A core-periphery analysis indicates that the United States, Canada and Norway remain at the core of the network with Russia, Denmark and Sweden holding notably strong positions. Finland's centrality has also increased with a particularly strong involvement in the 2006 AMAP report on acidification in the Arctic, which it led. Iceland's involvement in the authorship of AMAP reports remains the lowest of the Arctic Council Member states, which could be attributed to its relatively small size. Experts from the Netherlands, Germany, the United Kingdom and Austria continue to be involved. Authors from these states have been joined by experts from 10 other non-Arctic states, although authors from 8 of these states only contributed to one AMAP report.

These findings serve to reaffirm that the network of experts that the AMAP engages to prepare its assessments continues to be open to authors from non-Arctic states. It also confirms that the network of experts involved in the AMAP's work is growing and changing, although Arctic Council Member states continue to remain at the core of the network. These findings validate the advice of Arctic Council officials that suggest that those states or organizations looking to be involved in the work of the Arctic Council will find opportunities to inform and influence the Council by engaging with working groups and taskforces.

The Organization Network

An alternative approach to visualizing the network of experts involved in the AMAP scientific assessment reports is to focus on the network of organizations that have participated in their preparation. Again separating the network of experts into two time segments, Figure 4 shows that in the earlier years (1998-2005) the most central organizations in the network were organizations from Arctic Council Member states (green nodes) with only one organization from a non-Arctic state (red node) present in the core of the network. However, it is also important to observe that the network remains quite decentralized with many organizations contributing to a small number of AMAP scientific reports. The map suggests that during this period, at the organization-level, this network did not exhibit the signs of having a core-periphery structure. Rather there are two larger clusters in the network that are joined by a collection of central organizations that link the two main clusters together.

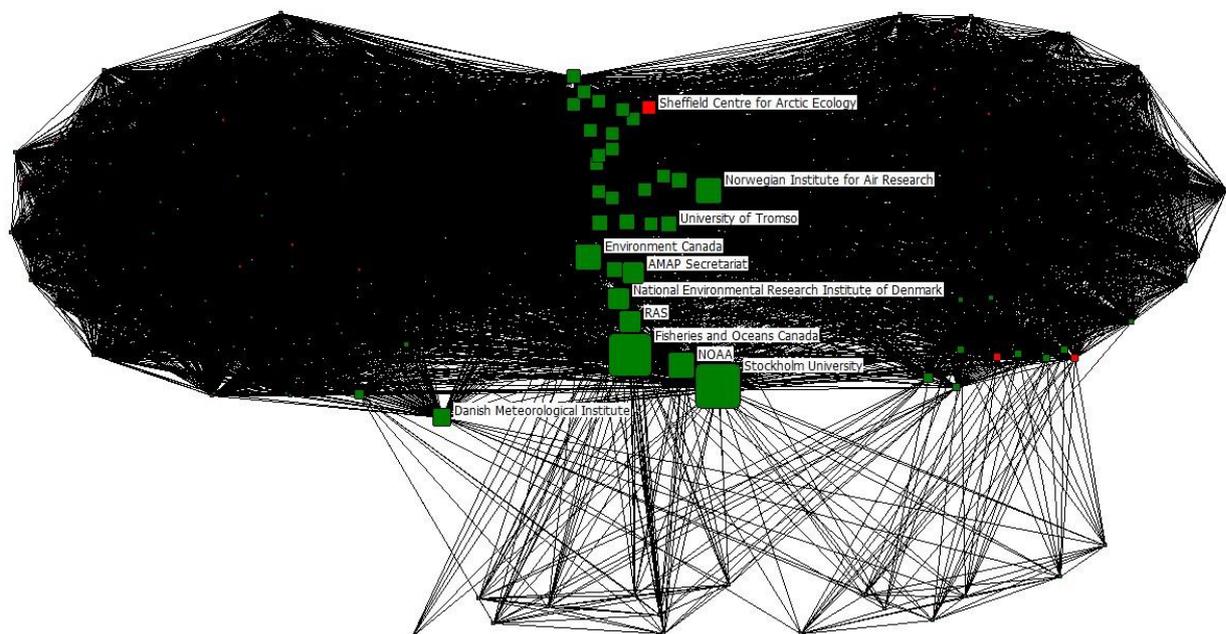


Figure 4: The network of organizations that contributed to AMAP reports from 1998 to 2005. The size of each node represents an organization's centrality in the network using the measure of "betweenness." The ties between the nodes represent organizations that have worked together on specific AMAP reports.

Figure 5 visualizes the network of organizations that contributed to the AMAP scientific reports between 2006 and 2015. This figure illustrates that the network is now developing to have more

of a core-periphery structure, which is consistent with the state-level network map for this same period (Figure 3). This indicates that certain experts are only connected to the network through an organization at the core of the network. This figure is also interesting because we see several changes in the organizations that are central to the network of experts. This map shows us that no organizations from non-Arctic states (red nodes) are central to the network. This would suggest that, although non-Arctic state participation increased during this period, each individual organization's participation was minimal. Focusing on organizations from Arctic states (green nodes), we observe that six of the central organizations identified in Figure 3 (the AMAP Secretariat, National Oceanic and Atmospheric Association (NOAA), University of Tromsø, Environment Canada, Fisheries and Oceans Canada, and the Norwegian Institute of Air Research) maintain a central position in the network; however, four organizations (Russian Academy of Sciences (RAS), National Environmental Research Institute of Denmark, Stockholm University and the Danish Meteorological Institute) are no longer present. Interestingly, three more Canadian organizations (Health Canada, Laval University, and Trent University) assume central positions in the network during this period. This indicates that five of the top 14 organizations that contributed to AMAP reports were Canadian with three of those being federal government departments. It is also worth noting that, despite Iceland's low centrality in the state-level network map, the University of Iceland appears as a central organization in this organization-level analysis. This emphasizes that examining the network of experts at different levels can expose unique features of the network that might not be evident if the network is only analyzed at one level.

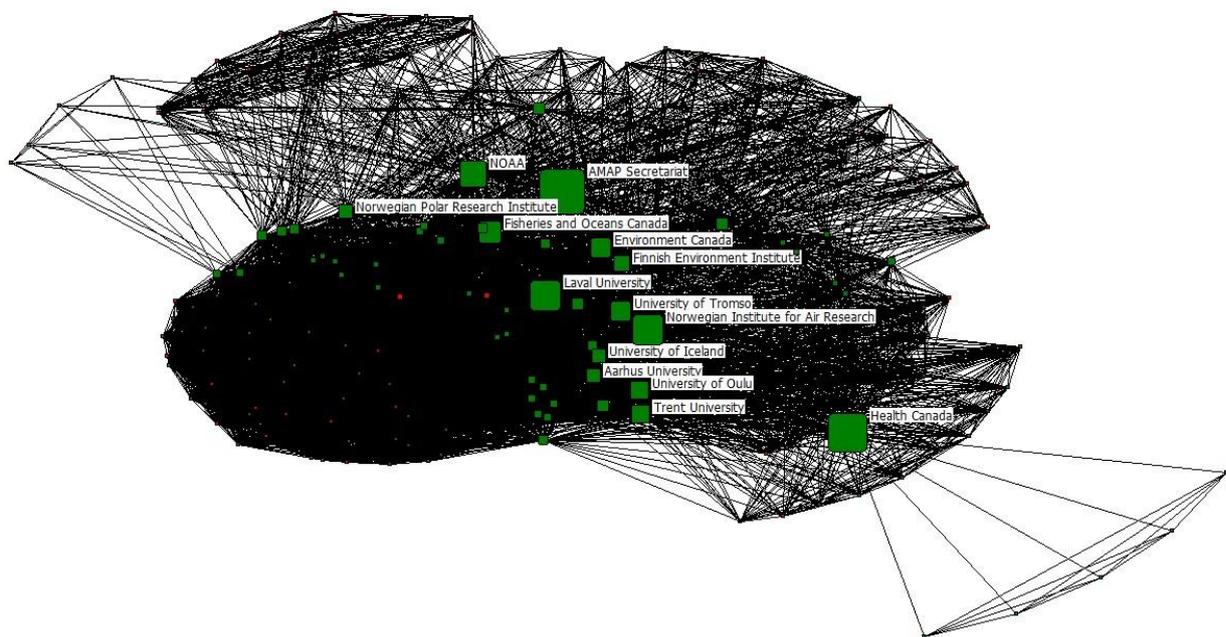


Figure 5: The network of organizations that contributed to AMAP reports from 2006-2015. The size of each node represents an organization's centrality in the network using the measure of "betweenness." The ties between the nodes represent organizations that have worked together on specific AMAP reports.

Overall, these three levels of analysis confirm that the AMAP's work has drawn on a large network of experts that have authors and organizations from Arctic Council Member states at its core;

however, this network has been open to the contributions of experts and organizations of non-Arctic states. Furthermore, as more actors become involved in the AMAP, we see that the network appears to be adopting more of a core-periphery structure with authors and organizations from Arctic Council Member states at its core. It is worth noting that there is evidence that this type of network structure is more robust and facilitates the flow of information better than a network that is made up of multiple clusters (Borgatti et al., 2013: 223).

AMAP Policy Advice Network

The translation of the AMAP scientific reports into policy advice and recommendations is a function that requires different skills and is primarily the responsibility of a separate network of people. To support this function of translating expert analysis into policy advice, each Arctic Council Member state identifies a Head of Delegation (HoD) that is given the authority to represent their state for the AMAP and these HoDs hold the responsibility of securing any internal approvals required for the Member state to support the policy advice of the AMAP working group. HoDs are usually technical experts and most commonly associated with a state's ministry of environment; however, there is limited crossover between the network of experts that contribute to the scientific assessments and the HoDs (although there are examples of working group members and AMAP secretariat staff contributing their expertise to the AMAP scientific reports). With the support of the AMAP secretariat, HoDs and Permanent Participant representatives hold the responsibility for preparing the AMAP's policy recommendations (personal communications, January 15, 2016); however, this policy advice is also reviewed by the lead authors of AMAP assessment reports and discussed at the AMAP working group meetings prior to being finalized.

In addition to Arctic Council Members states and Permanent Participants, the AMAP working group meetings are open to Arctic Council Observers and invited experts. This is the main forum where Arctic Council Observers have an opportunity to engage in discussions about what the AMAP scientific reports mean from a policy perspective and to comment on the proposed policy advice of the AMAP. To support the SNA mapping of the network that participates in translating the AMAP scientific assessments into policy advice, data was collected from the AMAP working group meeting minutes available for 18 meetings held between 1999 and 2015. This data indicates that 351 people from 138 different organizations and 19 different states attended meetings during this period. Consistent with the data collected about the AMAP network of experts, data about meeting participation was collected at the individual-, organization- and state-level; however, Figures 6 and 7 focus on presenting state-level participation in these meetings. Furthermore, the data collected has once again been segmented into two distinct time periods – 1999 to 2005 and 2006 to 2015 – to highlight changes in the network of participants as the Arctic and the Arctic Council grew in prominence.

Figure 6 illustrates that in the early years of the AMAP, working group meetings were attended by all the Arctic Council Member states. Making all the Member states equally central to the network (represented by the size of the node). The thickness of the ties between each Member state indicates that some states had larger delegations attend meetings. This figure also highlights that there was very limited participation by representatives from non-Member states with the Netherlands being the only regular attendee at meetings and the United Kingdom and France each attending one meeting during this period.

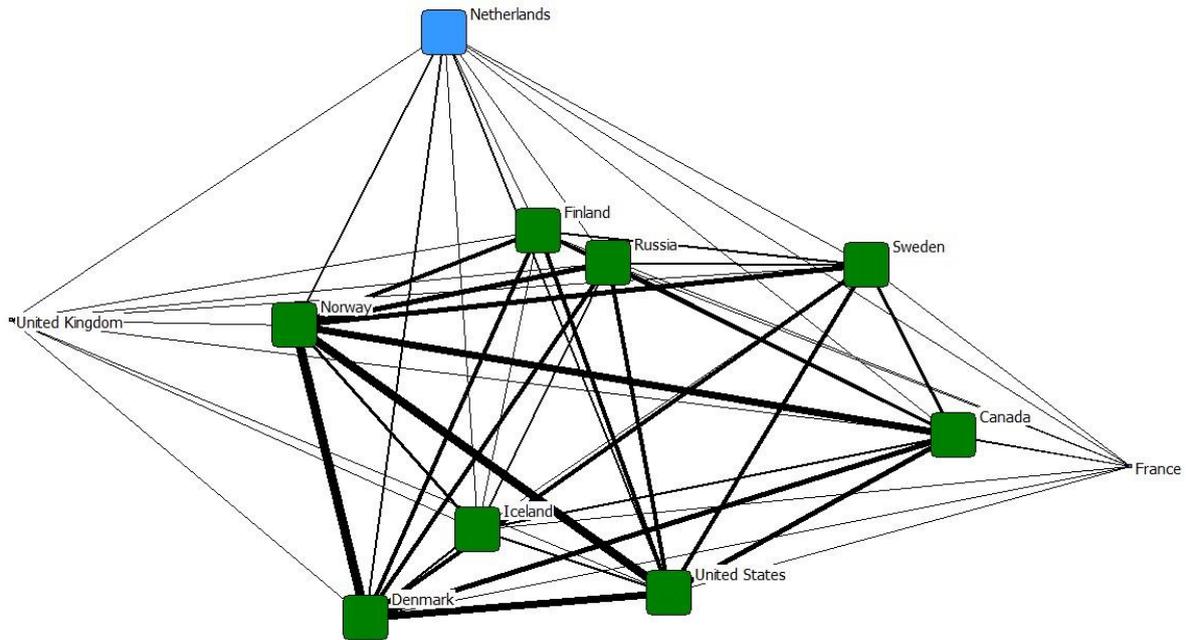


Figure 6: The network of states that participated in the AMAP working group meetings between 1999 and 2005. The size of each node represents a state’s centrality in the network of authors using the measure of “betweenness.” The thickness of the ties indicates the strength of the relationship between different states by the number of representatives participating in the AMAP working group meetings.

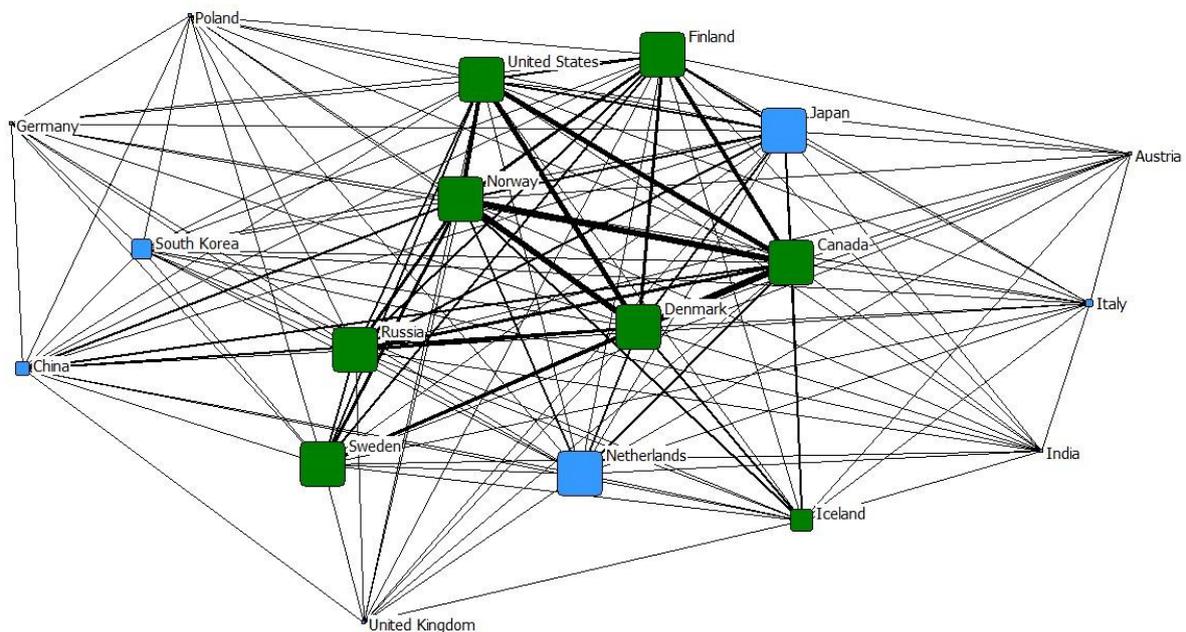


Figure 7: The network of states that participated in the AMAP working group meetings between 2006 and 2015. The size of each node represents a state’s centrality in the network of authors using the measure of “betweenness.” The thickness of the ties indicates the strength of the relationship between different states by the number of representatives participating in the AMAP working group meetings.

Figure 7 illustrates that most Member states (with the exception of Iceland) maintained regular attendance in the AMAP meetings between 2006 and 2015 making them equally central to the

network using the measure of betweenness. This figure also highlights that during this period the Netherlands continued to participate regularly and Japan also became a regular participant.

It is interesting to see a growth in participation by other states at specific meetings. This figure serves to confirm that interest in the work of the AMAP increased during this period; although, very few of these states participated regularly. This raises question about how the intermittent participation of certain representatives might impact the dynamics at working group meetings. Irregular attendance by certain states make it difficult for representatives to build relationships with other participants at the working group meetings or meaningfully engage in discussions about the policy advice being proposed as a result of the AMAP assessment reports.

Furthermore, what Figures 6 and 7 do not capture is the position or skill sets of the representatives of each state. Whereas Arctic Council Member states consistently send officials with the appropriate expertise and authority to engage in discussions about the policy advice that can be drawn from AMAP scientific reports, several officials interviewed indicated that the Observer state representatives often lacked either the expertise or the authority necessary to contribute to this type of discussion. This highlights that it is important for participating states and organizations to understand the functions of the working group and ensure that the appropriate representatives participate in meetings in order to meaningful engage in the translation of scientific assessments into AMAP policy advice.

Of course, as with any analysis, there are limits to what is presented and it is worth highlighting some of the more prominent issues that deserve further exploration in future research projects. First, this SNA analysis does not attempt to weight the nodes or the ties of authorship in AMAP assessment reports or participation in the AMAP working group meetings by quality or extent of involvement. A lead author in an assessment is given the same weight in a network as a minor contributing author and a representative that attends one AMAP working group meeting is given the same weight as the AMAP working group chair. Secondly, the article focuses on authorship in AMAP assessment reports and participation in AMAP working group meetings; however, it is important to acknowledge that there are other means of participating in the AMAP work that complement this analysis and provide different insights. For example, sources of core and project funding of the AMAP and sources of data used to support AMAP analyses. Finally, the analysis does not compensate for the variations in the size of participating organizations or states. The network maps illustrate the actual levels of involvement and not the level of involvement relative to a state or organization's capacity. If we were to take these variations into account, it might seem less surprising that Iceland's contribution has been smaller than the United States and the prominence of Sweden or Finland's roles might become more notable.

Conclusion

The analyses presented in this article provide different lenses to understand both the structures of the networks involved in the AMAP work and the prominent actors at the individual-, state, and organization-level. What these analyses demonstrate is that, despite recent debates, engaging non-Arctic actors in the work of the AMAP is not a new issue. Non-Arctic actors have been involved in the network of experts that support the scientific assessments of the AMAP since the working group's inception. This analysis confirms that valuable opportunities exist for Observers to get involved in the Arctic Council at the working group-level. This article also confirms that there has

been increasing participation by non-Arctic actors in both the AMAP network of experts and the policy advice network as the Arctic and the Arctic Council gain international attention; however, the growth of participation by non-Arctic actors has been gradual and Figures 6 and 7 demonstrate that their participation in the network of AMAP policy advice has remained weaker and more intermittent. This would suggest that, despite growing interest in the Arctic Council by non-Arctic actors, Observer states are currently not taking full advantage of the access that they already have to inform the policy advice prepared by the AMAP.

And perhaps most importantly, these analyses offer strong evidence that Arctic Council Member states make up the core of both networks that support the AMAP's work and the core-periphery structure of these networks suggest that the United States, Canada, and Norway have maintained a strong presence at the centre of these networks throughout the life of the AMAP. These analyses suggest that the AMAP networks have evolved to accommodate increasing participation by non-Arctic states and, in fact, there are areas where Observer states are not taking full advantage of the access they have. However, the AMAP case study also suggests that non-Arctic states will always hold peripheral positions in the networks and concern that new actors might dominate the policy agenda of Arctic Council work is likely overstated. For those Observers looking for opportunities to more meaningfully engage in the work of the AMAP, these network maps provide guidance on the organizations and states best positioned to connect them to the existing networks and provides options for how they might position themselves to support the AMAP mandate and priorities.

Finally, this article demonstrates that SNA offers interesting opportunities to better understand both the Arctic Council and the collection of people and institutions that support governance in the region. Future SNA research could assess the networks within states that support policy decision-making in the region, compare and contrast the features of the different Arctic Council working groups, and identify the linkages between the Arctic Council and other institutions.

Notes

1. This article does not consider or discuss the unique position of Permanent Participants in the AMAP. This is an important issue that requires focused attention. Data about the participation of Permanent Participants is included at the individual-, state-, and organization-levels; however, authors and officials from Permanent Participant organizations do not stand out in the AMAP network maps.
2. Although the ACIA published in 2005 is often credited to the AMAP, it is important to acknowledge that this report was a collaboration of the AMAP, the Conservation of Flora and Fauna (CAFF) working group and the International Arctic Science Committee (IASC) that was coordinated by the AMAP.
3. The AMAP, CAFF, Emergency Prevention, Preparedness and Response (EPPR) and Protection of the Marine Environment (PAME) were established as part of the Arctic Environmental Protection Strategy (AEPS). The Sustainable Development Working Group was conceived of by the AEPS Member states, but the working group was launched as an Arctic Council working group in 1998. The final Arctic Council working group, the Arctic Contaminants Action Programme (ACAP), was established by the Arctic Council in

2006. It took on responsibilities of managing activities that were initiated in 1998 to address pollution sources identified by the AMAP.

4. The terminology used to classify authors varies in the AMAP scientific reports. For the purposes of this article, the term “author” includes lead authors, authors, co-authors, contributing authors, and assessment leads. Many reports also acknowledge contributors, data contributors, editors, the AMAP secretariat and the AMAP working group members. This data was also collected but not included in the analysis presented in this article because it was not possible to assess the relative weight that should be placed on the different types of contributions. In some reports, staff from the AMAP secretariat participated as authors. This data is included in the analysis at individual-, organization- and state-level.
5. The full collection of AMAP scientific assessment reports are available at: <http://www.amap.no/documents/18/scientific/21>.
6. AMAP working group meeting minutes are available at: <http://www.amap.no/documents/18/working-group-documentation/18>

It should be noted that data on Arctic Council Member states, Permanent Participants and Observers are included in the data set used in this article. Data regarding the participation of AMAP secretariat staff is not included because it assumed that secretariat staff are required to attend and including data about their participation would dominate the network maps.

7. For 87 authors the state was identified, but the author was unable to confirm additional information about the organization the person represented at the time of their involvement in the work of AMAP. In addition, there are 18 authors where no data about the state or organization could be found by the author.
8. In fact, several non-Arctic states have a long history of interest and expertise in Arctic-related science. See *LASC After 25 Years* (Rogne, Rachold, Hacquebord, & Corell, 2015) and *The Changing Arctic Environment* (Stone, 2016) for more information.

References

- Arctic Climate Impact Assessment. (2016). About AMAP. Retrieved from <http://www.amap.no/about>
- Arctic Council. (1996). Declaration on the establishment of the Arctic Council. Ottawa.
- Arctic Monitoring and Assessment Program. (2005). *Arctic Climate Impact Assessment Report*. Cambridge: Cambridge University Press. Retrieved from <http://www.amap.no/documents/search>
- Borgatti, S. P., Everett, M. G., & Johnson, J. C. (2013). *Analyzing Social Networks*. Los Angeles: Sage Publications.
- Fenge, T. (2012). The Arctic Council: Promoting co-operation in the circumpolar world. In *The Arctic Council: Its place in the future of Arctic governance*.
- Huebert, R. (2009). Canada and the changing international Arctic: At the crossroads of cooperation and conflict. In F. Abele, T. J. Courchene, F. L. Seidle, & F. St-Hilaire (Eds.), *Northern exposure: Peoples, powers and prospects in Canada's North* (pp. 77–106). Montreal: The

- Institute for Research in Public Policy. Retrieved from <http://archive.irpp.org/books/archive/AOTS4/huebert.pdf>
- Lackenbauer, P. W. (2014). Canada and the Asian Observers to the Arctic Council: Anxiety and Opportunity. *Asia Policy*, 18(1), 22–29. <http://doi.org/10.1353/asp.2014.0035>
- Rogne, O., Rachold, V., Hacquebord, L., & Corell, R. (2015). *LASC after 25 Years. Special Issue of the LASC Bulletin*. Potsdam: International Arctic Science Committee. Retrieved from <http://iasc25.iasc.info>
- Scott, J. (2013). *Social Network Analysis* (Third). Los Angeles: Sage Publications.
- Stone, D. P. (2016). *The Changing Arctic Environment: The Arctic messenger*. Cambridge: Cambridge University Press.
- Watt-Cloutier, S. (2015). *The Right to be Cold*. Toronto: Penguin Canada Books Inc.
- Wilson, P. (2013, August 26). Asia Eyes The Arctic. *The Diplomat*. Tokyo. Retrieved from <http://thediplomat.com/2013/08/asia-eyes-the-arctic/2/>
- Young, O. R., & Kankaanpaa, P. (2012). The effectiveness of the Arctic Council. *Polar Research*, 1, 1–14.
- Ziff, B. (2015). U.S. Leadership in the Arctic. Retrieved from <http://www.arcticcircle.org/video2015>

Shaping Changing Circumpolar Agendas: The Identification and Significance of “Emerging Issues” Addressed in the Arctic Council

Dorothea Wehrmann

In the past twenty years, the Arctic Council has become the most important international forum for policy making in the Arctic. Another success ascribed to the intergovernmental forum is the inclusion of emerging issues in its work. With regard to the overall circumpolar agenda, Klaus Dodds and Mark Nuttall observed a representational shift and argued that recently issues related to business are increasingly prioritized. The purpose of this article is two-fold: It first examines in how far the agenda of the Arctic Council has shifted similarly. It further addresses the identification of “emerging issues” more generally to discuss how concerns related to business have been introduced in the Arctic Council in the first place. In this regard, the article focuses on priorities set by member states during their chairmanships as member states are widely perceived as agenda-shapers in the Arctic Council and touches on three central questions: What priorities were set under the different Arctic Council chairmanships in the past? Why were these priorities regarded as important in their respective programs? And how were these priorities reviewed in the Arctic Council? To address these questions, this article looks predominantly at official Chairmanship programs, the contextualization of issues related to business and their discussion in Ministerial meetings. In the conclusion, this article offers an assessment of whether or not the Arctic Council is moving from being a forum enforcing environmental cooperation to becoming a “business forum” and discusses the wider implications of shifting agendas in the Arctic Council.

Introduction

Celebrating its 20th anniversary this year and looking back, the Arctic Council is able to point to many accomplishments that range from the intensifying and increasing cooperation between actors from and beyond the Arctic region to landmark scientific reports produced under its auspices. Most importantly: Despite the popular depiction of a region prone to international conflicts, in the past twenty years no military conflict has arisen in the Arctic and the Arctic Council member states reaffirmed just recently their “commitment to maintain peace, stability and constructive cooperation in the Arctic” (Iqaluit Declaration, 2015). In times of rapid global (and particularly of climate) change political visions for the future of the Arctic region are very distinct. But despite the heterogeneous and sometimes opposing positions among the numerous actors involved in the Arctic Council, the Arctic Council has managed to even increase the number of actors participating

in what has become the “primary forum” for policy making in the Arctic region (Kerry, 2015; Lackenbauer & Manicom, 2015: 517; Spence, 2015: 4).

This particular importance often ascribed to the Arctic Council today is also a result of a process of change that has shaped the intergovernmental forum in the past twenty years: as the numerous subsidiary bodies exemplify, since its formation in 1996 the Arctic Council has diversified with regard to its institutional structures. And particularly in recent years the Arctic Council has changed from “the small, relatively informal Arctic Council “family”” (Spence, 2015: 3) to an increasingly formalized forum focusing also on efficiency and effectiveness. Moreover, the Arctic Council increased the number of topics addressed in its work and as Kankaanpää and Young (2012: 1) pointed out it has particularly “achieved considerable success in identifying emerging issues.”

Taking Kankaanpää’ and Young’s evaluation as a point of departure, this article explores the “emerging issues” identified and the specific significance ascribed to such topics in the Arctic Council. This article thus seeks to contribute to a better understanding of processes of change that take place within the Arctic Council “black box” (Spence, 2015: 4). At the same time it does not aim to neglect regional and global processes as the Arctic Council obviously does not operate “in a vacuum” (Berger, 2015: 13, Smieszek and Kankaanpää, 2015: 12). In this regard and considering the general circumpolar agenda, Klaus Dodds and Mark Nuttall, for instance, observed “a significant representational shift from the 1990s and early 2000s” (2016: 188), arguing that instead of conservational concerns recently issues related to business are increasingly prioritized.¹ With regard to the Arctic Council, this observation is perhaps most notably exemplified by the establishment of the Arctic Economic Council at the end of Canada’s second Arctic Council chairmanship. But how did this shift proceed in the Arctic Council? How was it initiated and why? Numerous scholars pointed out that especially Arctic Council member states obtain a strong agenda-setting role in the Arctic Council, which they exert particularly during their chairmanships. Moreover, it was found that during these rotating two-year term chairmanships, the Arctic Council member states have the opportunity to shape (to some extent) the work of the Arctic Council according to specific concerns and priorities as outlined in their respective programs. These official programs need to match with and most often support national interests. It thus needs to be acknowledged that also geopolitical reasoning influences the framing of “emerging issues” (Berger, 2015: 75; English, 2013: 295; Nord, 2016: 41, Smieszek & Kankaanpää, 2015: 11; Spence, 2015: 4).

Against this backdrop and on the one hand, this article explores in how far Dodds’ and Nuttall’s observation also applies to agenda-setting in the Arctic Council and thus examines whether or not in the past twenty years business-concerns have been increasingly prioritized in the Arctic Council. On the other hand, this article addresses the identification of “emerging issues” more generally to discuss how new concerns (such as those relating to business) have been introduced in the Arctic Council in the first place. In this regard, Berger, Smieszek and Kankaanpää have already provided evidence that (at least some) Arctic Council member states shaped the agenda according to national interests during their respective Chairmanship tenures. Against this backdrop and to tackle both foci, this article pays particular attention to the introduction and to the contextualization of “emerging issues” by Arctic Council chairs and explores the discussion of these topics in Arctic Council Ministerial meetings.

Accordingly, this article proceeds as follows: it first provides an overview of the institutional structure of the Arctic Council in order to qualify the role and significance of Arctic Council

chairmanships. Second and focusing explicitly on agenda-setting in the Arctic Council, this article compares the different priorities introduced by Arctic Council member states in their chairmanship programs. It explores the priority the business focus has received in the Arctic Council in comparison to other and still very relevant issues such as pollution, climate change and sustainable development. Also the reception of priorities relating to the “emerging” business focus as expressed during Ministerial meetings is reviewed. At last, the article discusses the wider implications of shifting agendas in the Arctic Council and assesses whether or not the Arctic Council is moving from being a forum enforcing environmental cooperation to becoming a “business forum”.

Agenda-Shapers in the Arctic Council: The Role and Significance of Arctic Council Chairmanships

The Arctic Council is a consensus-based intergovernmental forum composed of eight member States, six Permanent Participants (indigenous peoples’ organizations from the Arctic) and twelve non-Arctic states, twenty intergovernmental, inter-parliamentary and non-governmental organizations with Observer status. While the member States are the only actors with voting rights, Permanent Participants have full consultation rights. The agenda is set at biennial Ministerial meetings and the work of the Council’s subsidiary bodies is reviewed at biannually Senior Arctic Official (SAO) meetings. Despite the hierarchical institutional structure of the Arctic Council, the “real work” (Spence, 2015: 4) of the Council is conducted following the bottom-up approach: All research activities, negotiations of agreements and strategies are conducted by six permanent Working Groups as well as by Task Forces and Expert Groups that are established on an ad hoc basis. The work of the Council is also steered through interactions with other state and non-state actors within the Arctic Council (Permanent Participants, Observers, and invited experts). In order to assess how the agenda of the Arctic Council is set, this paper focuses particularly on member states, which have the greatest say in the Council due to their exclusive voting rights and because their positions are further bound to national agendas. More precisely, this analysis addresses the chairmanships, the rotating leadership of the Arctic Council conducted by member States for the duration of two years, which so far has not received much attention neither in literature focusing on the Arctic region nor on international relations (IR).

According to the revised Rules of Procedure (Arctic Council, 2015) each of the eight member States obtains the leadership role of the Arctic Council from the conclusion of a Ministerial meeting to the conclusion of the next Ministerial meeting. During this tenure, the respective member State is responsible for:

- coordinating arrangements for the next Ministerial meeting (and may place limits on the size of all delegations for the meeting after consultation with Permanent Participants and other member States),
- facilitating the preparations for Ministerial and SAO-meetings and circulating the draft-agenda for the next Ministerial meeting (after consultation with Permanent Participants and other member States)
- preparing meeting reports and minutes that need to be approved by the relevant officials of each member State
- designating the Chairperson for the Ministerial meeting and providing the Chairperson for SAO-meetings [both are subject to the concurrence of the member states as the SAO-chair

is “perhaps the most important actor” (Nord, 2016: 42) that oversees the day-to-day affairs and also maintains control over the director of the Arctic Council Secretariat],

- receiving and circulating applications for Observer status to other member States and Permanent Participants.

Studies focusing on the Arctic Council chairmanship often applied Jonas Tallberg’s studies on formal leadership in international cooperation. In this regard Smieszek and Kankaanpää (2015), for instance, examined the role and tasks assigned to the rotating chairs of the Arctic Council, while Berger (2015) related to Tallberg’s works to outline how Norway and Canada projected their Arctic national agendas when holding the chairmanship position. Both studies conclude that Tallberg’s theoretical framework in which the chair is understood as an *agenda-shaper* has explanatory power for the case of the Arctic Council. They argue that during their chairmanships Arctic Council member States obtain a special agenda-setting position: they are able to raise awareness on certain issues, to structure the agenda in accordance with their national interests, and to exclude unfavorable issues from the agenda or to position them at last, which then are more likely to remain unaddressed due to often experienced time constraints (Berger, 2015: V; Smieszek & Kankaanpää, 2015: 2-3). Especially with regard to the introduction of national priorities, also Nord (2016: 43) found that by “setting forth the chairmanship program at the outset of their leadership term, the host country can communicate quite effectively with matters it wishes the Arctic Council to focus upon and which it would prefer to give less attention”. Smieszek and Kankaanpää (2015: 3) describe this as a “‘window of opportunity’ to shift the agenda and distribution of gains in pursuit of their national interests”.

Against this backdrop, the following section sheds light on the content of official chairmanship programs, the reasoning introduced in the respective programs of the different Arctic Council member states as well as to the reception of outlined priorities during Ministerial meetings. This is done to assess the specific dynamics related to the identification of the arguably “emerging” business focus. While Tallberg’s approach is based on rational choice institutionalism; through shedding light on the contexts, in which the promoted topics are embedded, the following analysis takes a rather constructivist and global perspective that also considers how “emerging issues” are purposely related to events and discourses with global significance.

Agenda-Setting in the Arctic Council: Identifying “Emerging Issues” in Chairmanship Programs (1996-2015)

The Arctic Council celebrates its 20th anniversary after having entered the second round of chairmanships in 2013 and the forum is currently chaired by the United States, which launched its second chairmanship in 2016. Against the background sketched out above and to examine whether or not business issues are increasingly addressed in the Arctic Council, the next sections review the past chairmanship programs of the Arctic Council following three central questions:

1. What were the priorities set under the different Arctic Council chairmanships in the past?
2. Why were these priorities regarded as important in the respective programs?
3. And how were these priorities reviewed in the Arctic Council?

In the chairmanship programs and respective brochures under analysis, priorities are either directly introduced as such (e.g. in the case of Finland, Norway, Sweden, Denmark), are topics

“emphasized” or “work initiated” during chairmanships (e.g. U.S. Chairmanship programs), declared commitments, focus or objectives of chairmanships (e.g. Canada, Denmark, Iceland).

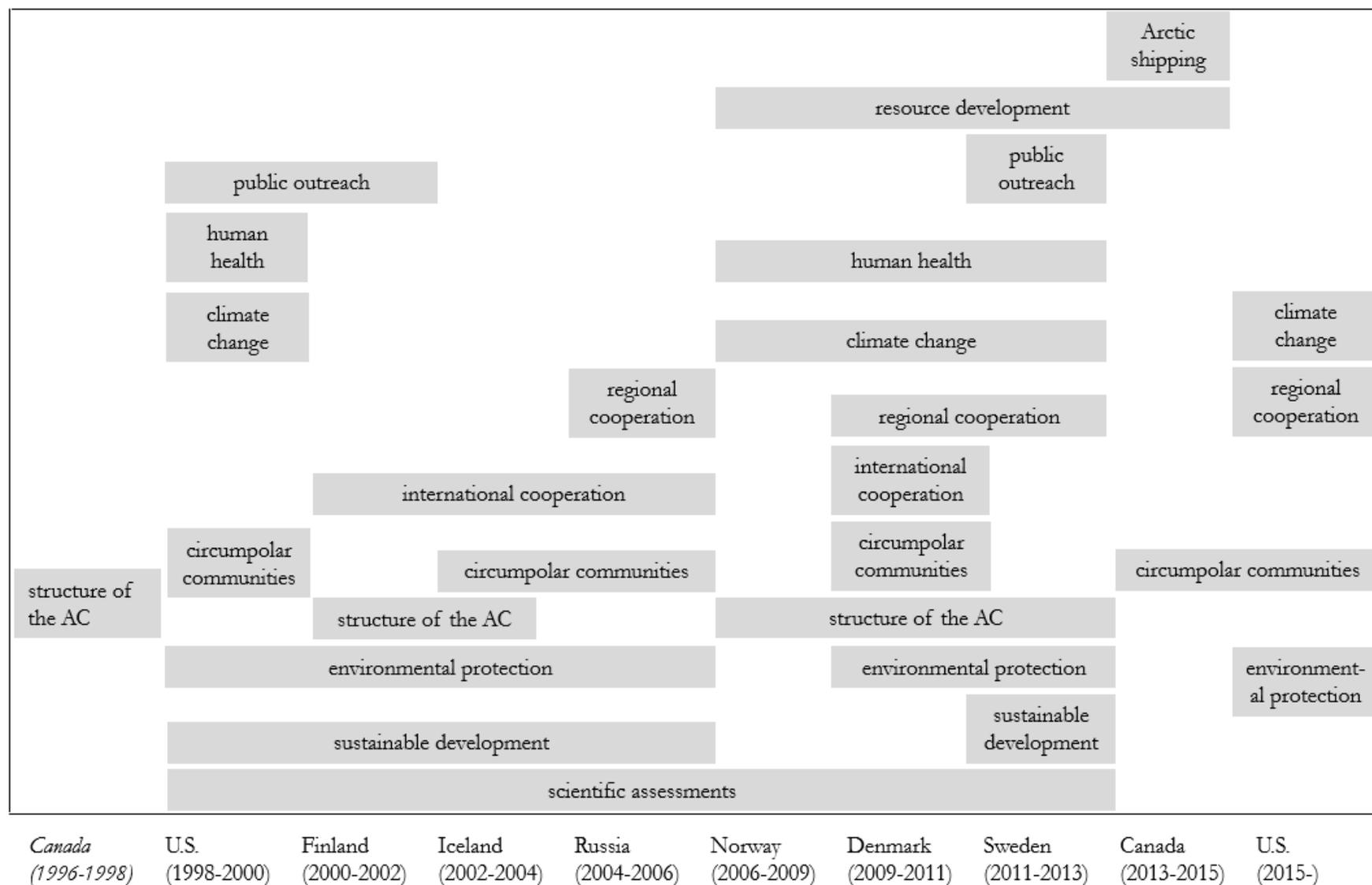


Table 1: Topics prominently addressed in Chairmanship Programs

As the following overview shows, numerous topics prioritized in the last ten chairmanship programs were either also prominently addressed by the succeeding chair(s) or picked up again at a later point and thus demonstrate continuity in Arctic Council agenda-setting: particularly issues related to environmental protection (7 times outlined as a priority), scientific assessments (7), the structure of the Arctic Council (6), circumpolar communities (6), climate change (5), and sustainable development (5) were framed as priorities during past chairmanships.²

Under these very general and also selective terms³ the respective member States subsumed different aspects: the protection of Arctic environment (including climate change) and sustainable development, for instance, were topics of concern that recurred as designated priorities. At the same time, these topics were also often addressed when placing specific emphasis on other topics in chairmanship programs (such as scientific assessments, international and regional cooperation, resource development and circumpolar communities). This already indicates that environmental protection and sustainable development have remained the main pillars for cooperation in the Arctic Council. An assumption that can further be substantiated when comparing the content of the Ottawa-Declaration on the establishment of the Arctic Council (1996) and the most recent Iqaluit Declaration (2015): in both documents, the Arctic Council member states affirm right at the beginning their “commitment to sustainable development in the Arctic region” and “to the protection of the Arctic environment” (Ottawa Declaration, 1996 and Iqaluit Declaration, 2015), both times referring to sustainable development prior to environmental protection.

Does this mean the agenda of the Arctic Council has not changed over the past ten distinct chairmanships? – no: although similar concerns have recurred prominently on Arctic Council chairmanship agendas, the following examples show that their meanings (and relations) have changed. While initially environmental protection mostly related to the elimination of contaminants (cf. Iceland’s chairmanship program), more recently environmental protection relates to Arctic biodiversity and ocean safety (cf. second chairmanship program of the U.S.). Sustainable development, on the other hand, has always included an (indirect) link to the so-called business focus: the terms of reference of the Sustainable Development Working Group, for instance, outline an enhancement and improvement of the economies and economic conditions of Arctic communities as main purposes (SDWG, 2015). In chairmanship programs, the affixes of sustainable development, however, have changed over time: The Swedish Chairmanship program, for instance, spoke of “environmentally sustainable development” (Government Offices of Sweden, 2011), the Russian Chairmanship program argued for “sustainable development of the Arctic indigenous peoples”, which was then related to the pollution impact on the Arctic indigenous peoples and their health, their traditional lifestyle under contemporary market conditions, and the demand to preserve their ethnic identity and cultural and historic heritage (Ministry of Foreign Affairs of the Russian Federation, 2004). Such understanding partly corresponds to Canada’s second Chairmanship program that prioritized “sustainable circumpolar communities” envisioning economic development of the North. The Finnish Chairmanship program, however, dropped the prefix sustainable and put emphasis on the promotion of “economic and social development” (Ministry for Foreign Affairs of Finland, 2000).

Aside from the different meanings ascribed to chairmanship priorities subsumed under broad umbrella-terms such as “environmental protection” and “sustainable development” and in general, these distinctions also hint at other “external” reasons and to a framing intended to enforce national

interests during Arctic Council chairmanships. In this regard, also Smieszek and Kankaanpää (2015: 10) outlined:

“As states construct institutions to advance their goals and support their interests, those institutions become a part of a broader matrix of national and foreign policies of their members, oftentimes influences as much by changes at the domestic level as in the external environment.”

Berger proved this relation to national interests more explicitly in the cases of Norway and Canada. She finds that both countries managed to “secure national interest[s]” (2015: 53) during their chairmanships: in the Norwegian case, the interest of “expansion” was achieved through negotiating successfully an umbrella-program for the three successive Scandinavian chairmanships (2006-2013) during which the permanent Arctic Council Secretariat was established in Tromsø, which “strengthened Norway’s position as an Arctic state” (Berger, 2015: 75). The Canadian Chairmanship, on the other hand, succeeded in establishing the Arctic Economic Council, “the centerpiece” of Canada’s efforts that build on the promise to bring “new trade, business and resource development opportunities in the Far North” (Nord, 2016: 31), a priority that was “closely tied to the country’s domestic policy priorities and interests” (Spence, 2015: 4). Berger’s findings clearly substantiate the agenda-shaping role ascribed to the Arctic Council chairmanship. But in following Smieszek’s and Kankaanpää’s reference to the “external environment”, also the broader contextualization of designated priorities needs to be considered when aiming to identify and to explain the emergence of new issues in the work of the Arctic Council. Or said differently: the extraordinary significance of the chairmanship-role alone does not explain the continuity of priorities addressed in chairmanship programs.

How was the “New Business Focus” Introduced and Reviewed in the Arctic Council?

This reasoning leads to the questions “why are priorities regarded as being important in chairmanship programs?” and “how are these priorities reviewed in the Arctic Council?”. As a detailed analysis of all thematic shifts in past chairmanship programs is beyond the scope of this article, in the following particularly the “emergence” of the so-called business focus is traced. In this regard attention is paid to priorities subsumed under “sustainable development” in chairmanship programs, which, as has been explained before, is one of the two main pillars for cooperation in the Arctic Council and (with the establishment of the Sustainable Development Working Group in 1998) is a term that has further been linked to economic factors. Particularly the presentation and discussion of chairmanship programs at Ministerial meetings is explored at which the future direction of the Arctic Council is set and which is regarded as being “the chief decision-making body for the organization” (Nord, 2016: 51-52).

In the first decade of the Arctic Council, “sustainable development” was much discussed in view of the 2002 World Summit on Sustainable Development. Directly referring to the agreements negotiated at the UN Conference on Environment and Development in 1992 and at the World Summit on Sustainable Development in 2002, the Russian Chairmanship program for instance declared the Arctic Council to be “the main mechanism for implementing the principles of sustainable development” (Ministry of Foreign Affairs of the Russian Federation, 2004: 1). At the same time the program promoted a “more balanced”, a broader approach to sustainable

development, which included the social and economic line of Arctic cooperation. Later in the program, this particular framing served as a stepping stone to justify the major priority that the development of circumpolar transport infrastructure received in Russia's Chairmanship program: As an example for social and economic cooperation, linking to a very national priority of Russia, it was further stated that the "goal is to form in the future the national Russian transport water way – the Northern Sea Route – as a Euro-Asian sea transport corridor integrated into the world transport system" (Ministry of Foreign Affairs of the Russian Federation, 2004: 2).

The introduction of an explicit "business focus", however, at least dates back to the Scandinavian chairmanships, during which the Rules of Procedure were revised, the permanent Arctic Council Secretariat was established and a new focus was perceived to be set "on including business and industry in the Council and the welcoming of new Observer states" (Gundersen on behalf of the Aleut International Association, 2013). But how did this focus emerge? Already in Denmark's chairmanship program "the present dynamics of a changing Arctic" were stressed (The Kingdom of Denmark, 2009) that particularly related to the Russian flag planted on the seabed under the North Pole in 2007, which had caused a "worldwide media frenzy and created a surge in international interest in the Arctic" (Smieszek & Kankaanpää, 2015: 11). In this regard, Denmark took upon the question of the role of Observers in the Arctic Council as the former Arctic Council Rules of Procedure had not contained detailed provisions and argued in favor of including more Observers in the work of the Arctic Council:

"Observers and ad hoc observers are assets, and the Arctic Council should look for ways to further involve those that are ready to cooperate under the premise that the primary role of the Arctic Council is to promote sustainable development for the Peoples of the Arctic and the Arctic States" (The Kingdom of Denmark, 2009).

In the ensuing Swedish Chairmanship the role of "outside actors" was enhanced when Sweden related to the increasing interest of "outside actors" and identified Corporate Social Responsibility (CSR) as a priority in its work. Describing the Arctic as a region "heavily affected by ongoing climate change, technological development and increasing commercial activities" (Government Offices of Sweden, 2011: 1), Sweden's chairmanship program argued for "environmentally sustainable development of the Arctic" to secure positive economic development ("the core issue for the population of the Arctic") and envisioned cooperation with the business community to discuss "how various industries can act for sustainable economic development in the region" (Government Offices of Sweden, 2011: 5). During its chairmanship, Sweden initiated interactions with the private sector to strengthen the Sustainable Development Working Group "a priority task for the Swedish Chairmanship" (Government Offices of Sweden, 2011: 4). This collaboration was perceived positively by the member states who agreed in the Kiruna Declaration to establish a task force dedicated to the creation of a circumpolar business forum (Duyck, 2015: 31). The new business focus was, however, also perceived skeptically by those to whom this cooperation was said to serve. The representative of the Saami Council, for instance, stated:

"We also welcome the initiatives regarding corporate social responsibility while we are somewhat concerned about the increased focus on business and industrial development – we have to be very careful in order to conduct the cooperation with the business the right way, also for the indigenous peoples and our economies and respecting the indigenous peoples' human rights" (Javo, 2013).

The succeeding Canadian Chairmanship thus placed “responsible economic development” in the Arctic at the forefront of its priorities (Government of Canada, 2013). Under the chairmanship-theme “Development for the people of the North”, the establishment of the Arctic Economic Council was designated as a main priority and subsumed under “responsible Arctic resource development”. The chairmanship program emphasized that businesses in the Arctic would “play a strong role in building a sustainable and economically vibrant future for the region” (Government of Canada, 2013). Although in the aftermath of its chairmanship, Canada was criticized for shifting the Arctic Council’s focus to domestic issues under its chairmanship, and for opening up the region to industry and big business (Exner-Pirot, 2015; Spence, 2015: 4), Canada actually followed the path initiated by the Scandinavian member states. The program, however, slightly shifted the emphasis formerly placed on the inclusion of the business community by the Scandinavian countries when aiming to foster “circumpolar economic development” instead of sustainable development and “to provide opportunities for business to engage with the Arctic Council” (Government of Canada, 2013).

While Canada’s Arctic Council policy and its chairmanship program is said to be grown “from domestic needs” (English, 2013: 295), the subsequent U.S. Chairmanship placed “notable silence on the need or relevance of integrating economic development, as a policy area that garners priority attention from the Arctic Council” (Spence, 2015:3). Instead, from a rather global perspective emphasis was put on climate change. Under the theme “One Arctic: Shared Opportunities, Challenges, and Responsibilities” the U.S. Chairmanship program highlighted the Arctic’s role in global ocean and climate systems, which the program outlined as the reason why “the Arctic Council seeks to educate and inform the public worldwide that the Arctic should matter to everyone” (U.S. Department of State, 2015). The program thus discontinued emphasizing an understanding of the Arctic as the last “resource frontier”. Different than the approach promoted under the Canadian Chairmanship, the U.S. also related sustainable development to its top-climate change priority when arguing:

“improving the lives of the Arctic indigenous peoples also means expanding access to clean, affordable, and renewable energy technologies (...) Clean energy is the solution to climate change. It also happens to be the world’s biggest market. It will make many people rich. Enormous numbers of jobs will be created” (Kerry, 2015).

This obvious shift of economic priorities was openly criticized by officials from the State of Alaska who had had a much greater say during the first Arctic Council leadership of the U.S. (Nord, 2016: 25), and the emphasis on climate change was perceived as a signal of the U.S. Government to underpin “its willingness to be a serious player in global climate change discussions” in view of the 2015 United Nations Framework Convention on Climate Change-conference in Paris (Spence, 2015: 1).

Conclusions

In the past twenty years of its existence, the Arctic Council has become the most important forum for policy making in the Arctic. Another success ascribed to the intergovernmental forum is the inclusion of emerging issues in its work. With regard to the overall circumpolar agenda, Klaus Dodds and Mark Nuttall observed a representational shift arguing that issues to business are increasingly prioritized instead of conservation. This article explored in how far this observation

also applied to the agenda of the Arctic Council and more generally examined how “emerging issues” such as the business focus are introduced during Arctic Council chairmanships.

This article showed that a new business focus already emerged during the Scandinavian chairmanships in the Arctic Council. At that time, the growing interest of “outside actors” in Arctic affairs already led to discussions on the regulation of observers and on benefits related to sustainable economic development when cooperating with the business community. While the member states agreed to further encourage this cooperation and to negotiate the creation of a circumpolar business forum, skepticism was raised particularly by the people living in the North, to whom this forum was said to serve. The Canadian Chairmanship tried to meet this criticism when placing “responsible economic development” at the forefront of its chairmanship priorities, the establishment of the Arctic Economic Council (AEC) being the centerpiece in the Canadian program. In the succeeding U.S. Chairmanship program and after the formation of the AEC in 2014, this business focus was not prioritized anymore. Instead the U.S. put emphasis on global climate change and related sustainable development primarily to the development of renewable energy.

Based on the analysis of the last ten chairmanship programs introduced by the Arctic Council member states, this article outlined a continuity of numerous topics that connected to priorities set in previous chairmanships. Particularly environmental protection and sustainable development are addressed as constant pillars for cooperation. While the overall priorities outlined in the work of the Arctic Council have not changed, the meaning ascribed to them certainly has. Under the priority of sustainable development (a term that always included an economic dimension and thus a link to the business focus in the Arctic Council), member states subsumed for instance the development of an Arctic transport infrastructure, the strengthening of circumpolar communities and the cooperation with businesses, thus highlighting issues related to the social and the economic spheres in past chairmanship programs.

Further research is needed, however, to compare and to qualify the leadership exerted by Arctic Council chairmanships with bottom-up agenda-setting in Arctic Council working groups and task forces, which certainly also shape the work of the Arctic Council. As member states that chair working group are not designated by the chair of the Arctic Council but elected by the working groups themselves, it is particularly of interest to examine in how far working groups have been supportive to the agenda set in the chairmanship programs or to what degree they tried to bypass any priorities set in the respective programs. In this regard, and as has been argued elsewhere (Wehrmann, 2016), outcomes of the work conducted in working groups and task forces also depend on the constellation of actors, which is why special attention needs to be paid to the involvement of actor groups.

Furthermore, and as has also been shown in this article, the Arctic Council does not operate in a vacuum and shifting priorities are not solely encouraged by national priorities but also by events - such as the Russian flag-planting - and discourses with global significance. Particularly the sustainable development discourses in the 1990s and early 2000s were outlined as reference points in chairmanship programs, as well as respective events such as the UN Conference on Environment and Development and the World Summit on Sustainable Development. In a similar vein also discourses on Corporate Social Responsibility, which arguably became a buzz-word in the mid-2000s, and also in view of the COP-21 Paris Climate Conference the more recent

intensified focus on global climate change have been mirrored in chairmanship programs. Corresponding to Berger's (2015) work, further research is needed that also examines to what degree events and discourses conducted in the Arctic Council member states explain why business was prioritized in some chairmanship programs and not in others.

In sum, the continuity of priorities addressed in Arctic Council chairmanship programs that relate to environmental protection as well as the number of subsidiary bodies focusing on conservation still prove that the Arctic Council is primarily a forum enforcing cooperation with regard to environmental issues. Nevertheless, in the past decade a stronger focus on business-issues was certainly set by some member states. This focus has, however, not materialized in the formation of a new working group mandated to enhance business cooperation but in the establishment of the Arctic Economic Council, a body located outside the Arctic Council. After being two years in existence, it is too early to assess its significance for the work conducted by the Arctic Council and the future will show whether or not both Councils are related through a strong cooperative relationship that also influences the emergence of priorities set in the Arctic Council.⁴

Notes

1. Dodds and Nuttall (2016: 119) relate their observation to the diverse range of actors with stakes in the Arctic ("including mining and hydrocarbon businesses and Investors and non-Arctic states") and the "intense interest in economic development possibilities" at conferences and industry events.
2. This summary is based on: Government of Canada (2013), Government of Norway (2006), Government Offices of Sweden (2011), Ministry for Foreign Affairs of Finland (2000), Ministry of Foreign Affairs of the Russian Federation (2004), Pálsson (2003), The Kingdom of Denmark (2009), U.S. Department of State (2015), four U.S. chairmanship brochures relating to the U.S. Arctic Council Chairmanship 1998 – 2000 submitted by Julia L. Gourley, U.S. Senior Arctic Official (personal communication, June 2, 2016). No official program could be accessed that relates to Canada's first Chairmanship (1996-1998). The documents introduced at the first Ministerial meeting reveal, however, that during the first Canadian Chairmanship the institutional structure of the AC was predominantly addressed.
3. The selectiveness of these terms is partly caused by the different meanings ascribed to these terms and by the missing specification for instance in chairmanship programs: Until the end of the first decade of the Arctic Council, the publication of detailed chairmanship documents was not a common practice and often an elaborated introduction of priorities was missing. Obviously and in more general terms, this selectiveness is, however, also advantageous for those who wish to frame controversial issues in a manner less open to attack.
4. Many thanks to the two anonymous reviewers for their careful reading, critical comments and for their helpful suggestions that contributed to improving the final version of this article.

References

- Arctic Council. (2015). *Arctic Council Rules of Procedure*. Retrieved (1.4.16) from https://oarchive.arctic-council.org/bitstream/handle/11374/940/2015-09-01_Rules_of_Procedure_website_version.pdf?sequence=1.
- Berger, A. C. (2015). *Agenda-shaping in the Arctic Council. Projecting national agendas in a consensus-based regime* (Master's thesis, University of Oslo). Retrieved (1.6.16) from https://duo.uio.no/bitstream/handle/10852/45355/Berger_thesis.pdf?sequence=1&isAllowed=y.
- Dodds, K., & M. Nuttall. (2016). *The Scramble for the Poles: The Geopolitics of the Arctic and Antarctic*. Cambridge: Polity Press.
- Duyck, S. (2015). Chapter 1. Polar Environmental Governance and Nonstate Actors. In S. H. Ali & R. H. Pincus (Eds.) *Diplomacy on Ice. Energy and the Environment in the Arctic and Antarctic* (pp. 13-40). New Haven and London: Yale University Press.
- English, J. (2013). *Ice and Water. Politics, Peoples, and the Arctic Council*. Toronto, Ontario: Penguin Canada Books Inc.
- Exner-Pirot, H. (2015). The Canadian Arctic Council Ministerial – What to expect [Web log post]. *Eye on the Arctic*. Retrieved (2.6.16) from <http://www.rcinet.ca/eye-on-the-arctic/2015/04/15/the-canadian-arctic-council-ministerial-what-to-expect/>.
- Government of Canada (2013). *Development for the People of the North: The Arctic Council Program during Canada's Chairmanship (2013-15)* [Brochure]. Retrieved (1.6.16) from http://international.gc.ca/arctic-arctique/assets/pdfs/Canada_Chairmanship-ENG.pdf.
- Government of Norway (2006). *The Norwegian Chairmanship of the Arctic Council 2006-2008* [Brochure]. Retrieved (1.6.16) from <https://regjeringen.no/en/aktuelt/the-norwegian-chairmanship-of-the-arctic/id436983/>.
- Government Offices of Sweden (2011). *Sweden's Chairmanship Programme for the Arctic Council 2011-2013* [Brochure]. Retrieved (1.6.16) from <http://government.se/contentassets/931ff6706f594a82a181840ee544addc/swedens-chairmanship-programme-for-the-arctic-council-2011-2013--ud11.023>.
- Gundersen, A. (2013). *Written Statement by ALA President Arlene Gundersen. Eight Ministerial Meeting in Kiruna, Sweden, May 15, 2013*. Retrieved (1.4.16) from https://oarchive.arctic-council.org/bitstream/handle/11374/1569/ACMM08_Kiruna_2013_Statement_AIA_Arlene_Gundersen.pdf?sequence=6&isAllowed=y.
- Iqaluit Declaration. (2015). Retrieved (1.6.16) from <https://oarchive.arctic-council.org/handle/11374/662>.
- Javo, A. (2013). *Statement by Ms Áile Javo, President of the Saami Council, on the occasion of the Eight Ministerial Meeting of the Arctic Council Giron 15. May 2013*. [speech] Arctic Council 8th Ministerial Meeting in Kiruna, Sweden, May 15 2013. Retrieved (1.4.16) from <https://oarchive.arctic-council.org/handle/11374/528>.
- Kankaanpää, P., & Young, O.R. (2012). The effectiveness of the Arctic Council. *Polar Research*, Vol. 31. doi: 10.3402/polar.v31i0.17176.
- Kerry, J. (2015). *Remarks John Kerry Secretary of State Legislative Assembly of Nunavut Iqaluit, Canada Iqaluit, Canada April 24, 2015*. [speech] Arctic Council 9th Ministerial Meeting in Iqaluit, Canada, April 24-25 2015. Retrieved (1.4.16) from <https://oarchive.arctic-council.org/handle/11374/376>.

- Lackenbauer, P. W., & Manicom J. (2015). Asian States and the Arctic: National Perspectives on Regional Governance. In G. Hønneland (Ed.) *The Handbook of the Politics of the Arctic* (pp. 517-32). Cheltenham, UK: Edward Elgar.
- Ministry for Foreign Affairs of Finland (2000). *Program for the Finnish Chair of the Arctic Council 2000-2002* [Brochure]. Retrieved (1.6.16) from <http://arcticfinland.fi/loader.aspx?id=677109d0-e161-4e25-8ce7-91481f2860a8>.
- Ministry of Foreign Affairs of the Russian Federation (2004). *Program of the Russian Federation Chairmanship of the Arctic Council in 2004-2006* [Brochure]. Retrieved (1.6.16) from <https://oaarchive.arctic-council.org/handle/11374/1766>.
- Nord, D. C. (2016). *The Arctic Council. Governance within the Far North*. Abingdon, New York: Routledge.
- Ottawa Declaration. (1996). Retrieved (1.6.16) from <https://oaarchive.arctic-council.org/handle/11374/85>.
- Pálsson, G. (2003). *Northern Forum 6th General Assembly – The Icelandic Chairmanship Program. Keynote Presentation by Ambassador Gunnar Pálsson. Chair of Senior Arctic Officials*. Retrieved (1.6.16) from <https://mfa.is/news-and-publications/nr/1924>.
- SDWG. (2015). *SDWG Mandate*. Retrieved (1.6.16) from <http://sdwg.org/about-us/mandate-and-work-plan/>.
- Smieszek, M., & Kankaanpää, P. (2015). Role of the Arctic Council Chairmanship. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds.). *Arctic Yearbook* (pp. 1-16). Akureyri, Iceland: Northern Research Forum.
- Spence, J. (2015). The Arctic Council Leadership Merry-Go-Round. Words of Advice as the United States Assumes the Arctic Council Chairmanship. *Center for International Governance Innovation*. Policy brief No. 55. Retrieved (21.4.16) from <https://cigionline.org/publications/arctic-council-leadership-merry-go-round-words-of-advice-united-states-assumes-arctic-c>.
- The Kingdom of Denmark. (2009). *Chairmanship of the Arctic Council 2009-2011* [Brochure]. Retrieved (1.6.16) from https://oaarchive.arctic-council.org/bitstream/handle/11374/1565/ACMM06_Tromsoe_2009_Denmark_chairmanship_programme.pdf?sequence=1&isAllowed=y.
- U.S. Department of State (2015). *One Arctic. U.S. Chairmanship Arctic Council 2015-2017*. Chairmanship Brochure. Retrieved (1.6.16) from http://arctic-council.org/images/PDF_attachments/US_Chairmanship/Chairmanship_Brochure_2_page_public.pdf.
- Wehrmann, D. (forthcoming, 2016). Non-State Actors in Arctic Council Governance, Chapter 10. In K. Keil & S. Knecht (eds.) *Governing Arctic Change: Global Perspectives*. Basingstoke: Palgrave MacMillan.

Briefing Note

Arctic Council Upgrade: WWF Arctic Programme Policy Note

Marc-André Dubois, Bill Eichbaum, Alexander Shestakov, Martin Sommerkorn & Clive Tesar

As the Arctic Council (AC) celebrates its 20th anniversary, we acknowledge its many positive scientific and policy-shaping accomplishments and look to greater Arctic cooperation to govern this unique region of the planet for sustainability. The rapid and significant changes in the Arctic, from melting ice to economic development have drawn global attention to the region, and to the Arctic Council as the central mechanism for responding to these changes.

The Arctic Council has a history of making and shaping policy. The Ministers of Arctic countries who assemble every two years have approved and built on recommendations flowing from the Council's working groups. The Council's Achilles' heel has been the lack of a coordinated approach to implementation at a national level and fragmented coordination at the Council level. For many Council recommendations, there has been no monitoring or reporting of results, and therefore no ability to assess the adequacy of policy or management approaches that should have flowed from the Ministerial direction. There have been some positive steps toward implementation over the past few years. Progress on following up recommendations from the Arctic Marine Shipping Assessment has been monitored, and an action plan developed for the Arctic Biodiversity Assessment. The Arctic Council established and developed a tracking tool to monitor progress on Council projects.

The central question facing the Council now is whether it is capable of meeting the policy and management challenges of rapid change over its next twenty years. The current Arctic Council structure and rules of procedure provide insufficient institutional ground for the coordination and integration of assessments and recommendations flowing from individual working and expert groups to ensure the Arctic states implement comprehensive and complementary action through

Marc-André Dubois is Advisor on Governance and the Arctic Council, WWF Arctic Programme. Bill Eichbaum is Senior Fellow for Arctic Policy, WWF-US. Alexander Shestakov is Director of WWF Arctic Programme. Martin Sommerkorn is Head of Conservation, WWF Arctic Programme. Clive Tesar is Head of Communications and External Relations, WWF Arctic Programme.

their national processes. The Arctic states have recognized the need for better communication of Arctic issues, and have claimed they are capable of stewarding the region. To meet these aspirations, they must also recognize that new architecture is required to shape an Arctic Council that will allow them to deliver in a more effective way. Better coordination and stronger specificity of decisions must be put in place to address major barriers to proper implementation and full accountability. Monitoring and reporting on implementation through the AC need to be strengthened in order to bring full legitimacy to the Council as the central entity accountable for assuring effective governance of the region.

To enable the Council to better meet the challenges of the next twenty years WWF proposes that three new subsidiary bodies should be created within the Arctic Council: a knowledge body; a policy body; and an implementation body.

These three bodies would enhance the existing Arctic Council functions and structure by integrating working groups, expert groups, task forces and Senior Arctic Officials (SAOs) into a more interactive system that allows for better coordination and execution of decisions on the basis of best available knowledge, and sharper policy guidance combined with a focus on implementation at a national level. Below, we outline the functions of the new subsidiary bodies within an evolving Arctic Council institutional architecture. We advance proposals for membership and rights, and conclude with identification of implications of the new design for Arctic Council structure, cost and administration. WWF also suggests actions needed at a national level to bolster Arctic Council decision implementation.

New Bodies: Design, Functions and Operation

We propose that three subsidiary bodies should be created within the AC with specific but complementary responsibilities and close interaction. The proposed new structure would operate within the Arctic Council mandate and Rules of Procedure. AC member States and Permanent Participants (PPs) would nominate their representatives to each body. Observers could participate in the work of these groups as per Rules of Procedure and the Observer Manual, with appropriate amendments.

These bodies would enhance the productivity of the existing structure by assuring that the flow of work from scientific analysis through consideration of policy implications and recommendations for implementation actions is integrated across all Working Groups (WGs), Task Forces (TFs) and Senior Arctic Officials (SAOs). This would result in a more integrated system, where gaps and duplication would be clearly visible, and there would be more uniform monitoring of progress and implementation of ministerial decisions. We have not suggested specific names for these bodies, but we outline the functions.

Knowledge Body:

This body would house the existing Working Groups (WGs) and Expert Groups (EGs), and/or other science and technical focus bodies as they may be created by the Arctic Council. It would be responsible for conducting all assessments, coordinating early warning work (identifying new and emerging issues), producing technical reports, coordinating science and research agendas, and ensuring use of traditional knowledge for co-production of new knowledge coming through the Arctic Council. The work and agenda of this body should be built upon: 1) Ministerial requests

(through ministerial decisions in Ministerial Declarations and in approved SAO reports), 2) requests from policy and implementation bodies and 3) following up on established and agreed indicators that require urgent direction of scientific resources.

The knowledge body should provide scientific and technical recommendations that are forwarded to the policy body. The knowledge body should have regular meetings (two between each Ministerial). All products of working groups (WGs) and expert groups (EGs) will be considered by the body as one knowledge package with no division into silos. This should strengthen the integration of science and the technical agenda through the entire Council. As results will go to the policy body this architecture will reduce the burden on Senior Arctic Officials (SAOs) who currently need to follow the progress of every WG or EG. The knowledge body would be chaired on a rotational basis by a senior scientist from a member state. The body would establish a Committee Executive Team, potentially the chair plus working group leads, to represent the knowledge body at meetings/work of other coordinating bodies and the SAOs. The chair would be supported by dedicated capacity (with science and traditional knowledge expertise) from the Arctic Council Secretariat who would also be responsible for coordinating interactions between WGs and EGs.

Policy Body:

The policy coordination body would develop and recommend policy options and actions based on the scientific assessments/reports and scientific recommendations submitted by the knowledge body and would be responsible for bringing the resulting policy recommendations to SAOs for the Arctic Ministers' decision. The policy body would be composed of representatives from relevant governmental authorities responsible for policy development in all relevant sectors. This would allow for a cross-sectoral approach to formulation of Arctic policies, improve dialogue at the national level between departments with Arctic portfolios and ensure policy recommendations are made by relevant professionals. Strong participation by Permanent Participants (PPs) in this process would be a priority given the importance of their role in decision shaping and making. We propose a similar governance structure to the knowledge body: rotating chair and Committee Executive Team. The policy body would report to SAOs who then make recommendations for consideration and approval by ministers. The policy body could create ad hoc Task Forces which would play a role in helping the policy body to negotiate specific policy recommendations and instruments. In addition to developing policies based on information and recommendations provided by the knowledge body, the policy body could also request further research/information to be conducted/gathered by the knowledge body. Before passing any policy recommendations on to SAOs and ministers, the policy body would pass its recommendations back to the knowledge body to ensure draft policies are appropriately supported by scientific advice. The policy body would meet twice between Ministerials, 60 days after the meeting of the knowledge body to allow for timely consideration of scientific findings and recommendations.

Implementation Body:

The implementation body would consider decisions and recommendations as provided by Ministers and operationalise them through developing general implementation plans. These plans would guide joint implementation through the Council and include clear timelines and measures to guide and support Arctic States in developing national implementation plans. The standards for

implementation established by this body would constitute the benchmarks against which the effectiveness of national or other actions regarding implementation would be measured and reported on. This body would also identify other international frameworks relevant to implementation and enable synergies between those bodies and the Arctic Council, where appropriate. Similar to the other bodies, the implementation body would have a rotational chair and an executive team. Member states would nominate their representatives to the Committee from among high-ranking public servants with implementation power. This Committee may consider recommending meetings of Ministers responsible for a certain area of implementation to foster national and regional follow through on Ministerial Declarations. The implementation body could request additional research to be conducted by the knowledge body to support the development of its implementation plans, and could request from the policy body the development of further policy options or recommendations to support implementation needs. The implementation body would work closely with the Arctic Council Secretariat on progress monitoring, evaluation and reporting (dedicated staff capacity within the Secretariat), and provide reports and proposals to SAOs. The implementation body would meet twice between Ministerials (the first meeting two months after a Ministerial Meeting and the second 4-5 months prior to the next Ministerial).

National Action Process to Bolster Arctic Council Decision Implementation

Under the system proposed above, SAOs would continue to manage day-to-day Council matters, and advise Foreign Ministers. Members of the implementation body would lead national implementation of the policies agreed upon at the Arctic Council given their respective national coordination mandate and in line with national legislation. Their prominent executive status and mandate should be officially recognized in order for different Ministries to respond adequately.

National integrative bodies involved in the science-policy interface such as the U.S. Arctic Executive Steering Committee or Russian State Commission for Arctic Development should be at the core of Arctic cooperation and integration. To make this successful, each Arctic government would need to create a national implementation committee led by high level officials, though Foreign Ministers would remain the ultimate decision makers within the Arctic Council structure. These national committees would be mandated to coordinate national efforts in the Arctic as well as prioritize and effectively integrate the work of individual departments and agencies with activities that are already underway at the subnational and at the international levels. This renewed and empowered Arctic Council system could better serve a two-way path across all governance levels.

Implications

For the Arctic Council Structure

- Establishes new bodies within the AC and requires appropriate changes in Rules of Procedure.
- Changes the relationships between WG, EG, TF, AC Secretariat and SAO and requires appropriate modifications in the Rules of Procedure.
- Requires changes in the role of the AC Secretariat and its staffing to provide for the expert facilitation/coordination for each body and by working with WGs, EGs and TFs as well as among those bodies.

- SAOs will meet twice between Ministerials to consider 1) policy recommendations from the policy body and 2) implementation progress as reported by the implementation body. SAOs may send direct requests to any of the three bodies in case they need additional knowledge or support in preparing recommendations for Ministers.
- WGs and EGs would continue their work as at present but within the context of the knowledge body and supported in their coordination and interactions by dedicated staff members from the Arctic Council secretariat.

For Costs

- Requires meetings of new bodies while probably limiting the number of meetings of SAOs to only two during an inter-Ministerial period.
- Requires new positions: at least 3 professional positions (one for each body), 1 position dedicated to monitoring and reporting on Arctic Council progress (at national level and Council as a collective body) and 1 administrative (to support bodies) in the AC Secretariat.

Other

- Provides for more professional, solid, coordinated “single” approach to developing scientific and policy advice including on cross-cutting issues (issues common to several WGs).
- Allows for developing solid scientific and technical advice while leaving policy decisions to people with appropriate expertise.
- Directly connects individuals in Arctic State governments who are responsible for national implementation.
- Shifts the attention to implementation and collaboration with national counterparts to create national plans which, as a collective, would increase the likelihood of a coherent implementation of AC decisions/recommendations.

Concluding Remarks

The time has come to focus on implementation of Arctic Council decisions by all Arctic States, and by governments and organizations beyond the Arctic. The steps we propose pave the way for greater implementation while simultaneously increasing the overall efficiency, accountability and visibility of the Arctic Council both within the Arctic countries and internationally. The new architecture proposed is built on the strong foundations of the Council, but recognizes the new challenges and conditions to which the Council must respond. The proposal strengthens the Council’s role in asserting regional stewardship by responding to the challenges of a rapidly changing Arctic and the increasingly more integrated policy frameworks from local to global scales. In combination, the proposed changes stand to make a strong impact on the future of implementation in the Arctic space at a time of critical juncture. As the changes we propose are purely structural and do not purport to create new binding obligations on countries, we believe that they can be implemented on the basis of an informal agreement among the Arctic States.

The Arctic states are right to celebrate the achievements of the past twenty years. They would also be prudent to take steps to ensure that there is something worth celebrating twenty years from now.

Briefing Note

Lessons to be Learned from Three Recent Chairmanships of the Arctic Council

Douglas C. Nord

This year, the Arctic Council celebrates its twentieth year of existence. Such an anniversary is no small milestone for any international institution. It is especially notable as some early observers worried that this body might not survive its first decade of operation. The combination of its unique membership roster and its consensus style of operation was seen by many as making it too fragile of an organization for the realities of traditionally practiced international politics.

The sudden emergence of the Arctic as a prominent region in the economic, political and military calculus of many nation-states also raised a number of questions as to Arctic Council's ability to function as an effective mechanism for forging circumpolar consensus. Yet, two decades out from the issuance of the Ottawa Declaration the body seems now to be well on its way to meeting the expectations of many of its original advocates (See Nord 2016a).

It can be argued that some of the forward progress—as well as the occasional setbacks—of the Arctic Council over the past two decades is a direct consequence of the character of leadership provided by the successive chairs of the organization. It has been observed that not all of the body's chairs have possessed equal amounts of interest, resources, focus and political will as they have operated at the helm of the body. Similarly it has been noted that not all Arctic Council chairmanships have been undertaken with the same intent nor have been conducted in the same manner. Some have been organized around rather narrow national priorities or concerns while others have been more broadly inclusive. Some have been conducted in a directive manner while others have been more consensus-oriented. It is suggested here that both the willingness and the ability of the rotating national chairs of the Arctic Council to promote common concerns and to instill an attitude of collective problem-solving among its diverse membership has been critical to the success and effectiveness of the body.

A quick review of the conduct of the past three Chairmanships—those of Sweden, Canada and the United States—seems to confirm this assessment. Before undertaking to do so, it is important to first consider the influence that chairs can exercise within most international organizations.

The Influence of Chairs within International Organizations

Many observers often share a particular vision of the nature of the chair within any international organization. It tends to be a somewhat limited and constrained view. According to this perspective, the chair of any international body is simply as the presiding officer who attends to the smooth operation of the organization. The chair sits at the head of the table and makes sure that the particular debate or negotiation is conducted according to the established agenda and rules. As an entity, itself, the chair has minimal power and has limited influence over the outcome of events. As a consequence, the role played by chairs in the development of such bodies is rarely investigated. A review of the extensive literature on international diplomacy and negotiation provides limited insights. Until very recently, most chairs from nearly all international organizations were portrayed as performing basically the same functions and conducting themselves in the same manner (See Barnett and Finnemore 2004).

Traditionally, the efforts of the chair were seen to be allocated around four undertakings. The first was to insure the smooth unfolding of organizational meetings or negotiations. In this “convening” or “presiding” role the chair had the responsibility for initiating discussion and for recognizing subsequent speakers. The chair was also tasked with the assignment of seeing that any agreed agenda was followed and that the time schedule and rules of procedure were observed. As a particular organization grew and developed the chair, might also take on a second role related to longer-term operational responsibilities. Within this “management” role the chair would endeavor to oversee its external activities and internal operations. Often in concert with a support staff or a secretariat, the chair would issue reports to the membership and supervise funding allocations. A third role that a chair might acquire was seen to be “representational” in character. The chair could take on the task of presenting the views and program of the organization at other international meetings or forums. The chair might also assume the responsibility of providing a “face and voice” for the organization. In so doing, the chair would serve to offer an audible and visible reference point for a variety of external audiences. Finally, the last of the key functions of the chair could perform was seen to be that of facilitator of agreement between members of the body. In this “go-between” or “brokerage” role the chair would seek to build consensus and maintain harmony within the organization. Often utilizing informal means of information sharing and extended discussion, the chair would endeavor to perform the important tasks of reconciling opposing viewpoints and bridging differences between contending groups within the membership (See Bengtsson et. al, 2004).

While most analysts agree that these four roles continue as the modal patterns of behavior for most chairs within contemporary international organizations, increasingly it is pointed out that the manner in which they perform these functions can vary significantly. These observed variances in chair behavior may be reflective of differences in personality or cultural background, the nature of the organization of which they are a part or the particular style of leadership that a chair adopts. Each of these factors may contribute to the creation of individualized chair profiles.

Finally, chairs may adopt a distinctive style of leadership which may arise from a combination of the factors listed above. Some may see themselves as committed to promoting a very specific agenda that embodies either their own national or personal objectives or the internal organizational priorities of the bodies they head. This “entrepreneurial” style of leadership tends to emerge when a chair believes it enjoys a significant degree of autonomy in performing its various roles and where it can exercise a substantial degree of influence over desired outcomes (Young 1998). Alternatively, some chairs adopt a leadership style that has at its core a preference for advancing a more inclusive agenda that reflects collective membership needs. This “honest broker” style of leadership tends to emerge when the chair often does not possess a burning ambition to promote their own individual projects and recognizes it may not have complete control over ultimate decision outcomes of the organization. A third leadership style, that of “the professional”, may be utilized in response to an existing internal norm within the body that favors neutral or limited efforts by the chair and demands a minimal leadership profile (Tallberg 2003).

Regardless of the leadership style that is adopted, the chairs of most international organizations can—and do—exercise significant influence in performing their several roles. This fact, however, has not always been adequately acknowledged or discussed in many studies of international relations and global diplomacy. Prime attention tends to be allocated to the power dimensions and relationship behavior among the individual state-nation state participants. Their actions and interactions when exercising their clout and influence tend to be focused on and discussed in great detail. The impact of effective organizational leadership tends to be overlooked (Nye 2004).

When the “powers of the chair” has been considered, it has been usually limited to the context of its role as the convening or presiding officer of the body. Some acknowledgement is usually made of the inherent power of the chair that is secured by determining who shall speak, for how long and in what order. Also, on occasion, the chair’s influence is sometimes considered when note is made of its contributions in setting the agenda of the body and in insuring that its rules and procedures are observed. Most often, however, other forms of its power tend to be overlooked. It is often forgotten that the chair can also exercise considerable influence through its managerial role within an organization. This can be seen in its ability to help shape operational budgets and to allocate staff and other support services. It can also be discerned in its involvement the supervision of the release of information, data and reports coming from the organization. The chair can also exercise its power through its “representational” role. In becoming the “voice and face” of the body it can help determine which of the organization’s programs and objectives are prioritized in the minds of both internal and external audiences. In performing this role, a chair can also contribute to the development of an identity and mandate for itself and for its organization that may be independent of that of its nation-state members. Similarly in performing its “go-between” or “brokerage” role, the chair can exercise a form of transactional influence that may not be available to other participants within the organization. Taken together these separate avenues of influence contribute to a considerable base of potential power within the organization and with regard to the membership (See Tallberg 2010).

The Leadership Styles of Three Recent Arctic Council Chairmanships—Sweden, Canada, the United States

Each of the last three Chairmanships of the Arctic Council has provided a distinctive model of leadership for the organization. These alternative approaches can be seen to reflect both differences

in their assessment of the needs of the body as well as their own national priorities and goals within the Arctic. In providing both direction and focus for the efforts of the Arctic Council each of the three chairs has performed several of the different formal and informal roles associated with their institutional position. Each, at times, has also made use of some of the “powers of the chair” that have been described above.

Sweden, for its part, provided one of the clearest examples of an Arctic Council Chairmanship whose efforts and energies were directed primarily toward the needs of the body as a whole. With a limited national Arctic profile and an established tradition of working for the collective interest within international organizations, Sweden announced from the start of its Chairmanship its desire to play the role of an “honest broker.” In this capacity, it would seek to reconcile discordant views within the body and strive for the development of a common Arctic vision among the membership. Its Chairmanship Program was organized around this theme of a “common vision” and directed toward three themes—the needs of the Arctic environment, the needs of the peoples who inhabit the region, and the need to strengthen the operation and effectiveness of the Arctic Council as a whole (Swedish Ministry of Foreign Affairs, 2011).

In noting its intention to focus the Council’s work on both environmental protection and sustainable development concerns, the Swedish Chairmanship signaled its desire that the body should make headway in both areas. It would seek to reconcile divisions within the organization between proponents of each cause. By taking such a conciliatory position the Swedish Chairmanship was able to advance research efforts in both areas during its leadership term.

It was, however, in the third thematic area—“building a stronger Arctic Council”—that the Swedes excelled in their role as an “honest broker.” By listening to differing views around the table and seeking to build consensus among a variety of contending participants, the Swedish Chairmanship was able to establish common ground that allowed the body to move forward on a variety of fronts that had earlier plagued the body. This included formalizing new rules of procedure, implementing an effective communication strategy, establishing a permanent Secretariat and, perhaps most critical, breaking the logjam that had prevented the addition of new national observers to the Arctic Council (Economist 2013).

In achieving these objectives, the Swedish Chairmanship performed adroitly each of the previously discussed roles of an organizational chair and made use of the formal and informal powers associated with its position. It effectively moved its objectives forward by carefully crafting the agenda as the presiding officer of the body and by the skillful use of its gavel. In performing its “managerial” role it oversaw the specific steps by which undertakings as the creation of a common communication strategy and the establishment of the Secretariat in Tromsø moved forward from plan to full implementation. It undertook to perform its “representational” role by actively becoming the “voice and face” of the body as it attended a variety of international meetings dealing with global climate change and actively participated in social media around the circumpolar North. It performed its “brokerage” role repeatedly throughout its leadership term utilizing its “good offices” to promote compromise and consensus on difficult and complex matters—perhaps most notably in the case of the lingering observer question. The end result of such endeavors was a truly reinvigorated international organization with a sense of common purpose and expectations (Nord 2016b).

Canada, for its part, offered a very different leadership approach. It could be best described as being “entrepreneurial” in nature. As the originator of the Council and as a country with a strong Arctic profile, Sweden’s successor at the helm of the organization was less interested in forging consensus and more interested seeing a specific agenda and program endorsed and acted upon by the body. Under the thematic heading of “Development for the Peoples of the North” the Canadian Chairmanship announced that it had three specific programmatic objectives to advance within the Arctic Council during its leadership term. These included: 1) Providing for Responsible Arctic Resource Development; 2) Fostering Safe Arctic Shipping; and 3) Securing Sustainable Circumpolar Communities. In addition, it would seek to enhance the participation of indigenous peoples within the organization (Arctic Council Secretariat 2013).

Contrary to the Swedish approach of seeking to balance and redress contending views within the body, the Canadians were primarily interested in pushing forward their own understanding as to what action should be taken in support of specific initiatives under each rubric. This was most evident in their almost single-handed insistence that an Arctic Economic Council be established in order to build circumpolar trade and foster business and natural resource development opportunities in the Far North. Encountering significant resistance from representatives favoring a more environmentally conscious approach to such economic development efforts, the Canadian Chairmanship insisted ever more strongly that the initiative should go forward as originally framed. In its mind, the Council needed to get on board with the proposed plan and not engage in unnecessary debate and delay (McGwin 2014).

In undertaking their Chairmanship, the Canadians were not seen as performing their requisite chair functions as effectively as their predecessors. Nor did they seem as skillful as the Swedes in utilizing the formal and informal tools and powers of the position. In their “convening” role they often seemed confused and at cross-purposes with themselves. Agendas were regularly delayed and reworked. Discussions at scheduled meetings seemed to wander. The Canadians appeared to fare little better in undertaking their “management” role. Oversight of the formal working groups of the Council lagged as did liaison with the newly established Secretariat. Progress toward creating concrete deliverables for presentation and discussion at the Ministerial Meeting was, at best, measured. The “representational” role of the Canadian Chairmanship was also somewhat diminished during this time. Although frequent press releases and photo sessions were offered by the Chair of the Council, Leona Aglukkaq, the frequent change of personnel and assignments within the Canadian Chairmanship failed to provide a consistent “voice and face” for the organization (Axworthy and Simon 2015). This was most in evidence with the sudden replacement of the Canadian Chair of the Senior Arctic Officials, Patrick Borbey, not even half-way through his term. Finally, the Canadians did not really seek to undertake much of a “brokerage” role in their capacity of Chair of the body. As indicated above, they did not really see the need to foster agreement or consensus within the organization. As they understood it, their primary role was to lead and to have the others follow. Unfortunately for the Canadian Chairmanship this proved not to be an automatic relationship. An insightful observer was to note that: “The Canadian Chairmanship featured lots of leadership—but saw few followers” (Exner-Pirot 2014).

Although the United States Chairmanship of the Arctic Council is only half-way completed, one can discern elements of a distinctive leadership style that seems to borrow from both the approaches of the Swedes and the Canadians. Under the thematic heading of “One Arctic: Shared

Opportunities, Challenges and Opportunities” the Americans have launched a series of initiatives within the Arctic Council that are reflective of their own national priorities for the region. These include efforts to 1) address the impact of climate change in the region; 2) enhance Arctic Ocean safety security and stewardship and 3) improve the economic and living conditions of Arctic communities (Arctic Council Secretariat 2015). This list of objectives emerged from a prolonged discussion within the bureaucracy of the U.S. federal government and from sometimes heated discussions with other national policy players such as the state of Alaska. They have now become the central touchstones for their Chairmanship Program. As such, like their Canadian predecessors, the Americans have seemed to favor more of an entrepreneurial style of leadership than either a “professional” or “honest-broker” approach. They have definite objectives they wish to advance and as a major global player inclined to make use of their established influence and power to secure their endorsement by the Council.

Unlike the Canadian Chairmanship, however, the United States has been far more willing to seek the assent and cooperation of its fellow Council members when promoting its priorities. This can be seen in the manner in which it has sought to build support for action on topics as diverse as circumpolar health and Arctic Ocean acidification. It can also be observed in the way it has endeavored to accommodate the views and perspectives of the Russian Federation within the work of the Council. Whereas during the Canadian leadership term there existed a somewhat tense standoff between the Canadian and the Russian representatives, the Americans have sought to bridge differences with the Russians when they have arisen (Bergh and Klimenko 2016). In this manner, the United States approach at the helm of the body has adopted features of a brokerage leadership style that was seen earlier during the Swedish Chairmanship

Also like the Swedes, the Americans have been far more willing to perform the other necessary roles associated with being an effective organizational chair. They have received generally good reviews in their “convening” capacity. The Americans have also been seen to be effective managers of the behind-the-scenes operation of the body providing necessary oversight and accountability. Furthermore, they have done a credible job in offering a visible “voice and face” for the organization within the circumpolar region and in the broader international community. The United States Chairmanship has also been quite skilled—like its earlier Swedish predecessor—in utilizing both the formal and informal “powers of the chair” in advancing its overall objectives.

Lessons to be Learned from the Experiences of Recent Chairs of the Arctic Council

Looking back over these recent leadership experiences at the helm of the Arctic Council there seem to be several “lessons to be learned.” First and foremost of these is the need for the chair of the organization to properly prepare for this responsibility. This preparation may not require a significant expenditure of time in detailed planning exercises, but it does require a commitment to careful study and analysis. Future chairs should make sure that they have clearly identified the key issues and concerns where they are likely to encounter during their leadership term and have done the necessary investigation of the history and source of those matters which are likely to figure prominently on the agenda of the organization during their watch. This careful study and analysis was central to the ultimate success of the Swedish Chairmanship even though it was conducted initially on a “just-in-time” basis. In comparison, both the Canadian and U.S. Chairmanships

wasted considerable effort in “arranging and re-arranging seats on the deck” of the organizational ship when a more careful review of its log and of the future issue forecast was required.

Secondly, once having identified and assessed the primary concerns of the body, the Chair needs to maintain a clear focus on the process of providing solutions to them. This the Swedes did with almost laser-like precision. They noted which issues were likely to prove the most difficult to advance within the organization and engaged in an ongoing calculus regarding what initiatives were required to facilitate their passage. They carefully reviewed what could be done from their position as chair of the body and what would require ongoing discussion and negotiation with the other participants in the organization. As noted above, the Canadian Chairmanship failed to recognize this distinction and wasted considerable time and effort pushing for the adoption of the AEC even when it was clear they had limited support among the other members.

Thirdly, it is important as chair not to overpromise. The Swedish Chairmanship was careful in not committing itself to an overly broad and extensive agenda. It identified from the outset what “deliverables” it might likely secure during its leadership term and what issues would have to remain as future undertakings for the Council. The Swedes did not raise expectations among either the external or internal audiences of the Arctic Council to a point that they could not meet. The Canadian Chairmanship, unfortunately, was full of promises and short on concrete deliverables. As a consequence, there was a notable degree of dissatisfaction within and without the organization at the conclusion of its leadership term. The Americans have seemed to have learned from this experience and have offered a more modest set of proposals for action by the Council.

Fourthly, the success of Swedish Chairmanship was rooted in having an intelligent and capable staff. Their experience proved that it was not necessary to have a large number of individuals involved in the operation. Nor is it necessary to have participants from several different ministries of the host government. Having a dozen or so focused and dedicated individuals from only two major ministries was sufficient. The quality of the staff involved, not the quantity of individuals mattered the most. This “lesson” was clearly not learned by the Canadians. Their chairmanship was regularly hobbled by the coming and going of often ill-prepared staff from countless arms of the Canadian government. The same “lesson” has also only partially been taken to heart by the U.S. Chairmanship. Note has been made that the latter has at times stumbled over a plethora of plans and priorities that have emerged from its vast national bureaucracy.

Fifth and finally, the Swedish Chairmanship pointed to the utility of making use of the full menu of the formal and informal “powers of the chair.” Rather than limiting itself to simply a presiding role, Sweden adopted a series of other leadership roles to advance its identified agenda. This adept use of the managerial, representational and brokerage capabilities of the chair in addition to the traditional presiding role of the head of the organization enabled it to secure results that a less experienced state might have failed to accomplish. Without utilizing such a multifunctional approach, complex matters like the final establishment of the Secretariat and the resolution of the “observer problem” could have eluded the Swedes. As noted above, the Canadians proved to be far less aware and adept in their use of the “powers of the chair” and failed to provide organizational leadership from the chair. The Americans, in contrast, have seemed to have learned this “lesson” during their stewardship of the body and have performed with positive effect the multiple roles inherent in their leadership position.

Conclusions

The comparative analysis undertaken here has noted that like the heads of other international bodies, the Chair of the Arctic Council can and often does exercise influence over the path and direction that the organization has taken. Successive chairs have elected to pursue alternative leadership styles and strategies that have been reflective of their assessment of the needs of the organization and their own national objectives and capacities. The three most recent Chairmanships—those of Sweden, Canada, and the United States—have each chosen to pursue distinctive leadership paths. They have performed the necessary formal and informal roles of the chair with differing degrees of enthusiasm and success. They have also exercised the “powers of the chair” in their leadership position with varying degrees of effectiveness.

It is important to recognize the fact that while alternative leadership styles might appeal to different chairs, the nature of the Arctic Council itself sets some parameters on the effectiveness of each approach. Most significantly, the number and variety of its participants, as well as the requirement for consensus, suggests that any chair of the body must work to address and accommodate differing perspectives and priorities within the body. If a chair too quickly narrows the agenda for discussion or limits the alternatives for action there is the danger that one might have “decisive leadership” but in the end achieve little in the way of results. The dual challenge for any future chair of the organization is to present both innovative ideas and approaches for the Arctic Council and to help build the consensus within the body that will enable their adoption.

References

- Arctic Council Secretariat (2013) *The Canadian Arctic Council Chairmanship 2013-2015*.
- Arctic Council Secretariat (2015) *The Arctic Council Chairmanship of the United States*.
- Axworthy, Lloyd and Mary Simon. (2015, March 4th). Is Canada Undermining the Arctic Council. *Globe and Mail*.
- Barnett, Michael and Martha Finnemore. (2004). *Rules for the World: International Organization in World Politics*. Ithaca and London: Cornell University Press.
- Bengtsson, R, O. Elgström and Jonas Tallberg. (2004). Silencer or Amplifier? The European Presidency and the Nordic Countries. *Scandinavian Political Studies*, 27(3): 311-34.
- Bergh, Kristofer and Ekaterina Klimenko. (2016) Understanding National Approaches to Security in the Arctic. In L. Jacobson and N. Melvin (eds.). *The New Arctic Governance* (pp. 41-75). Oxford: Oxford University Press.
- Exner-Pirot, Heather. (2014, July 2nd). The Canadian Arctic Council Chairmanship: Lots of Leadership, No Followers. *Alaska Dispatch News*.
- McGwin, Kevin. (2014, April 22nd). One Small Step for Arctic Business. *The Arctic Journal*.
- Nord, Douglas. (2016a). *The Arctic Council: Governance within the Far North*. London and New York: Routledge.
- Nord, Douglas. (2016b). *The Changing Arctic: Creating a Framework for Consensus Building and Governance within the Arctic Council*. London and New York: Palgrave Macmillan

- Nye, Joseph. (2004). *Soft Power: The Means to Success in World Politics*. New York: Public Affairs.
- Swedish Ministry of Foreign Affairs. (2011). *Sweden's Chairmanship Program for the Arctic Council*.
- Tallberg, Jonas. (2003). Agenda Shaping Powers of the EU Council Presidency. *Journal of European Public Policy*. 10(1): 1-19.
- Tallberg, Jonas. (2010). The Power of the Chair: Formal Leadership in International Cooperation. *International Studies Quarterly*. 54(2): 241-65.
- The Economist. (2013, May 18th). Arctic Diplomacy: A Warmer Welcome.
- Oran Young (1998) *Creating Arctic Regimes: Arctic Accords and International Governance*. Ithaca and London: Cornell University Press.

Commentary

U.S. Chairmanship of the Arctic Council: Mid-Point

Ambassador David A. Balton

Anniversaries provide an opportunity to take stock of where we are, and to consider where we hope to go. The U.S. Chairmanship of the Arctic Council has taken this opportunity to heart in considering the 20th Anniversary of the Council's founding, on September 19.

The first twenty years of the Arctic Council have seen remarkable change. The Council has grown – in stature, in ambition and in effectiveness. An increasing number of non-Arctic States, as well as intergovernmental and non-governmental organizations, have sought and obtained accredited observer status. The Council has established a permanent secretariat and strengthened its internal operations.

The issues confronting the Arctic Council have also grown – in number and significance – in reflection of the dramatic changes in the region. The warming Arctic climate in particular commands unprecedented attention, as governments, Arctic residents and civil society strive to understand and address the potentially profound consequences of climate change for the Arctic and the planet as a whole.

As the United States assumed the Chairmanship of the Council, we also recognized that climate change was not the only topic demanding attention. We created a Chairmanship theme (“One Arctic: Shared Opportunities, Challenges and Responsibilities”) to address the impacts of climate change as well as to promote Arctic Ocean safety, security and stewardship, and to improve economic and living conditions.

At the mid-point of our two-year Chairmanship, we have a better sense of what the Arctic Council has accomplished, and what remains to be done. To mention just a few initiatives:

- The Circumpolar Local Environmental Observer network (CLEO) took a major step forward with the launch of the “LEO reporter” app, enhancing the ability of indigenous communities to share their observations of weather and environmental anomalies.
- The “One Health” initiative completed a survey of some 450 participants in 14 countries, believed to be the largest ever survey of One Health awareness and practices at a regional level.
- The Council developed a set of guidelines for the safe operation of unmanned aircraft systems in the Arctic, the first time such guidelines have been developed for any geographic region.
- In follow-up to the Agreement on Cooperation on Arctic Marine Oil Pollution Preparedness and Response entering into force, which strengthened international cooperation in the event of an oil spill in the Arctic, the Arctic States have begun to implement the agreement through joint exercises.

Looking ahead, the Arctic States expect to conclude a legally binding agreement to enhance scientific cooperation in the Arctic, to be signed by Arctic Ministers at the 10th Arctic Council Ministerial meeting on May 11, 2017 in Fairbanks, Alaska. Work also continues on a broad range of other initiatives including:

- increasing local capacity for managing renewable resource microgrids;
- tracking and mitigating black carbon and methane emissions;
- assessing circumpolar telecommunications capacity;
- evaluating the effectiveness of suicide interventions;
- improving sewage treatment and local water delivery;
- producing high-resolution digital elevation models of the Arctic;
- building a network of Arctic marine protected areas;
- broadening cooperation on Arctic Ocean issues; and
- much more.

We have also strengthened the Council itself in a variety of ways. The Council adopted Communications and Outreach Guidelines, updated its Communications Strategy, and worked to raise Arctic awareness in the United States and other countries. We have made it easier to access Arctic Council documents and have improved the Arctic Council website. Perhaps most importantly, we have taken steps to improve Arctic Council cohesiveness, including in the ways the Council interacts with other international bodies.

I am particularly pleased with the work of the Council in relation to its many observers. We have found new ways to engage with observers. We have created an application form for those who seek observer status, as well as a new template for use by observers when submitting their regular reports. Finally, we will soon complete the first-ever review of observer participation.

The Council is also already looking beyond the U.S. Chairmanship. We are considering the development of a long-term Strategic Plan and are seeking to make Arctic Council financing more secure and predictable. We are considering whether the work of the Council should become more systematic and cross-cutting, including with respect to climate change and sustainable

development. The United States and Finland have also begun the critical process of ensuring a smooth transition in chairmanships.

The United States has had the great honor of chairing Arctic Council for the second time. At the twenty year mark, this has been a dynamic and important period. We will do our best to finish with as much momentum as when our chairmanship began, and look forward to continuing to serve the Council as an active, constructive member in the future.

Commentary

The Establishment and Progress of the Standing Arctic Council Secretariat

Magnús Jóhannesson

In 2011, Ministers of the Arctic States met in Nuuk for the biennial Arctic Council Ministerial Meeting. Among the most prominent outcomes from the Nuuk meeting was the newly-minted “Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic.” Ministers also decided to “strengthen the capacity of the Arctic Council [...] by establishing a standing Arctic Council Secretariat” in Tromsø, Norway.

The Arctic Council Secretariat was to be operational at the beginning of the Canadian Chairmanship, which would arrive in spring 2013. The first director of the Secretariat was chosen in November 2012, and I feel both fortunate and humbled to have been selected for this role.

In January 2013, on the margins of the Arctic Frontiers conference, the host country agreement for the Secretariat was signed by Norway’s Minister of Foreign Affairs. The standing Secretariat then began operations on 1 June 2013 after recruitment of the first staff members.

The Secretariat was instructed to support the Arctic Council’s work by providing “institutional memory, operational efficiency, [and] enhanced communication and outreach,” as well as supporting the Council in other ways big and small. It offers administrative and organizational support, manages the Arctic Council’s website and social media accounts, houses the secretariat for two of the Council’s six Working Groups (ACAP and EPPR), and assists with Russian-English translation and interpretation for many Arctic Council initiatives.



Host Country Agreement signing ceremony, Arctic Council Secretariat, Tromsø, Norway 22 January 2013. Source: Arctic Council, Arctic Council Photo Archives.

In its first three years of operation, the Secretariat and its international staff have taken on many new challenges. In addition to its day-to-day efforts supporting the work of the Council's Task Forces, Working Groups, and Senior Arctic Officials, the Council has undertaken such ambitious initiatives as:

- archiving of the Council's historic documents stretching back to the establishment of the Arctic Council,
- creating a public, open access archive that links Arctic Council reports and documents to library databases worldwide,
- establishing a tracking tool that provides an overview and status report for the Arctic Council's current initiatives,
- centralizing and streamlining the Council's interactions with Observers, and
- expanding the Council's communications channels, materials and activities, including providing updates on the Arctic Council's work to external bodies and visiting delegations.

In many of these initiatives, the Council's staff has been "learning by doing," and has profited greatly from the guidance of the Canadian and U.S. Chairmanships. The Arctic Council is certainly a unique entity, and the Secretariat has been charting new territory in much of what it has done.

Presently, the Secretariat has 13 staff members from seven of the eight Arctic States. Most recently, the Secretariat has welcomed new team members to Tromsø in the form of the Indigenous Peoples' Secretariat, which relocated from Copenhagen in early 2016. This important move allows both entities to profit from, and share in, the other's experience, knowledge, and resources.

The Secretariat has undoubtedly helped the Arctic Council to deal with growing tasks and challenges in the Arctic. With twenty years under its belt, the Arctic Council is taking stock of

where it stands and where it could go. Looking to the future, I can see only a bright horizon for the Secretariat as it continues to help the Arctic Council in its work. The experienced and dedicated staff in Tromsø continuously strives to find ways to expand and improve the services that it provides, and to meet the demands of the Arctic Council's ongoing growth and development.

The foundation for the Arctic Council Secretariat was laid at the Nuuk Ministerial Meeting in 2011. This was also the first Ministerial attended by the U.S. Secretary of State (Hillary Clinton, at that time), so it is fitting to reflect during the U.S. Chairmanship on how far the Secretariat has come, and how it might continue to grow in its efforts to serve the Arctic Council.

Commentary

Arctic Economic Council: Creating Parameters for Sustainable Economic Development in the Arctic

Tara Sweeney & Tero Vauraste

The vision of the Arctic Economic Council (AEC) is to make the Arctic a favorable place to do business.

Our mission is to facilitate sustainable Arctic economic and business development. The AEC also provides a business perspective to the discussions taking place at the Arctic Council, serving as a link between Arctic governments and the wider circumpolar business community.

Backbone: Our Goals and Five Overarching Themes

Our purpose is to facilitate Arctic business-to-business activities and responsible economic development. The five overarching themes form the backbone of our actions.

The first overarching theme focuses on establishing strong market connections between Arctic states. Working to identify and remove trade obstacles at the circumpolar level is key for AEC membership.

The second overarching theme is promoting stable and predictable regulatory frameworks. We support high standards of regulation, and support a predictable regulatory environment for all Arctic stakeholders where common standards make sense.

The third overarching theme encourages the use of public-private partnerships in infrastructure investments. There are 4 million people living north of the Arctic Circle. The need for infrastructure development is great and the cost is high, if not cost prohibitive for a single sector. Therefore, promoting public-private partnerships as a feasible option for pan-Arctic infrastructure

Tara Sweeney is Chair, and Tero Vauraste is Vice Chair, of the Arctic Economic Council (AEC).

development will go a long way in fostering responsible economic and business development in the North.

The fourth overarching theme focuses on creating closer ties between industry and academia. Exchange of information between academia and the business community will only strengthen the foundation for promotion of responsible economic growth. Industry and the academic world approach issues with a variety of perspectives, and through cooperation both industries can work to make the Arctic a favorable place to do business. Both sectors learn from each other in partnership.

The fifth overarching theme is a focus on traditional knowledge, stewardship and small and medium enterprise development. Traditional and local knowledge is a valuable resource that is a necessary de-risking agent to any Arctic project. Further, through this engagement process, businesses will learn what it means to be a good Arctic steward. As Arctic residents, it is important that we ensure that those interested in doing business in the Arctic are good stewards of our lands and environment. Finally, small and medium enterprise development in the North is important for sustainable growth, especially in our most remote parts of the Arctic.

Rapid Development of the Organization

The rapid development of the AEC demonstrates our Legacy Members' commitment. 18 months after AEC's creation, our founding documents were adopted. Thanks to the work done at the first AEC Governance Committee meeting, the 2016 Annual Meeting ratified the organization's Strategic Plan for 2016-2018, Rules of Procedure as well as Membership Terms and Conditions.

The AEC represents the diverse faces of the Arctic, whether that voice represents a large organization, an indigenous group or small business, each Legacy Member has a vote. Sub-Arctic interests are encouraged to join the AEC and go through the membership process. By creating three different non-voting membership categories, we provide an opportunity for all businesses and organizations to engage in our work no matter their size or origin.

Strategic Plan Sets the Course for the Future

Going forward, the AEC has established a rolling three-year strategic planning process. To ensure continuation, these planning periods extend over the AEC chairmanships. To help coordination and dialogue with the Arctic Council, we have chosen to follow their Chairmanship rotation.

The AEC Strategic Plan (2016-2018) is built on three pillars: *organizational*, *stewardship* and *economic growth*. The *Organizational* pillar builds a solid foundation for future success. The *Stewardship* pillar creates a foundation for collaboration and stewardship among Arctic stakeholders and AEC members. The goals under the *Economic Growth* pillar focus on supporting and creating networks to advocate for responsible development and meaningful economic growth in the Arctic. (The Strategic Plan with detailed goals can be downloaded at www.arcticeconomiccouncil.com).

Definition of Success

To define success, the AEC has set criteria which will be evaluated at the end of 2018. True to the *Organizational* pillar of our strategic plan, we aim at establishing a fully functioning, efficient

organization with sufficient and sustainable funding. Value-add is our goal with meaningful benefits to our members.

The *Stewardship* pillar, calls for an association with only well-respected, business-oriented ethical organizations. Being good Arctic stewards is important to sustaining the identity of the Arctic region, and we choose to align ourselves with organizations that share those same views.

Promoting meaningful investments in the Arctic is a success criterion based on the *Economic Growth* pillar of our Strategic Plan. The AEC aims to advocate and support responsible development and the regulation of that development. We will continue to engage with the Arctic Council and provide an Arctic business perspective to their discussions.

Commitment, cooperation and dedication have led us to a stage where we are ready for business. With the establishment of the organizational foundation, Governance Committee and a Secretariat, we are now equipped to strengthen our position as the preferred advisor on business development in the Arctic.

Please stand with the AEC and join us in making the Arctic a favorable place to do business.

Commentary

Launching the Norwich Model Arctic Council

Anthony Specca

This year, the Arctic Council celebrates its twentieth anniversary. As its profile as the premier high-level forum for international Arctic cooperation has grown, so too has interest in its affairs. Amongst educators, this interest has stimulated a small but increasing number of Model Arctic Councils (MACs). MACs are experiential learning simulations at which students or pupils, playing the roles of delegates to a cycle of Arctic Council meetings, discuss salient issues facing the region and try to build consensus around solutions.

As a secondary-school educator at Norwich School in the UK, as well as a former policy official with the Government of Nunavut in the Canadian Arctic, I take a double interest in this trend. But given the specialised nature of Arctic study, nearly all MACs advertised to date have been pitched to university students rather than to secondary-school pupils. Most notably, the University of the Arctic has developed a biennial MAC to be held at a member university located in the country chairing the Arctic Council, the first of which took place in May 2016 at the University of Alaska Fairbanks.

However, similar experiential learning simulations have been pitched to secondary-school pupils for decades. Model United Nations (MUN) is the best known, but Model International Court of Justice, European Youth Parliament and others are regular events. My own experience introducing MUN at Norwich School convinced me that MACs can raise awareness and understanding of the Arctic at secondary school just as much as at university. Inspired to share my enthusiasm for the Arctic with pupils, I developed and launched the inaugural Norwich Model Arctic Council (NORMAC) in July 2016 at Norwich School.

NORMAC may be the only secondary-school MAC held in the world today. Indeed, perhaps only one other MAC has ever been held at this level—in October 2010 in Whitehorse, Yukon, convened by the United Nations Association Canada. Pupils participating in NORMAC 2016 declared not only that they enjoyed the role-playing exercise in itself, but also that they valued highly what they learned about the Arctic and its peoples through researching their roles. Encouraged by their uniformly positive feedback, I intend to run NORMAC as an annual event.

Full details about NORMAC are available online.¹ I shall focus here instead on some strategic questions raised during conference preparations. NORMAC 2016 was a one-day pilot involving 18 senior pupils from Norwich School, but NORMAC 2017 will be a two-and-a-half day conference open to pupils from other secondary schools in the UK and beyond. Many of these pupils may have participated in MUN, but most probably none in MAC, and few if any will have had previous exposure to the Arctic. Three questions stand out:

- What distinguishes NORMAC from the many MUN conferences or other such simulations that pupils could choose to attend instead?
- What balance should NORMAC strike between insisting on strict realism on the one hand, and making space for a creative learning experience on the other?
- How can pupils' newfound interest in the Arctic be sustained beyond preparing for and participating in NORMAC itself?

The answer to the first question might seem obvious. Unlike MUN, which is geographically and thematically diffuse, MAC focuses pupils on the Arctic, a unique and compelling part of the world. But the 'lure of the far North' can be over-emphasised. The risk here is of running a MAC essentially as a MUN, only situated in the 'mythical Arctic'—and of missing what makes both the Arctic and the Arctic Council truly distinct.

To mitigate this risk, NORMAC makes much of two special features of the Arctic Council—the category of indigenous Permanent Participant (PP), and the rule of consensus. At MUN, pupils play the roles exclusively of delegates from Member States. At NORMAC, some pupils play the roles of delegates from indigenous PPs—and all pupils are exposed to the Arctic as a homeland, as well as to the critical social and political concepts of indigeneity and indigenous rights. Many pupils today have a strong sense of social justice, and in my experience they are excited by the prospect of learning about indigenous peoples and politics.

Similarly, whereas at MUN pupils require bare majority support for their proposals, at NORMAC pupils must build real consensus in order to influence proceedings. At secondary-school age, this poses a considerable challenge, but it also develops valuable skills. In keeping with Arctic Council rules, consensus technically need only extend to the Arctic States. But even this rule encourages pupils to consider carefully the relationships between Arctic States and their indigenous peoples, and to aim for the Arctic Council ideal of full PP involvement.

Indeed, it would be unrealistic for pupils not to do so—but NORMAC is a learning experience, not a diplomatic scenario analysis. At NORMAC, pupils have the creative licence to propose, discuss and pass resolutions that would not meet the high standard expected at the Arctic Council. NORMAC procedure, a mix of formal parliamentary procedure and typical MUN rules, also deviates from the Arctic Council's more collegial practice. Nevertheless, it offers pupils the

structure they need to discuss complex issues maturely in a large group, and to hope to achieve consensus in a short time.

That said, realism is still an explicit aim of NORMAC. Pupils grapple with up-to-the-minute issues either actually or potentially on the Arctic Council agenda, and they compete for commendations judged partly on how convincingly they played their roles. It is useful in this regard to have at least one Arctic specialist on hand to offer formal or informal ‘briefings’—a sort of expanded ‘Arctic Council Secretariat’ role played by myself and a colleague at NORMAC 2016. Good preparation is also critical, for which I maintain a small ‘research library’ of Arctic-related materials on Norwich School’s online Virtual Learning Environment.

In fact, good preparation creates the foundation for sustained interest in the Arctic. Like MUN, NORMAC requires many weeks of careful research, which pupils would ideally conduct together in the context of a continuing after-school ‘Arctic club’. Although this research may not overlap with the school curriculum except indirectly, pupils at schools in the UK offering an extended project at GCSE- or A-Level have the opportunity to transform their NORMAC preparation into a nationally recognised qualification. In this way, the most enthusiastic pupils can extend their engagement with the Arctic well beyond the conference.

Participating schools could also consider integrating NORMAC preparation with other co-curricular activities, such as visits to universities with Arctic research programmes, or youth campaigns for indigenous rights through clubs such as Amnesty. School trips to the Arctic are also possible—at certain UK schools, trips to Iceland or Norway are already popular. As for NORMAC itself, not only do I intend to run it annually, but also to expand it to other venues, as well as to explore the possibility of NORMAC-related pupil exchanges with Arctic-based secondary schools. But even if in future most pupils attending NORMAC do so only once, it will still have played its part in raising awareness and understanding of the Arctic amongst youth.

Notes

1. For further details and to register interest, please visit the NORMAC website at <http://www.normac.org/> and follow NORMAC on Twitter [@NorwichMAC](https://twitter.com/NorwichMAC).

Section III:

**Arctic Science, Diplomacy &
Policy**

Science as Catalyst for Deeper Arctic Cooperation? Science Diplomacy & the Transformation of the Arctic Council

Clemens Binder

As a variety of challenges emerge in the Arctic, the demand for scientific and technological solutions is increasing. Due to the complex nature of the given challenges, cooperation in the fields of science and technology could serve profitable in order to tackle these issues. The impact of cooperation in Science and Technology however exceeds the purely practical dimension; it rather opens opportunities for closer political cooperation as well as requiring diplomatic efforts in order to establish cooperative structures. This chapter assesses the current state and possible future trajectory of scientific and technological cooperation within the Arctic Council by applying the concept of science diplomacy and assesses if scientific cooperation can assist in ameliorating political cooperation by creating an epistemic community. Examples will comprise the development of the Arctic Environmental Protection Strategy into the Arctic Council as well as the legally binding agreements.

Science and technology are among the fields where cooperation is most visible in the Arctic. A variety of initiatives within the Arctic Council (AC) such as the Sustainable Development Working Group (SDWG), the Emergency Prevention, Preparedness and Response (EPPR) or the Arctic Monitoring and Assessment Programme (AMAP) represent sub-units within the AC that show at least the symbolic significance of scientific cooperation within the Council.

The AC has introduced the Agreement on Enhanced International Arctic Scientific Cooperation¹, a legally binding agreement, in order to strengthen scientific relations in the Arctic. This agreement will represent one of the major objectives of the United States' AC chairmanship from 2015 to 2017 (State Department, 2015). This results from the high demand for scientific solutions of Arctic policy areas – mitigating the negative effects of climate change, achieving environmental protection and improving maritime security, to mention a few examples. As these challenges affect all Arctic states and cooperation in areas of science and technology proves profitable for states in combating these challenges, the Arctic states show a high degree of interest in scientific topics. In addition, the high degree of influence of indigenous groups in the Arctic Council and their specific knowledge production could fortify their roles in scientific cooperation. As Briggs (2005: 110) describes, indigenous knowledge should not only be regarded as alternative to Western knowledge,

but also as complement. Within the Arctic Council (AC), this could lead to an emerging transfer of indigenous knowledge.

Scientific and technical cooperation provides a number of opportunities to states. First, there is mutual advantage from improved technological solutions to central Arctic issues. For example, in the field of Search and Rescue (SAR), the improvement of crucial infrastructures is facilitated by the combination of the respective states' scientific capabilities in developing technological means for SAR and improved analysis of the situation through research on sea ice and ocean dynamics.

Second, states can emerge as knowledge leaders by providing specific knowledge on these issues, the transfer of technologies that could assist with solutions, and assuming an active role in research communities through agenda-setting. For example, Finland pursues an engaged research policy in the Arctic to emerge as a leader in knowledge and technology and eventually profit economically from this form of engagement (Prime Minister's Office 2013: 23). Arctic strategies of various states contain insight in to which form of scientific cooperation is desired – joint research centers, technology transfer and common solutions to imminent problems such as climate change are central.

Third, and most prominently in this chapter, scientific cooperation holds potential as an instrument to achieve deeper institutional integration and cause positive spillover effects on other issues. I argue that science and technology serve as a viable means to address not only urgent challenges but will cause a strengthening of cooperative institutions as a whole. In this regard I will also assess which obstacles science diplomacy has to overcome in order to be effective and where scientific cooperation reaches its limits, or even could affect cooperation negatively.

Concepts that are applicable to this argument are the “Soft Power” concept by Joseph Nye (2004, 2011), epistemic communities and most prominently the concept of science diplomacy, which describes scientific cooperation as a diplomatic instrument for improving relations and establishing cooperation. Deeper integration and strengthening of an institution, in this case the Arctic Council, can be approached through neofunctionalist approaches (Haas, 1958, Rosamond, 2015) that describe institutional integration as a consequence of spillover effects of cooperation in one sector, creating a more comprehensive institution as a whole. This applies especially to the case of science diplomacy, where scientific cooperation is created with the endeavor to achieve deeper political cooperation.

This chapter will therefore investigate the role of the AC's cooperative scientific programs not only in the narrow framework of scientific cooperation, but also in the wider framework of science as an instrument of deeper institutional integration and for strengthening the Council. In this regard it is however also important to include the possible concerns scientific cooperation may cause – transfer of technologies may be perceived as compromising sovereignty and, in some issues, even security. I will assess however how science can work as a positive narrative of transformation of the Council, as a measure of building trust and confidence and if science diplomacy seems a viable option to strengthen the Council's role in Arctic politics. In doing this, I will explain the existing initiatives for cooperation in science and technology, evaluate national strategies and policies in this issue and assess if these build a framework that is necessary for stronger cooperation and if this could incite a transformation process within the Arctic Council. The assessment will be based on the theoretical framework consisting of neofunctionalist integration theories and the concepts of soft power, epistemic communities and especially science diplomacy.

Neofunctionalist Integration Theory and Epistemic Communities

Institutions often play an important role in the production, collection and cultivation of knowledge. As Young (2004: 217) states, institutions and regimes shape knowledge production by agenda-setting, framing issues and concentrating resources on areas of particular interest. However, states should not be perceived as 'black boxes', as civil society actors can influence knowledge production as well. Furthermore, they can establish policy frameworks and construct analytic models that improve knowledge production. However, Young (2004: 220) does not reduce the influence of institutions to agenda-setting, but acknowledges their importance in defining contents and topics. In addition, knowledge production is represented more in public through institutions, therefore applying knowledge production to public issues and creating policy frameworks.

Such institutions can trigger a stronger institutional integration in other areas than knowledge production, and knowledge production serves as a base for more comprehensive integration. Theoretically, this could be explained through neofunctionalist theories, although neofunctionalist scholars have especially focused on the European Union as a prime example of institutional integration (e.g. Haas, 1958). However, the theory applies to a variety of institutions that attempt to achieve deeper integration. As Heininen's (2012) analysis of the Arctic strategies proves, strengthening the Arctic Council is an objective of the majority of Arctic nations, therefore integration theories such as neofunctionalism prove to be useful to explain a possible route to a stronger institutionalization. Neofunctionalism describes integration as a steady process with a variety of actors included, attempting to achieve mutually positive results through cooperation (Niemann & Ioannou, 2015: 197). Regional integration differs from cooperation as it is understood as a comprehensive procedure that does not only include intergovernmental cooperation in an issue area, but common policies in a number of areas. While the AC is clearly an intergovernmental rather than a supranational institution, advancing regional integration of the Arctic by adopting common policies in an increasing variety of policy fields could be serviceable to improved intergovernmental cooperation. When applying neofunctionalist theories on the AC, one needs to be cautious to limit the extent of these theories, as integration will never reach quite as deep as in the case of the EU. The argument for applying neofunctionalism in this case is because it perceives cooperation in one area as initiating cooperation in other areas through so-called spillover effects, for example, scientific cooperation may cause cooperation in other sectors. (Fritsch & Franke, 2004; Lieber, 2000) Haas (1958: 292) describes spillovers as a consequence of domestic policy development and the perception of actors within states, that aspects of these developments could be governed more effectively on an international level. Likewise, cooperation on supranational levels in one area, for example industrial policy, increases the interest of discussing labor policy on a supranational level as well. As knowledge production in the Arctic comprises areas of environmental security and protection, resource extraction and maritime security, such spillovers are likely to occur.

This process of creating and collecting knowledge turns institutions into epistemic communities. An epistemic community, as defined by Haas (1992: 3) is "a network of professionals with recognized expertise in a particular domain and an authoritative claim to policy-relevant knowledge within that domain or issue-area." According to Haas, these communities share normative principles and beliefs, causal beliefs, notions of validity and common practices. However, they are not reduced to scientific communities. Epistemic communities can be understood as communities

of shared thoughts and norms based on the notion of science as a means of creating knowledge. Haas also describes epistemic communities as “thought collectives”. The importance of epistemic communities lies in their possibility to influence policy makers. Haas describes this as a causal process, as epistemic communities influence the behavior of policy-makers, who in consequence turn to influence other policy-makers in order to increase policy coordination. Epistemic communities therefore serve an important role in the building of comprehensive institutions, which also underlines the significance of the concept in science diplomacy. Cross (2013: 155) extends the groups of persons compiling an epistemic community to diplomats, military officials, lawyers and more, assessing that these groups have the power to influence common policies as well. Cross describes professionalism as the constitutive element of epistemic communities rather than science. Of utmost importance for a functional epistemic community is its inner constitution, internal cohesion leads to a strengthening of the community and in consequence the community can execute its influence on policy processes more strongly (Cross, 2013: 146).

To sum up, epistemic communities share common scientific understandings and norms, however, do not have to consist merely from scientists, but can comprise a broader array of members. Through common understanding they create knowledge and exert influence on policy-making processes, contributing to converging positions of states in the international system. If the Arctic Council thrives to substantially and sustainably develop Arctic policy, it needs to become a strong epistemic community.

Politics through Science: Soft Power & Science Diplomacy

Epistemic communities can be understood as a variation of science diplomacy, especially if science diplomacy works as a strong means of policy coordination. Exerting influence through science and common scientific understanding however comprises another aspect, the so-called “soft power” concept, as described by Joseph Nye (2004, 2011).

Soft power, as described by Nye, is a less coercive and more cooperative understanding of power. Soft power is used by states as a diplomatic mean to set agendas, shape preferences and influence interests in order to create common values and spread norms. However, soft power exceeds influencing states, it seeks to change perceptions via attraction and via spreading values. As Nye (2011: 83) describes, soft power is not only used by states, but also non-governmental actors or intergovernmental institutions can make use of the concept, influencing behavior and actions through attraction. As science and technology can serve as mean of soft power, technological development that is encouraged and facilitated by the Arctic Council could strengthen the Council as a whole, rendering influence in other policy fields possible, therefore also causing the desired spillover effects. In this case, soft power cannot only be exercised by states, but also indigenous groups come into play by delivering specific knowledge as form of power exertion.

In this article however, the question of how states and institutions exert power through soft power means is not central, although a prerequisite for the concept of science diplomacy. Science diplomacy, as the former Science and Technology Adviser to the U.S. Secretary of State, Nina Fedoroff, describes, “is the use of scientific collaborations among nations to address the common problems facing 21st century humanity and to build constructive international partnerships” (Fedoroff, 2009). Essentially, Fedoroff describes the creation of an epistemic community; science diplomacy can therefore be easily perceived as such a structure. The Royal Society (2010) describes

three dimensions of science diplomacy, the three dimensions being science in diplomacy, diplomacy for science and science for diplomacy. The first dimension, science in diplomacy, focuses on the scientific consultations by experts for policymakers. This means that political bodies do not necessarily conduct their own research but review scientific debates and ongoing research in order to base policies on contemporary scientific debates. Therefore, politicians are required to have the ability to understand scientific debates as well as scientists need to formulate their findings in an accessible way.

The second dimension, diplomacy for science (Royal Society, 2010: 9), describes political and diplomatic initiatives in order to achieve joint research projects. Two facets of initiatives occur in this regard, either states set research agendas and align their diplomatic initiatives according to their objectives or they can facilitate the development of joint research, either following a top-down or a bottom-up approach. Diplomacy for science can serve as means to strengthen political ties with countries and regions where historically connections were on a low level; governments often assemble on the highest levels in order to achieve joint scientific programs.

Central for the analysis in this article however is the third dimension, science for diplomacy. Science for diplomacy describes the soft power approach states follow through strengthening their scientific capabilities, achieving additional attraction and in consequence developing the availability to shape preferences and policies. The Royal Society (2010: 11) distinguishes between multiple ways science can work for diplomacy. Most prominently, cooperation agreements and the creation of institutions are used as an instrument to promote deeper political ties through scientific collaboration. The Arctic Council serves as a good example for this dimension, as the cooperation on environmental protection within the Arctic Environmental Protection Strategy (AEPS) in consequence led to the foundation of the AC. The question arises if research programs in the framework of the Arctic Council can be used to strengthen the institution and improve its ability to shape interests and preferences, becoming more of a policy-making rather than a policy-shaping body (Kankaanpää & Young, 2012). This dimension is also a prime example for the spillover effects described in the neofunctionalist theory, as in this perspective science causes deeper integration through creating and strengthening institutions. In general, science is perceived as a positive element of cooperation. However, the danger remains that strongly diverging interests in scientific goals can hinder closer cooperation. Therefore spillover effects remain low.

Resulting from the theories and the concepts, this article will therefore analyze the scientific interests and strategies of Arctic states as well as the cooperative scientific programs within the Arctic Council before proceeding to assess how science diplomacy is perceived in Arctic policies and how scientific programs in the AC have caused spillovers into other policy fields. By analyzing current debates about the transformation of the AC, the science diplomacy perspective will be added. The existing scientific programs will also be tested for their sufficiency to work as instruments for science diplomacy and strengthening the AC.

Scientific Cooperation within the Arctic Council

This section will describe the variety of scientific initiatives that exist in the Arctic Council. Especially important in this regard is the policy-making process of the two legally binding agreements that have been achieved in the framework of the AC – the Agreement on Aeronautical and Maritime Search and Rescue² (Arctic Council, 2011) and the Agreement on Cooperation on

Marine Oil Pollution, Preparedness and Response in the Arctic³ (Arctic Council, 2013). These agreements signified a major success since they were the first legally binding agreements issued by the Arctic Council, which represents a deeper integration in a neofunctionalist understanding. In addition, they comprise two of the more dominant fields in Arctic scientific interest – maritime security and marine environmental protection. Both agreements allow the question of the role of science diplomacy in Arctic policy making processes, therefore they will serve as the basis of the analysis. The analysis will also be based on three interviews with experts on Arctic science diplomacy.⁴ However, it is important to clarify in advance that science diplomacy and the creation of an epistemic community is a continuous process. Especially the dimension of science for diplomacy needs to be strengthened to conduct effective science diplomacy and strengthen the AC as an institution. At this time the soft power narrative overshadows the creation of an epistemic community, as states attempt to achieve scientific cooperation in the Arctic by fortifying their own position.

From its founding onward, the Arctic Council had a strong scientific component; its predecessor, the Arctic Environmental Protection Strategy (AEPS) revolved mainly around the protection of environment. While the AEPS did not include an outspoken scientific focus, its focus encouraged scientific activity in the Arctic at least, as the foundation of the International Arctic Science Committee (IASC), a non-governmental organization with the purpose to “encourage and facilitate international consultation and cooperation for scientific research concerned with the Arctic” proves (IASC, 1990: 4). Initiatives like the IASC, or the University of the Arctic (UArctic), a community of primarily research institutions in Arctic states, highlight the endeavors for scientific cooperation in the High North. Albeit not having a political nature, the significance for science policies of these institutions is given through their influence in establishing research structures and the conduct of research in a variety of policy-relevant areas.

Investigating the institutional establishment process of the AC discloses multiple aspects of science diplomacy and the creation of epistemic communities. The creation of the AEPS followed an initiative by the eight Arctic States in order to reduce pollution, mitigate climate risks and guarantee sustainable development in the Arctic (AEPS, 1991). The AEPS however was considered as too narrow for discussing the wide range of issues in the Arctic, and particularly from the Canadian side where endeavors to strengthen Arctic cooperation as a whole were sought, which resulted in the foundation of the AC through the Ottawa Declaration in 1996.

The AC therefore represents a classic case of a spillover, resulting from the framework of AEPS, however with a more comprehensive approach to cooperation. Bloom (1999: 712) describes two objectives of the AC: environmental protection and sustainable development. Both these areas depend on scientific work, therefore encourage scientific cooperation. A special aspect of scientific cooperation in the AC is the inclusion of indigenous knowledge. Indigenous groups are included strongly in agenda-setting and shaping objectives, albeit not possessing full membership status. “The Arctic Council’s effectiveness is significantly enhanced by this innovative approach to indigenous peoples” (Nowlan, 2001: 34).

Therefore it becomes visible that the development process of the AC, although not openly formulated so, was shaped by science diplomacy from the beginning. One key component of scientific cooperation within the AC is the working groups, collectives of scientists and policy-makers that cooperate in order to tackle important Arctic issues. Four working groups, which are

still in existence today within the AC, were founded in order to oversee the work of AEPS in different areas. Two have since been added. Today's working groups within the AC are the Arctic Contaminants Action Program (ACAP); the Arctic Monitoring and Assessment Programme (AMAP); the Conservation of Arctic Flora and Fauna (CAFF); the Emergency Prevention, Preparedness and Response (EPPR); the Protection of the Arctic Marine Environment (PAME); and the Sustainable Development Working Group (SDWG). Especially crucial in this regard was the Arctic Monitoring and Assessment Programme (AMAP).

AMAP is monitoring developments in climate change in the Arctic region, scientifically analyzing the collected data and producing policy-relevant assessments of the data (AMAP, 2010: 5). This is a classic case of science in diplomacy, with stakeholders in the working group defining common objectives in order to reach science-based policy recommendations. SAOs are strongly involved in shaping the objectives of working groups as they are attempting to achieve policy results from the findings. Therefore, reducing the working groups only to scientific influence on policy-making would fall short of their full scope of opportunities in scientific and political cooperation. AMAP openly attempts to attract researchers from Arctic nations to work in the program and strongly encourages scientific cooperation (AMAP, 2010: 10). Therefore it also represents the diplomacy for science dimension, where an institution that exists due to political efforts increases opportunities for research and cooperation in scientific sectors.

Working groups like the AMAP symbolized the merging of scientific and political cooperation. The institutional structure within these working groups, combining policy-makers in the form of SAOs⁵ with scientists in order to achieve scientific influence on policies as well as set a scientific political agenda in order to strengthen policies, shows a politicization of science. As the Arctic Council was formed in order to achieve a deeper forum for cooperation, the working groups however remained central in its institutional structure. This could be interpreted as a spillover effect and explain the transformation from AEPS into the AC as a result of science for diplomacy.

However, as Koivurova assesses (2010: 148), cooperation remains *de facto* on a low level, also after the creation of the AC. Young (2005: 11) argues that different results delivered by working groups "played a role both in framing and in highlighting issues on the Arctic agenda." As stated above, working groups have a strong scientific influence in their work. However, politics shape the scientific goals as well as scientific outcomes influence future policies. Working groups therefore highlight the strong connection between science and policy, which is manifested in the politicized setting of scientific goals. However, their impact on visible political cooperation should be estimated rather low. Based on the example of the Arctic Climate Impact Assessment (ACIA), a program within the AMAP, Nilsson (2007, 2009) describes how political battles on scientific programs can also hinder deeper cooperation, highlighting problems of working groups.

Scientific cooperation therefore poses one of the main pillars of the AC and assumes at least a minor role in strengthening political cooperation by connecting SAOs from the Arctic states in order to set scientific goals. According to Sergunin (2015), the AC possesses an important role as an intersection between science and policy, as within the working groups of the AC produce scientific outcomes for political purposes. In this understanding, two dimensions of science diplomacy are visible, science in diplomacy, as scientists are consulting political bodies and influencing decision-making processes, and diplomacy for science, as the AC as an

intergovernmental institution facilitates scientific cooperation through the creation of the working groups and task forces.

By investigating the institutional building of the AC and processes within the working groups, one can determine three key aspects of science diplomacy. First, working groups, by consulting the SAOs, serve an important body for scientific contributions to policy-making in an international organization. Science in diplomacy is strengthened through working groups, as their assessments shift agendas and objectives. Second, as could be seen in the case of ACIA, the Arctic Council as an intergovernmental institution facilitated scientific cooperation by setting an institutional framework and connecting science to policy. This is a case where diplomacy for science is visible. Third, by connecting scientists and policy-makers, shared norms and understandings of problems such as climate change are created and shared scientific understanding is developed. This form of cooperation creates epistemic communities within the AC, while cooperation of the working groups creates an understanding of the AC as a comprehensive epistemic community (Bertelsen, 2015). This in consequence provokes the question if shared norms and understandings can lead to spillovers in other issue areas.

In order to investigate if scientific cooperation within the AC and the working groups can create spillovers, the examples of the Oil Spill Agreement as well as the SAR Agreement can be used. As these agreements represent the first legally binding documents produced by the eight Arctic states that happen to be members of the AC, they signify a progress in the institution-building process of the Arctic Council. As its foundational document, though, the Ottawa Declaration (1996) cannot be considered a treaty: the AC's legal status was a debated question. Furthermore, it weakened the standing of the institution as the AC represented an intergovernmental cooperation forum rather than a full-fledged political institution. Therefore legally binding agreements within the AC represent a sign of deeper institutional integration and accelerate institution building since they improve the position of the AC within Arctic governance. Investigation of the agreements is important for two reasons. First, the influence of science could reveal aspects of the third dimension of science diplomacy, science for diplomacy. Even though the agreements only cover specified issue areas, their status as legally binding documents improve political processes in the Council as a whole, therefore, they can be regarded as successful cooperation between science and policy in order to improve intergovernmental relations. In order to assess how the agreements fit into the science for diplomacy pattern, it is important to investigate their scientific as well as their political dimensions.

The SAR Agreement, signed at the Nuuk Ministerial Meeting in 2011, resulted out of the need for improved maritime security due to increased activity in Arctic waters. While vessels operating in the Arctic Ocean need to be prepared for extreme conditions, their number continues to increase as a result of the economic potential of the region. However, due to technological limitations, satellites cannot operate in the Arctic (Linden-Vørnle, 2015). In that perspective, SAR has become a vividly debated topic in the AC.

Rottem (2013: 286) describes Russia as the driving force behind the SAR Agreement, as the Northern Sea Route is a central aspect of Russia's Arctic policy grounded in sovereignty and security considerations. SAR was also emphasized in the 2008 Ilulissat Declaration, which described the need to strengthen the capabilities of the five Arctic Ocean states that considered themselves to be stewards of the Arctic Ocean (Arctic Five, 2008). While the motivation for the

SAR Agreement is predominantly political, there is an important scientific dimension within the agreement. Article 9 emphasizes the need for knowledge exchange and calls especially for the mutual use of advanced technologies in order to improve SAR. Another important aspect is the inclusion of experts during exercises to increase the effectiveness of SAR (Arctic Council, 2011). However, science still assumes a minor role in the agreement; working groups did not have any substantial influence on the process of reaching the agreement. It is however important to outline the general interdependence between SAR, the military as well as coast guards and technology, as SAR is highly dependent on advanced technologies, and the agreement poses an opportunity to deepen cooperation in research and development of these. Linden-Vørnle (2015) describes aerial surveillance technologies as one field where cooperation seems especially viable for cooperation, as these technologies are seen as necessity in improving SAR capabilities. The lack of visible scientific influence in the SAR Agreement however affects the view on science diplomacy in a variety of aspects. Foremost, the utility of science for diplomacy might be questioned. Second, the meaning of such agreements for science diplomacy might be undermined. And finally, it proves limits to cooperation and the positive effects on regional integration.

Similar observations can be made for the Oil Spill Agreement. Rottem (2016: 165) describes it as “a symbol of Arctic cooperation” rather than “a practical mechanism”. As in the SAR Agreement, working groups are not specifically included in the process of the Oil Spill Agreement although Rottem (2016: 164) sees the opportunity for the EPPR to take over the tasks defined in the agreement. However he acknowledges that the main decisions will occur on the policy-level rather than through scientific consultations as within the Oil Spill Agreement, especially environmental regulations assume a key role. In this regard, policy coordination is central in the implementation of the program. Another similarity is that neither agreement establishes a formal body in order to observe the implementation of the agreements. This could be a consequence of what Sergunin (2015) describes as an unwillingness to accelerate institution building in the Arctic and/or an anxiety on the part of the Arctic states to ‘observe’ too closely one another in the Arctic region.

Slow institution building processes pose a general obstacle for functioning science diplomacy, as science and technology contribute to policy but cannot reach the desired effects under the dominant narrative of science for diplomacy. Investigation of the structures of the AC leave the assumption that the two other narratives of science diplomacy, science in diplomacy and diplomacy for science are more prominent in the intersection of science and policy. As the agreements have shown however, there is a willingness to strengthen the Council as an institution, albeit in a reduced manner. It is difficult to assess if this could be interpreted as spillover effects, and even if that is the case, the extent of those effects is rather minor. However, science and technology can become important driving forces for further cooperation in the Arctic as they prove to be crucial in main working areas of the AC.

The Science Cooperation Agreement could increase the role of science and technology in Arctic policy drastically and add a new dimension to science diplomacy in the Arctic. As the concluding section of the article will assess, national states follow strong interests regarding scientific cooperation, in some cases this could even be interpreted as soft power ambitions.

Conclusion: National Approaches & the Transformation of the Arctic Council

Science and technology assume prominent roles in the respective Arctic national strategies. As Heininen (2012: 41) assesses, “is either explicitly mentioned as a priority, or an objective, by all of the Arctic strategies.” For example, Canada views science and technology as “an important foundation for Canada’s Northern Strategy priorities and provide the knowledge necessary for sound policy and decision-making” (Government of Canada, 2009: 24). The Canadian strategy formulates the objective of becoming a leader in scientific issues and strengthens its Arctic position through assuming a leading role in science and technology. Canada therefore follows a classic soft power approach, but also calls for a stronger inclusion of the AC in scientific matters. Similarly, the United States regards science and technology as important aspects of Arctic cooperation. The strategy of the U.S. chairmanship in the Arctic Council from 2015 to 2017 emphasizes the role of the Scientific Cooperation Task Force (SCTF) in completing the Agreement on Enhanced International Arctic Scientific Cooperation which would represent a major achievement of the chairmanship in common science and technology policy, and in this regard could strengthen political cooperation within the AC (State Department, 2015).

The Nordic countries are considered as smaller military powers; therefore their ability to exercise hard power is considered limited. For this reason they regard science and technology as important issues of cooperation and mean of exerting influence. Within the official documents (Kingdom of Denmark, 2011, Norwegian Ministry of Foreign Affairs, 2014, Prime Minister’s Office, 2013, Government Offices of Sweden, 2011) Nordic states highlight the importance of scientific cooperation and express their respective endeavors to become and remain leading science nations in the Arctic. A soft power approach is also visible in Russia’s Arctic strategy, and as Sergunin and Karabeshkin (2014: 356) describe, Russia attempts to improve the scientific capabilities in general, and particularly in the Arctic. However, Konyshov and Sergunin (2014: 83) assess that Russia lacks technological knowledge and scientific capabilities to become a leader in these issues. This could pose a great example for the science for diplomacy narrative. By including Russia in the Arctic science community through working groups, tensions have remained low although the relations between NATO and Russia have reached a nadir. Extended Arctic scientific cooperation could also be a motivation for Russia and other states to engage in cooperative security measures.

Another interesting aspect of Arctic science diplomacy, as stated above, is the inclusion of indigenous knowledge, which gives indigenous populations the opportunity to assume more influential roles particularly in issues which concern their safety and quality of lives. This could serve as a base for more research on the role of indigenous knowledge in science diplomacy.

In the beginning I asked if science and technology could become driving forces for a transformation of the Arctic Council and if the AC could become an epistemic community. One of the major opportunities will be an effective implementation of the Science Cooperation Agreement that would institutionalize cooperation in science and technology and could cause spillover effects in other areas. The slow pace of institution-building, caused by differing strategic goals of the respective member states in the Arctic, will remain one of the major obstacles, however increased cooperation could however accelerate this process. Spillover effects so far have been low, which results from the nature of the AC as intergovernmental institution. Still, deeper institutional cooperation, especially in the working groups, is becoming visible, and the working groups have

experienced an increased influence on policy. Science therefore can assume an important role in the process of institutional integration and strengthening the role of an institution in policy-making processes. In addition, the strong scientific approach of the Arctic states puts science to the center of attention, which is manifested in the Science Cooperation Agreement. As states follow mainly soft power approaches in the Arctic, science might even become more prevalent, and so could science diplomacy. Science diplomacy also could profit from the fact that scientific cooperation is easy to achieve at a low cost but neglecting serious divergences between Arctic states will likely have a negative impact on any form of cooperation.

However, it is important to clarify that science diplomacy and the creation of an epistemic community is a steadily evolving process. Especially the dimension of science for diplomacy needs to be strengthened to conduct effective science diplomacy and strengthen the AC as an institution. At this time, the soft power narrative overshadows the creation of an epistemic community, as states attempt to achieve scientific cooperation in the Arctic in order to assume a stronger leading position in shaping the Council's future development. To sum up, science diplomacy figures to assume a much greater role in Arctic futures and common science policies can lead to an epistemic community in the Arctic which in consequence strengthens cooperation as a whole. Science can build trust, create common values and therefore cause spillovers. However, there is a need for stronger support from the policy side that science can cause significant changes and transform the Arctic Council.

Notes

1. Hereinafter Science Cooperation Agreement.
2. Hereinafter SAR Agreement.
3. Hereinafter Oil Spill Agreement.
4. Interviews conducted between November 12-13 2015 in Arhus, Denmark, with Alexander Sergunin (Sergunin, 2015), Rasmus Bertelsen (Bertelsen, 2015), and Michael Linden-Vørnle (Linden-Vørnle, 2015).
5. During the period of AEPS, this position was denominated as Senior Arctic Affairs Official (SAAO), the term SAO derived with the foundation of the AC.

References

- Arctic Council (2011). Agreement on Aeronautical and Maritime Search and Rescue. Retrieved from: <https://oaarchive.arctic-council.org/handle/11374/531>.
- Arctic Council (2013). Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic. Retrieved from: <http://arctic-council.org/eppr/agreement-on-cooperation-on-marine-oil-pollution-preparedness-and-response-in-the-arctic/>
- Arctic Five (2008). The Ilulissat Declaration. Retrieved from: https://www.regjeringen.no/globalassets/upload/ud/080525_arctic_ocean_conference_outcome.pdf
- AEPS (1991) Declaration on the Protection of Arctic Environment. Retrieved from: <http://www.grida.no/polar/resources.aspx?id=1384>.

- AMAP (2010). AMAP Strategic Framework 2010+. AMAP Report 2010:8. Retrieved from: <http://www.amap.no/documents/doc/amap-strategic-framework-2010/126>
- Bloom, Evan T. (1999). Establishment of the Arctic Council. *The American Journal of International Law*. 93(3): 712-722
- Cross, Mai'a K. Davis. (2013). Rethinking epistemic communities twenty years later. *Review of International Studies*. 39(1): 137-160
- Fedoroff, Nina (2009). Science Diplomacy in the 21st Century. *Cell*. 136: 1-3.
- Fritsch, Micharel & Grit Franke (2004). Innovation, regional knowledge spillovers and R&D cooperation. *Research Policy*. 33: 245-255.
- Haas, Ernst (1958). *The Uniting of Europe*. Notre Dame: University of Notre Dame Press.
- Haas, Peter M. (1992). Introduction: Epistemic Communities and International Policy. *International Organization*. 46(1): 1-35.
- Heininen, Lassi. (2012). State of the Arctic Strategies and Policies. In L. Heininen, H. Exner-Pirot and J. Plouffe. *The Arctic Yearbook 2012* (pp. 2-47). Akureyri, Iceland: Northern Research Forum.
- IASC (1990). Founding Articles for an International Arctic Science Committee. Retrieved from: <http://iasc.info/images/about/iasc-founding-articles.pdf>
- Konyshev, Valery, and Alexander Sergunin (2014). Russia in Search of Its Arctic Strategy: Between Hard and Soft Power? *The Polar Journal*. 4(1): 69–87.
- Kankaanpää, Paula and Oran R. Young. (2012). The Effectiveness of the Arctic Council. *Polar Research*. 31. Retrieved from: <http://www.polarresearch.net/index.php/polar/article/view/17176>
- Koivurova, Timo (2010). Limits and possibilities of the Arctic Council in a rapidly changing scene of Arctic governance. *Polar Record*. 46: 146-156.
- Lieber, Keir A. (2000). Grasping the Technological peace. The Offense-Defense Balance and International Security. *International Security*. 25(1): 71-104
- Niemann, Arne and Demosthenes Ioannou (2015). European economic integration in times of crisis: A case of neofunctionalism. *Journal of European Public Policy*. 22 (2): 196-218
- Nilsson, Annika (2007). A changing Arctic climate. Science and policy in the Arctic Climate Impact Assessment. (Dissertation) *Department of Water and Environmental Studies*. Linköping University.
- Nilsson, Annika (2009). A changing Arctic climate. Science and policy in the Arctic Climate Impact Assessment. In T. Koivurova et al. (eds). *Climate Governance in the Arctic* (pp. 77-95).
- Nowlan, Linda (1999). Arctic Legal Regime for Environmental Protection. *IUCN Environmental Policy and Law Paper*. No. 44
- Nye, Joseph S. (2011). *The Future of Power*. New York: PublicAffairs.
- Nye, Joseph (2004). *Soft Power. The means to success in World Politics*. New York: PublicAffairs.
- Prime Minister's Office, Finland (2013). Finland's Strategy for the Arctic Region 2013. Retrieved from: <http://vnk.fi/documents/10616/334509/Arktinen+strategia+2013+en.pdf/6b6fb723-40ec-4c17-b286-5b5910fbecf4>

- Rosamond, Ben. (2005). The uniting of Europe and the foundation of EU studies: Revisiting the neofunctionalism of Ernst B. Haas. *Journal of European Public Policy*. 12(2): 237-254.
- Rottem, Svein Vigeland (2013). The Arctic Council and the Search and Rescue Agreement: The Case of Norway. *Polar Record*. 50(3): 284-292.
- Rottem, Svein Vigeland (2016). The Arctic Council in Arctic Governance: The Significance of the Oil Spill Agreement. In L. Jakobson and N. Melvin (eds). *The New Arctic Governance* (147–74). *SIPRI Research Report, no. 25*. Oxford: Oxford University Press.
- Royal Society and AAAS (2010). *New Frontiers in Science Diplomacy*. London: The Royal Society Science Policy Centre.
- Sergunin, Alexander and Leonid Karabeshkin (2014) Understanding Russia's Soft Power Strategy. *Politics*. 35(3-4): 347-363.
- State Department, United States (2015). Arctic Council Workplan during the US Chairmanship. Retrieved from: <http://www.state.gov/documents/organization/249166.pdf>
- Young, Oran R. (2004). Institutions and the Growth of Knowledge: Evidence from International Environmental Regimes. *International Environmental Agreements: Politics, Law and Economics*. 4: 215-228.
- Young, Oran R. (2005). Governing the Arctic: From Cold War Theater to Mosaic of Cooperation. *Global Governance*. 11(1): 9-16.

Circumpolar Legislation on Pollutants: How Effective is Arctic Governance on Global Environmental Threats?

Doris Friedrich

The protection of the Arctic environment was one of the main motivations for establishing the Arctic Council. In the past, the Arctic nations have played a pivotal role for several agreements on environmental protection, such as the Stockholm Convention, which can be considered as a positive example of Arctic cooperation and targeted action. However, not all Arctic States have ratified the Convention and its amendments, which regularly add pollutants to the scope of the Convention. Thus, the environmental legislation in the Arctic states does not catch up with the scientific findings and recognition of these threats.

This paper examines the efforts of the Arctic nations towards circumpolar governance and international legislation on pollutants, as well as the consequences and effectiveness of these efforts. A brief comparison of policy initiatives, in particular through a look at U.S. legislation, will serve as an illustration of the development of Arctic environmental governance over time and shed light on differences between Arctic states. An effective governance on Persistent Organic Pollutants (POPs) requires a precautionary approach and the regular adaptation to emerging chemicals of concern. While national initiatives have achieved some success in reducing the production and use of POPs, a more comprehensive approach encompassing a list of pollutants corresponding to state-of-the-art research within a global legislative framework is needed.

Introduction

Persistent Organic Pollutants or 'POPs' are environmentally persistent toxic chemicals, which take a long time to degrade and are transported over long distances. Due to the environmental conditions, they often end up in the Arctic, where different biota can act as sinks and where they can cause considerable damage to the environment and human health. Many of the chemicals classified as POPs were widely used globally in commercial products, in particular as pesticides and industrial applications, until their production and use was limited by national and international regulations, such as the 2001 Stockholm Convention on Persistent Organic Pollutants. Nevertheless, some are still extensively used in some parts of the globe.

In the 1970s, the assessment of POP levels in Arctic indigenous peoples found levels of serious concern. After POPs entered public consciousness in the 1960s thanks to Rachel Carson's

celebrated book *Silent Spring*, these results from the Arctic marked the beginning of a long-standing effort on the part of the Arctic states to limit or ban POPs on a global scale.

Persistent Organic Pollutants (POPs) in the Arctic

What are POPs?

Persistent organic pollutants are chemicals that are highly toxic and very persistent in the environment, which enables their long-range transport to places far from their source. They are transported via atmospheric circulation, ocean currents and to a lesser extent migratory species or formed through the degradation of volatile precursors (Muir & de Wit, 2010). The fastest transport route of POPs is via the atmosphere, through which their reach is expanded globally. The pollutants are atmospherically deposited on land or water, which serve as entry points into the food web (AMAP, 2014; Hung et al., 2016). The 1991 Rovaniemi Declaration on the Protection of the Arctic Environment further lists “releases of large quantities into the environment” as a characteristic and part of the definition of POPs.

POPs are used for a variety of applications, which can be divided into three categories: pesticides used in agriculture or pest control, industrial chemicals, and unintentionally produced POPs resulting from incomplete combustion or chemical reactions (UNEP/AMAP, 2011). Apart from the chemicals found in commercial products, POPs are released by mines, military sites, smelters, power stations and a variety of other sources (Letcher et al., 2010; Hung et al., 2016).

The most well-known POPs are dichlorodiphenyltrichloroethane (DDT), an insecticide used to control vector-borne diseases such as malaria and typhus, and polychlorinated biphenyls (PCBs) used for example as coolant fluids in electrical equipment. A list of the POPs recognized in different agreements can be found in Table 1, below.

Few of the pollutants actually originate in the Arctic, where the special environmental conditions, such as the cold that favors their persistence compared to warmer environments, tend to “trap” the chemicals.

Effects on the Environment

The pernicious effects of POPs were depicted in detail in the 1960s by Rachel Carson’s popular book *Silent Spring* and pointed out by ecologists and hobby ornithologists even before that (Carson, 1962). A variety of effects on the environment have been observed, most notably POPs’ effect on the health of wildlife. In addition to their toxicity, the pollutants’ effects on reproduction disturb the reproduction cycle, for example by interfering with animals’ sex hormones and in the case of birds, resulting in thinner eggshells. Their impact on the thymus, which normally produces antibodies, weakens the immune system, making wildlife even more vulnerable to diseases and other stressors. POPs also increase the risk of tumors and their effect on the production of the pigment in red blood cells can lead to an extreme sensitivity of the skin to sunlight and damage to the nervous system. The survival of wildlife populations is therefore seriously endangered in case of high exposure to POPs (NOAA, n.d.).

The pollutants are stored in animals’ fatty tissues, which in the Arctic are an important source of energy during long, cold winters. Through the metabolism of fat reserves, the POPs are released

and impact the organism. In spring, a critical period for reproduction, the melting of ice and snow releases the accumulated POPs into the environment, where they are ingested by wildlife.

By feeding on smaller animals poisoned by POPs, such as earthworms, the pollutants are ingested by other animals and then passed from one species to another. Along the process, they accumulate over the food web, which is known as biomagnification or bioaccumulation. Predator species higher up in the food chain, such as seals, bears or toothed whales, have potentially very high levels of pollutants. Species such as polar bears, which are a fourth level carnivore, meaning that they feed on other carnivores, are therefore at the top of the food web and likely have very high levels of POPs. However, these animals are also often sources of subsistence food for Arctic indigenous people, which is how POPs make their way into human bodies. The pollutants' potential for bioaccumulation means that the release of even small quantities can lead to their accumulation with significant impacts.

During the period from 2002 to 2009, tissue concentrations measured in several Arctic species exceeded 1 part-per-million (ppm), which is considered a threshold of concern (Letcher et al., 2010). However, other environmental, ecological and physiological stressors might add to the negative repercussions of POPs and make it more difficult to assess their impact. The Arctic species at highest risk include polar bears, killer whales, ringed seals, several species of seabirds, such as gulls, as well as a few populations of Arctic char and Greenland shark (Letcher et al., 2010). It can also be argued that the low biodiversity of the Arctic ecosystem, home to a few key species, makes the region particularly vulnerable to the effects of pollution (Koivurova, 2005; Arctic Council, 2013).

A prominent example of Arctic wildlife affected by POPs are peregrine falcons and other birds of prey. While they nest along Alaska's Yukon River, their migrations south exposed them to DDT, which led to a thinning of the eggshells and substantially harmed the reproduction of the population. Peregrine falcons were classified as endangered under the 1969 U.S. Endangered Species Conservation Act. Soon after DDT was banned, the population recovered and the U.S. Fish and Wildlife Service eventually proposed delisting American peregrine falcons from the federal list of threatened and endangered species in 1998, which was accepted a year later (Florida Fish and Wildlife Conservation Commission, 2009). This example reveals how toxic persistent organic pollutants are and is indicative of the short amount of time needed to critically endanger wildlife or human health. Long-term monitoring to gain a comprehensive understanding of the ramifications of diverse substances on the environment is therefore crucial (Ambrose et al., 2016). It is further important to consider continuously new chemicals for listing. In 2011, flame retardants were detected in peregrine falcon populations in Spain and Canada, whereby the latter exhibited higher levels of 'dechlorane plus' and other chlorinated compounds used on products to inhibit the spread of fire (Guerra et al., 2011).

Another case of highly affected species is the wild reindeer, also known as caribou in North America. Already in 1997, a study by the Arctic Monitoring and Assessment Program (AMAP) indicated the accumulation of PCB over the reindeer's food chain. Compared to the contaminated lichen on which they feed, the reindeer in Canada's Northwest Territories had ten times higher levels of PCB. In turn wolves' PCB levels were 60 times that of the lichen at the bottom of the food chain. In 2010, as the only terrestrial mammal included in the studies on POP levels, Muir and de Wit noted a decline of the levels of "legacy POPs", which were the initial twelve chemicals

included in the 2001 Stockholm Convention on POPs (Stockholm Convention b, n.d.), in reindeer from northern Sweden. However, new pollutants of emerging concern were measured in later studies. Last year, Wang et al. (2015) found flame retardants – in this case polybrominated diphenyl ethers or PBDEs - in the feces of wild reindeer on Svalbard and in one of their favorite foods: moss. Brominated flame retardants (BFRs) were recognized as pollutant of emerging concern in the 2004 AMAP Assessment. They were extensively used for several decades in a wide range of commercial and household products, ranging from plastics to textiles and electronic equipment, and can be released into the environment during production, use or dismantling of the products.

Climate Change as Game Changer and the Consequences for Governance

Release, Distribution and Degradation of POPs

The release, distribution and degradation of POPs is highly dependent on environmental factors, which is why climate change is likely to have a great impact on POP contamination through changes in:

- emission sources,
- transport processes and pathways, and
- degradation processes (UNEP/AMAP, 2011).

After initially decreasing trends, higher levels of hexachlorobenzene and PCBs, whose use has been restricted and which are no longer produced, were observed in the Arctic in the mid-2000s. The Arctic Climate Impact Assessment (ACIA) report of 2004 warned that global warming is likely to speed up the transport of pollutants to the Arctic and increased precipitation would lead to more POP deposits in the Arctic. In addition, the melting of snow and ice – and similarly permafrost – releases the contaminants accumulated over decades in the form of melt water, which will then enter the food web. Increased frequencies of forest fires due to climate change could also release increasing amounts of pollutants into the Arctic air (Muir, 2010; Hung et al., 2010).

POPs have low water solubility. As a result, they are harder to dissolve in water and evaporate more easily. They bond strongly to particulate matter in aquatic sediments, which then serve as “sinks” for the pollutants. In the case of global warming, which disturbs the ecosystem, they might be released. Warmer temperatures lead to a heightened volatilization of the pollutants, which can boost their mobilization from primary sources. This is likely the most important effect of climate change on POP releases. By contrast, in colder temperatures, the chemical compounds are less volatile. The degradation of POPs is likewise temperature-dependent. They are thus likely to degrade faster in warmer temperatures due to the higher degradation capacity of microorganisms. Yet this factor is deemed as less influential. Other factors directly linked to climate change include wind fields and speed, whose local or regional growth could amplify airborne transport, precipitation rates, which influence atmospheric deposition patterns, ocean currents, and a higher frequency of extreme weather events (UNEP/AMAP, 2011).

Likewise, emissions from secondary emission sources, i.e. from remaining stocks such as PCBs still present in buildings and electrical equipment or POP stores in natural “sinks”, are also likely to increase due to the higher volatility of POPs in warmer temperatures. They hamper estimates of primary emissions (Lamon et al., 2009).

Ecological Effects

Indirect effects of global warming are changes in patterns of Arctic land use and emissions, such as an intensification of activity in the Arctic through mining or shipping (Hung et al., 2016). Migration routes of wildlife could also be affected. The Pacific salmon for instance may move northwards into Arctic rivers. Changes in bird migrations might transport POPs from marine to freshwater environments, where they can concentrate under certain circumstances, as was the case in a specific watershed at Lake Ellasjoen on the Svalbard archipelago (AMAP, 2004).

Seasonal changes of animals' food intake and correlated processes of fattening and emaciation alter the distribution of POPs in animal tissue and their toxic effects. Climate change and rising temperatures do affect these feeding cycles. The earlier break-up of ice for instance can cause temporal and nutritional shifts in the diet of polar bears. The ripples from these changes might go through the entire food web (Letcher et al., 2010).

Diseases and species invasion that are due to climate change can affect the distribution of the pollutants in the ecosystem and individual animals and impede their adaptation capacity (Muir, 2010). Climate-related changes in biodiversity, ecosystem composition, function and vulnerability will further affect the distribution and toxicity of POPs (UNEP/AMAP, 2011).

Human Adaptation as Additional Factor

Certain adaptations by populations affected by the repercussions of climate change could contribute to a surge in POP levels. The greater risk of vector-borne diseases associated with warmer temperatures might promote the demand for certain POPs, whose use is exempted for public health reasons against malaria-transmitting mosquitoes, for instance DDT in India or sub-Saharan Africa (WHO, n.d.).

Climate change mitigation policies that are aimed at reducing carbon dioxide emissions are generally likely to entail a reduction of unintentionally produced POP emissions. However, some measures could worsen emissions of specific POPs. Promoting biomass fuel could for instance lead to an increased release of toxic chemicals due to the fuel's incomplete combustion.

For human populations, the different stressors stemming from climate change, such as migration, and changes in the availability and quality of local or traditional food, could change their exposure to POPs and increase their vulnerability (UNEP/AMAP, 2011).

Climate change may thus reduce the efforts and effectiveness of the Stockholm Convention, but it is currently not possible to reliably estimate the extent of the potential exposure changes for humans and wildlife (UNEP/AMAP, 2011). The AMAP flagship project "Adaptation Actions for a Changing Arctic" (AACA) examines the interaction of several drivers of change, such as climate change, global resource demands, tourism, global transport, fisheries, and economic development. This will also shed light on the interactions between climate change and POP trends (AACA, n.d.).

The Primacy of Health

Similar to the effects on wildlife, POPs also represent a serious threat to human health and well-being. People living in the Arctic are considered to be especially vulnerable to POP emissions and likely will become even more exposed to emissions due to climate change (UNEP/AMAP, 2011). As high levels of POPs were unexpectedly found in the 1970s and 1980s in the Arctic, an area

thought to be largely unpolluted, the issue rose to global prominence. The presence of pollutants in the Arctic, far away from the main source or use area of these pollutants, demonstrated that the chemicals must have been transported over great distances and played a substantial role in subsequent international efforts to limit POPs emissions.

The main source of human contamination in the Arctic is the consumption of traditional Arctic subsistence food, especially traditional marine food, which is central to the diets of Arctic indigenous peoples. As many of the animal species consumed are high up in the food chain and rich in fat, they have elevated levels of POPs. Another factor exacerbating the problem are the high food prices in the North, resulting in a greater dependence of the local population on subsistence foods and therefore aggravating their exposure to the harmful effects of persistent pollutants. The pollutants are further transmitted to future generations through the placenta and breast milk (AMAP, 2015). However, there are great regional differences in the threat that POPs pose, due to environmental and socio-economic factors.

The main health issues related to POPs are the following:

- **Neurobehavioral:** damage to the nervous system. Prenatal and postnatal exposure in children can impair brain development, with symptoms like decreased motor function, attention span, verbal abilities and memory.
- **Immunological:** higher general susceptibility to diseases through the damage of the immune system.
- **Reproductive:** lower level of semen quality and lower capacity for testosterone production, birth defects, dysfunctional reproductive systems.
- **Cardiovascular:** elevated blood pressure.
- **Carcinogenic:** certain types of cancers.
- **Endocrine:** mimicking, interfering or blocking of the function of endogenous hormones, which in addition to adverse developmental, reproductive, neurological, cardiovascular, and immune effects, is also associated with metabolic disorders and type 2 diabetes.
- **Others,** such as the alteration of bone metabolism and increase in bone fragility (UNEP/AMAP, 2011; AMAP, 2015; Stockholm Convention, 2001; NOAA, n.d.).

Policy Developments and Governance

National Initiatives

Prior to international and circumpolar efforts to control POPs, their use and production was already restricted in some countries (Arctic Council, 1991). The United States for instance signed a bilateral agreement with Canada for the Virtual Elimination of Persistent Toxic Substances in the Great Lakes and provided ample financial and technical support to countries across the globe supporting the reduction of POPs (EPA, 2009). They signed but did not ratify the regional protocol of the United Nations Economic Commission of Europe (UNECE) on POPs under the Convention on Long-range Transboundary Air Pollution (CLRTAP). The use of the original “Dirty Dozen”, the POPs first included in the Stockholm Convention, is banned within the United States, but several substances more recently added to the Stockholm Convention, such as different flame

retardants, continue to be used. Some of the chemicals, like chlordane, are still manufactured for export (Morales, 2014).

Circumpolar and Global Initiatives

The Arctic Environmental Protection Strategy (AEPS) and Arctic Monitoring and Assessment Program (AMAP)

The so-called “Rovaniemi Process” – initiated by Finland – started with a conference on the protection of the Arctic environment. Two years later, the eight Arctic nations Canada, Greenland/Denmark, Finland, Iceland, Norway, Russia, Sweden and the United States signed the non-binding Arctic Environmental Protection Strategy (AEPS) in 1991. Among the three main reasons for the agreement was the finding of abnormally high levels of POPs and heavy metals in Arctic indigenous peoples, in particular of PCB in breast milk samples from Inuit women in northern Canada (Arctic Council, 1991).

The states committed themselves among other things to cooperation on scientific research on pollution issues, in particular POPs, to the control of pollutants and the reduction of their effects on the Arctic environment. To this means, five programs were established, among which the Arctic Monitoring and Assessment Program (AMAP) is mandated to watch over pollution and climate change issues in the Arctic, monitor their levels in the Arctic air, water and biota and assess their effects. Besides oil pollution, heavy metals, noise, radioactivity and acidification, persistent organic contaminants were defined as priorities in the 1991 Rovaniemi Declaration on the Protection of the Arctic Environment. As a result, AMAP also has a strong emphasis on POPs (AMAP, n.d.).

Table 1: Inclusion of POPs in International Agreements

AEPS 1991	Aarhus Protocol under CLRTAP 1998	Stockholm Convention 2001: “legacy POPs”	Amendments listing additional chemicals 2009	Amendments listing additional chemicals 2011, 2013, 2015
Chlordane	Aldrin	Aldrin	Alpha hexachlorocyclohexane	Technical endosulfan and its related isomers
Dichlorodiphenyltrichloroethane (DDT)	Chlordane	Chlordane	Beta hexachlorocyclohexane	Hexabromocyclododecane
Polychlorinated biphenyls (PCBs)	Chlordecone	DDT	Chlordecone	Hexachlorobutadiene
Toxaphene	DDT	Dieldrin	Hexabromobiphenyl	Pentachlorophenol and its salts and esters
	Dieldrin	Dioxins	Hexabromodiphenyl ether and heptabromodiphenyl ether	Polychlorinated naphthalenes
	Endrin	Endrin	Lindane	
	Heptachlor	Furans	Pentachlorobenzene	

Hexabromobiphenyl	Hexachlorobenzene (HCB)	Perfluorooctane sulfonic acid, its salts and perfluorooctane sulfonyl fluoride
HCB	Heptachlor	Tetrabromodiphenyl ether and pentabromodiphenyl ether
Mirex	Mirex	
PCBs	PCBs	
Toxaphene	Toxaphene	

In the AEPS, the combined effort of the Arctic states towards international cooperation on a global level deserves special attention. Recognizing that the control of POPs in the Arctic required cooperation on a wider geographical scale, the Declaration on the Protection of the Arctic Environment associated with AEPS laid down the resolution of the Arctic nations to “pursue together in other international environmental fora those issues affecting the Arctic environment which require broad international cooperation” and support and promote cooperation (Arctic Council, 1991: 3). The support of the process to include POPs into the CLRTAP, which was underway at that time and culminated in the 1998 Aarhus Protocol on POPs (Arctic Council, 1991) is a good example of the Arctic states’ encouragement of international cooperation.

Convention on Long-Range Transboundary Air Pollution (CLRTAP)

Before negotiations started on the AEPS, work was already underway within the Geneva Convention on Long-Range Transboundary Air Pollution (CLRTAP) of the United Nations Economic Commission for Europe (UNECE) to integrate the emerging problem of POPs. This first international legally binding agreement was signed in 1979 and entered into force in 1983. In 1998, it was extended by the Aarhus Protocol on Persistent Organic Pollutants (POPs), which comprises 16 substances (UNECE b, c, n.d.). Seven of the Arctic States – Russia being the exception – are signatories of the protocol. The United States, however, did not ratify the Aarhus Protocol (United Nations, n.d.; de Wit & Muir, 2010). Denmark declared that the amendments to Annexes V and VII, which regulate the use of best available technologies (BAT) to control emissions shall not apply to Greenland (United Nations, n.d.).

The Role of the Arctic Council

The Arctic Council has a long history of advocating for the resolution of environmental issues. When the Arctic Council was established in 1996 in Ottawa, Canada, it subsumed the AEPS programs. In the Declaration on the Establishment of the Arctic Council (1996), the Arctic states set as one goal of the Council to promote “cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic.” Continuing the course of the AEPS, the protection of the environment was assigned a great value among the tasks of the Arctic Council. The importance of environmental issues is underlined by the fact that all the working groups of the Council (ACAP, AMAP, CAFF, EPPR, PAME, SDWG) deal mostly with environmental issues (Koivurova, 2005).

Another principle of the AEPS that the Arctic Council consolidated is the active involvement of the indigenous and local population and the recognition of their “special and unique contributions” and “traditional knowledge” (Arctic Council, 1991).

In 1998, the Arctic Council ministers requested an Action Plan to Eliminate Pollution of the Arctic from the Senior Arctic Officials, which resulted in the Arctic Contaminants Action Program (ACAP). The plan re-stated the recommendation to participate in international fora and agreements and the desire to develop stronger links with international bodies, intergovernmental organizations, financial institutions, observers, the private sector and NGOs relevant to pollution reduction and to urge other countries to take measures through these bodies. It further advocated the “integration of environmental concerns in economic, administrative and research sectors” (ACAP, 2000).

The Arctic Council also played an important role in the negotiations of the Stockholm Convention on Persistent Organic Pollutants during Finland’s Chairmanship from 2000 to 2002. Later, it was vital for the implementation of the Convention under the Icelandic Chairmanship from 2002 to 2004 (Koivurova, 2005).

Previously, however, the rotating chairmanship and lack of permanent secretariat of the Arctic Council left much room for setting individual priorities and focal points during the chairmanship tenures, which might have worked against a continuous work on specific environmental issues (Koivurova, 2005). A Standing Arctic Council Secretariat was established in Tromsø, Norway, in 2011 and became operational in 2013 (Arctic Council, 2016). This permanent secretariat might contribute to a more consistent approach.

Stockholm Convention on Persistent Organic Pollutants

The Stockholm Convention built on the 1998 Aarhus Protocol (UNECE a, n.d.) is a legally binding international agreement on a global level. It was adopted in 2001, entered into force in 2004 and is managed by the United Nations Environment Program (UNEP). As of today, 179 parties have ratified the Convention, including the Arctic states with the exception of the United States. Denmark ratified, but excluded the territory of Greenland and initially also the Faroe Islands from the provisions. Canada and Russia have ratified the original treaty, but not its subsequent amendments listing additional pollutants, such as endosulfan and HBCD, as POPs (Stockholm Convention a, n.d.).

The Stockholm Convention refers to the vulnerability of Arctic regions and their inhabitants. Paragraph 3 of its preamble states “that the Arctic ecosystems and indigenous communities are particularly at risk because of the biomagnification of persistent organic pollutants and that contamination of their traditional foods is a public health issue.” During the negotiations for the Convention, Sheila Watt-Cloutier, former vice president of the Inuit Circumpolar Council, in particular cemented the awareness of the public health threat stemming from POPs, symbolized by a carving of an Inuit mother and child (Kohler, 2011).

Recognition of Indigenous Peoples & Traditional Knowledge

In the negotiations of various circumpolar agreements, as well as in the global agreements such as the Stockholm Convention, great importance was attached to the involvement of indigenous peoples, their knowledge and their well-being.

During AEPS negotiations, the Arctic indigenous peoples were represented by the Nordic Saami Council, the Inuit Circumpolar Conference (ICC) and the Association of Indigenous Minorities of the North of the Russian Federation as observers (Arctic Council, 1991). Other observers included the United Nations Economic Commission for Europe (UN ECE), the United Nations Environment Program (UNEP) and the International Arctic Science Committee (IASC). The Declaration on the Protection of the Arctic Environment further acknowledges the “special relationship of the indigenous peoples and local populations to the Arctic and their unique contribution to the protection of the Arctic Environment.” It places special emphasis on the respect of the “traditional and cultural needs, values and practices of the indigenous peoples as determined by themselves, related to the protection of the Arctic environment” (Arctic Council, 1991: 9). The AEPS thus aimed at integrating both traditional knowledge and scientific research. Likewise, the Arctic Council Action Plan further re-emphasized the need for involving local and indigenous communities and the recognition and use of traditional knowledge and advised a precautionary approach.

The Arctic Council’s acceptance of indigenous organizations as Permanent Participants set a precedent. Nevertheless, more recently, the five Arctic coastal states issued the 2008 Ilulissat Declaration stating their “unique position” and thus supremacy in Arctic affairs. This challenges the previous implicit agreement on who is a legitimate stakeholder in Arctic issues, which included indigenous peoples. In the Ilulissat Declaration, they were completely left out, just like the three “non-coastal” Arctic states (Young, 2010).

During the negotiations for the CLRTAP, indigenous peoples played an active role raising awareness on the harmful effects of POPs and advocating their limitation. In the last years of the negotiations, indigenous groups established the Northern Aboriginal Peoples Coordinating Committee on POPs to coordinate their presence at the meetings. One year later, in 1998, they were among the 400 advocacy groups that formed the International POPs Elimination Network to support a global response (Fenge & Downie, 2003).

The Arctic as an Indicator Region

Already in the AEPS, the Arctic is presented as an indicator region, which “exerts an important influence on the global environment” (Arctic Council, 1991: 7). In combination with the leading role of POP research in the Arctic, the acknowledgment of the typical characteristics of POPs in the Stockholm Convention, namely their long-range transport and presence in regions far from the emission source, furthered the position of the Arctic as an indicator region (de Wit & Muir, 2010).

With regards to the framing of Arctic issues for purposes of policymaking, Oran Young (2010) refers to the accentuation of the links between Arctic processes and global systems, which was symbolized among others by the 2004 Arctic Climate Impact Assessment (AMAP, 2004). The presence of POPs in the Arctic is a case in point, showing the complex linkages that need to be addressed when thinking about environmental governance of the Arctic. The Arctic Council here played a substantial role in advancing an ecosystem-based management approach, which views the Arctic as a “complex and dynamic socio-ecological system” and gives preference to an integrated approach to address interrelated Arctic issues (Young, 2010: 174). In the case of POPs, evidence of their dispersion and harmful effects in the Arctic were essential in negotiations and the image of the Arctic as an indicator region was readily adopted (Downie & Fenge, 2003; Young, 2010).

Ratification Differences Among the Arctic States

Interestingly, since the Arctic Council has no law-making or enforcement mechanisms, the national environmental laws of the Arctic states – however restricted by international treaties – apply to most of the region, with the exception of the “high sea” areas. These areas beyond the 200 nautical miles Exclusive Economic Zones (EEZ) of the Arctic coastal states are subject to the United Nations Convention on the Law of the Sea (UNCLOS), which obliges the states “to protect and preserve the marine environment” (United Nations, 1982: 100). While playing an important role in developing global environmental regulations, in the circumpolar region, the Council has thus been limited to recommendations and guidelines.

The example of the United States is striking in this regard. While they implemented several measures against POPs, the United States have until now refused to ratify the Stockholm Convention and have signed, but not ratified the CLRTAP. Arctic indigenous communities’ efforts to raise awareness of the urgency and the dangerous effects of POPs on their health have had only limited success. In 2015, Vi Waghiyi of the traditional Yup’ik community Savoonga, Alaska, wrote in an open letter to Alaska Dispatch News: “The United States is one of only a handful of nations which have not signed the Stockholm Convention, and so is not bound by this latest ban. The U.S., along with Canada, remains the highest user of this toxic chemical [PCP or pentachlorophenol].” The U.S. Department of State (n.d.) explains the failure to ratify in the “current lack (of) the authority to implement all of its provisions”, referring to the required approval by the Senate. However, the “United States participates as an observer in the meetings of the parties and in technical working groups.” Not being party to the treaty has drawbacks such as not being able to take part in decisions on the inclusion of additional substances to the Convention, which has been a central issue in debates on the Convention’s ratification. The lack of influence worries not only the U.S. Environmental Protection Agency (EPA), but chemical industry groups as well, who do not get the opportunity to act on or block the global listing of new substances (Schor, 2010). What is more, the necessary legislative changes to the Toxic Substances Control Act (TSCA) and the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) prove to be extremely challenging despite serious attempts by several governments. In particular, no agreement could be reached on how the government should react to decisions under the Stockholm Convention to add additional chemicals to the list of limited or banned substances (Bang, 2011).

Effectiveness of Measures

POPs Level Trends

The level of POPs is monitored at four sampling stations in the Arctic: Alert in Canada, Pallas in Finland, Stórhöfði in Iceland and Zeppelin in Svalbard, Norway. The legacy POPs have half-lives of 5 to 15 years, which means that after this time, 50% of the chemicals still remain in the environment (AMAP, 2015). Most of the pollutants listed under the Stockholm Convention show a declining trend in the Arctic air and biota, which suggests that the efforts of limiting and banning POPs under the Stockholm Convention and previous regulations did effectively bear fruit (AMAP, 2014, AMAP, 2015). Hung et al. (2016: 9) view these trends as “evidence of progress achieved as a result of national and international control measures”. However, most of these POPs have been banned for decades, often 20 to 30 years, in many countries, but can still be observed now,

underlining just how persistent the pollutants are. One conclusion we can draw is the importance of a timely and geographically wide-spread ban.

The levels of hexachlorobenzene (HCB) and lighter PCBs increased at some measurement locations. Reasons for this could be continuous primary emissions or the effects of a warming climate, which could lead to increasing secondary emissions. Due to the retreating Arctic sea ice, they might be revolatilized from the open ocean (AMAP, 2014). The case of PBDEs also hints to differences in local conditions, proximity to the key source regions and the potential for long-range atmospheric transport (Hung et al., 2010). Whereas its levels are declining in European Arctic air, this is not the case in the Canadian Arctic. This might be due to previously higher usage in North America (Hung et al., 2016) and its usage at nearby military sites (AMAP, 2014). Another example of regional differences in the trends is DDT, whose levels consistently decline only at the Zeppelin station on the Norwegian archipelago Svalbard, while they have levelled at the other stations (AMAP, 2014). Of the POPs more recently added to the Stockholm Convention, HBCD already shows a decline at the Svalbard sampling station (AMAP, 2014).

Many of the monitoring time-series began decades before the Stockholm Convention, since the early 1990s in the case of the four Arctic stations. Especially the declining trends they show are thus likely to reflect regulations at the national level prior to the Stockholm Convention (AMAP, 2014). The phase-out of toxaphene in the southern USA in the early 1980s, as well as the phase-out of technical HCH in China and Russia have coincided with the decline of their measured levels in Arctic air (Li & Macdonald, 2005).

Another factor that needs to be taken into account when evaluating the effectiveness of agreements and policies is secondary emissions. Warmer temperatures lead to increasing emissions from POP storages, such as water or land masses, which are generated in atmospheric reactions between contaminants. As the primary emissions decrease, secondary emissions might be the reason for the slower declining rates, such as DDTs, aldrin and dieldrin, PCBs and chlordanes. They seem to be approaching a steady state, which in the absence of further primary emissions can be traced back to secondary sources that are becoming more important (AMAP, 2014).

The decline of some POP levels in human tissues could also be a reflection of a change in the diet of indigenous people to a more western diet (AMAP, 2015). What is more, the Convention entered into force only in 2004, so it might be too early to come to scientifically sound conclusions as to the effectiveness of the treaty, Oran Young (2010) indicates that the Stockholm Convention focused on chemicals, the “dirty dozen”, that most signatory countries had already banned prior to the Convention, which might suggest that the Convention is or has been of subordinate importance regarding the regulation of POPs. Notwithstanding, it represents one of the most updated and comprehensive regulations of POPs and advocates global action, which is particularly important in the case of pollutants that are transported over long distances.

The data from the second AMAP Assessment Report on POPs published in 2004 pointed to “new” contaminants reaching the Arctic, such as brominated flame retardants (BFRs) (de Wit & Muir, 2010). Of the emerging contaminants of concern, many are chemicals of commerce, such as PFOS (perfluorooctansulfonate), and do have pollution sources in the Arctic, for example in homes or landfills. Some of these chemicals are more volatile than most “legacy POPs”, which makes them more difficult to trace as they might pass through conventional samples. As a result, their actual level might not accurately be reflected in monitoring data. The additional challenges and financial

and technical constraints of sampling and analyzing an ever increasing list of chemicals of emerging concern have led to reduced sampling frequency and scope and in general less research of legacy POPs (Hung et al., 2016). This is not without consequences as it weakens the ability to detect trends and the scientific basis for political action (AMAP, 2014).

Monitoring Agreements & Scientific Cooperation

The need for international cooperation on research on pollution was already identified in the 1991 Arctic Environmental Protection Strategy. As mentioned above, long-term monitoring of POPs takes place in Canada, Iceland, Svalbard and Finland. In the Russian Arctic, POPs were so far monitored and assessed only on a campaign basis for 1 to 2 years at four locations. It is thus not possible to evaluate temporal trends for these locations and compare the development to other Arctic sites. To address this data gap, two Russian air monitoring stations are currently being established in Amderma (Nenets Autonomous Okrug) and Tiksi (Sakha Republic - Yakutia) (Hung et al., 2016). In addition, AMAP and NOAA (n.d.) point to data gaps in the United States.

Conclusion

The health case against persistent organic pollutants, which surfaced in the Canadian Arctic in the 1970s and 1980s, proved a powerful impetus in the Arctic states' endeavor to ban POPs on a global level. The states' cooperation achieved a ban of POPs on a circumpolar scale and eventually POPs were recognized internationally as a problem in need of urgent attention. This resulted in the 1998 Aarhus Protocol to the Convention on Long-range Transboundary Air Pollution and the 2001 Stockholm Convention of POPs, which currently lists 26 chemicals that have been or are still being phased out.

During the negotiations for these agreements, the Arctic was promoted as an indicator region of the global environmental state, in particular regarding climate change and pollution. In addition, the recognition of the complex linkages between different geographic regions and factors furthered an ecosystem-based management approach.

Research has shown that the ban of certain POPs decades ago contributed to decreasing levels in the Arctic and benefitted wildlife populations and ecosystems, which subsequently did recover from the damages caused by the toxic chemicals. However, the geographic distribution and development of POP levels is still not enough understood to reliably connect the decreasing levels of some POPs at some sites to specific limitations or bans. Much more research is thus needed. The global cooperation on research and monitoring is a good step in the right direction and should be furthered.

Nevertheless, the ratification and implementation of the provisions of the Stockholm Convention, as well as the continuous update of the list of POPs should therefore have a positive effect on the environment, as well as on the public health, in particular of Arctic indigenous people. It can be suggested that the Arctic countries should ratify the Stockholm Convention without exceptions and phase out these extremely harmful pollutants, including pollutants of emerging concern that are regularly added to the Convention. The inclusion of all Arctic territories, such as Greenland, is another missing piece in the puzzle. In addition, due to the long-range character of POPs, the Arctic states should keep up their proactive stance towards international regulation in order to reduce POP levels globally.

References

- AACA (n.d.). Adaptation Actions for a Changing Arctic. Retrieved from: <http://www.amap.no/adaptation-actions-for-a-changing-arctic-part-c>
- ACAP Arctic Contaminants Action Program (2000). Arctic Council Action Plan to Eliminate Pollution of the Arctic (ACAP). Retrieved from <http://hdl.handle.net/11374/429>
- AMAP Arctic Monitoring and Assessment Programme (2014). Trends in Stockholm Convention Persistent Organic Pollutants (POPs) in Arctic Air, Human media and Biota. By: S. Wilson, H. Hung, A. Katsoyiannis, D. Kong, J. van Oostdam, F. Riget, A. Bignert. AMAP Technical Report No. 7 (2014). Arctic Monitoring and Assessment Programme (AMAP), Oslo. 54 pp. Retrieved from: <http://www.amap.no/documents/doc/trends-in-stockholm-convention-persistent-organic-pollutants-pops-in-arctic-air-human-media-and-biota/1081>
- AMAP Arctic Monitoring and Assessment Programme (1998). AMAP Assessment Report: Arctic Pollution Issues. Arctic Monitoring and Assessment Programme (AMAP), Oslo, Norway. xii+859 pp. Retrieved from: <http://www.amap.no/documents/doc/amap-assessment-report-arctic-pollution-issues/68>
- AMAP Arctic Monitoring and Assessment Programme (2004). Impacts of a Warming Arctic: Arctic Climate Impact Assessment (ACIA) Overview Report. Retrieved from: <http://www.amap.no/documents/doc/impacts-of-a-warming-arctic-2004/786>
- AMAP Arctic Monitoring and Assessment Programme (2015). *AMAP Assessment 2015: Human Health in the Arctic*. Arctic Monitoring and Assessment Programme (AMAP). Retrieved from: <https://oaarchive.arctic-council.org/handle/11374/1703>
- AMAP Arctic Monitoring and Assessment Programme (n.d.). "Welcome to AMAP". Retrieved from: <http://www.amap.no/about>
- Ambrose, S., C. Florian, R. R. J. Ritchie, D. Payer, & R. M. O'Brien (2016). Recovery of American peregrine falcons along the upper Yukon River, Alaska. *The Journal of Wildlife Management*. 80(4): 609-620.
- Arctic Council (1991). Rovaniemi Declaration on the Protection of the Arctic Environment (1991). Retrieved from: <http://www.grida.no/polar/resources.aspx?id=1384>
- Arctic Council (1996). Ottawa Declaration (1996) – Declaration on the establishment of the Arctic Council. Retrieved from: <https://oaarchive.arctic-council.org/handle/11374/85>
- Arctic Council (2004). Report of Senior Arctic Officials to Ministers at the Fourth Arctic Council Ministerial Meeting. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/1553/ACMM04_Reykjavik_SAO_Report_to_Ministers_En.pdf?sequence=1&isAllowed=y
- Arctic Council (2013). Arctic Biodiversity Assessment 2013: Synthesis. Retrieved from: <http://www.caff.is/assessment-series/arctic-biodiversity-assessment/232-arctic-biodiversity-assessment-2013-synthesis>
- Arctic Council (2016). The Arctic Council Secretariat. Retrieved from: <http://www.arctic-council.org/index.php/en/about-us/arctic-council/the-arctic-council-secretariat>
- Arctic Council (n.d.). Emergency Prevention Preparedness and Response Working Group. Ministerial Direction. Retrieved from: <http://arctic-council.org/eppr/reports/ministerial-direction/>
- Bang, G. (2011). Signed but not ratified: limits to US participation in international environmental agreements. *Review of Policy Research*. 28(1): 65-81.

- Carson, R. (1962). *Silent Spring*. Greenwich, Connecticut.
- de Wit, C. A., & D. Muir (2010). Levels and trends of new contaminants, temporal trends of legacy contaminants and effects of contaminants in the Arctic: Preface. *Science of the Total Environment*. 408(15): 2852-2853.
- EPA United States Environmental Protection Agency (2009). Persistent Organic Pollutants: A Global Issue, A Global Response. Retrieved from: <https://www.epa.gov/international-cooperation/persistent-organic-pollutants-global-issue-global-response>
- Fenge, T., & D. L. Downie (2003). *Northern Lights Against POPs: Combatting Toxic Threats in the Arctic*. McGill-Queen's Press-MQUP.
- Florida Fish and Wildlife Conservation Commission (2009). Peregrine Falcon Management Plan. Retrieved from: http://myfwc.com/media/214329/ImpSpp_Peregrine_Plan.pdf
- Guerra, P., K. Fernie, B. Jiménez, G. Pacepavicius, L. Shen, E. Reiner, E. Eljarrat, D. Barceló & M. Alae (2011). Dechlorane Plus and related compounds in peregrine falcon (*Falco peregrinus*) eggs from Canada and Spain. *Environmental Science & Technology*. 45(4): 1284-1290.
- Hung, H., R. Kallenborn, K. Breivik, Y. Su, E. Brorström-Lundén, K. Olafsdottir, J. M. Thorlacius, S. Leppänen, R. Bossi, H. Skov, S. Manø, G. W. Patton, G. Stern, E. Sverko & P. Fellin (2010). Atmospheric monitoring of organic pollutants in the Arctic under the Arctic Monitoring and Assessment Programme (AMAP): 1993–2006. *Science of the Total Environment*. 408(15): 2854-2873.
- Hung, H., A. A. Katsoyiannis, E. Brorström-Lundén, K. Olafsdottir, W. Aas, K. Breivik, P. Bohlin-Nizzetto, A. Sigurdsson, H. Hakola, R. Bossi, H. Skov, E. Sverko, E. Barresi, P. Fellin, & S. Wilson (2016). Temporal trends of Persistent Organic Pollutants (POPs) in Arctic air: 20 years of monitoring under the Arctic Monitoring and Assessment Programme (AMAP). *Environmental Pollution*.
- Kohler, P. M. (2011). Indigenous Knowledge and Global Environmental Politics: Biodiversity, POPs, and Climate. In A. L. Lovecraft & H. Eicken (Eds.). (2011). *North by 2020: Perspectives on Alaska's changing social-ecological systems* (pp. 135-149). Anchorage: University of Alaska Press.
- Koivurova, T. (2005). Environmental protection in the Arctic and Antarctic: can the polar regimes learn from each other?. *International Journal of Legal Information*. 33(2): 204-218.
- Lamon, L., H. von Waldow, M. MacLeod, M. Scheringer, A. Marcomini, & K. Hungerbühler (2009). Modeling the global levels and distribution of polychlorinated biphenyls in air under a climate change scenario. *Environmental Science & Technology*. 43(15): 5818-5824.
- Letcher, R. J., J. O. Bustnes, R. Dietz, B. M. Jenssen, E. H. Jørgensen, C. Sonne, J. Verreault, M. M. Vijayan & G. W. Gabrielsen (2010). Exposure and effects assessment of persistent organohalogen contaminants in arctic wildlife and fish. *Science of the Total Environment*. 408(15): 2995-3043.
- Li, Y. F., & R. W. Macdonald (2005). Sources and pathways of selected organochlorine pesticides to the Arctic and the effect of pathway divergence on HCH trends in biota: a review. *Science of the Total Environment*. 342(1): 87-106.
- Morales, M. (2014). The Stockholm Convention. Retrieved from: <https://sites.nicholas.duke.edu/superfund/the-stockholm-convention/>
- Muir, D. C., & C. A. de Wit (2010). Trends of legacy and new persistent organic pollutants in the circumpolar Arctic: overview, conclusions, and recommendations. *Science of the Total Environment*. 408(15): 3044-3051.

- NOAA National Oceanic and Atmospheric Administration (n.d.). Persistent Organic Pollutants in the Arctic. Retrieved from http://www.arctic.noaa.gov/essay_calder.html
- Schor, E. (2010) Obama Admin Steps Up Pressure to Ratify Treaties on Toxics. *The New York Times*. Retrieved from: <http://www.nytimes.com/gwire/2010/09/24/24greenwire-obama-admin-steps-up-pressure-to-ratify-treati-73636.html>
- Stockholm Convention a (n.d.). Amendments to Annexes to the Stockholm Convention. Retrieved from: <http://chm.pops.int/Countries/StatusofRatifications/Amendmentstoannexes/tabid/3486/Default.aspx>
- Stockholm Convention b (n.d.). Listing of POPs in the Stockholm Convention. Retrieved from: <http://chm.pops.int/TheConvention/ThePOPs/ListingofPOPs/tabid/2509/Default.aspx>
- Stockholm Convention c (n.d.). Overview. Retrieved from: <http://chm.pops.int/TheConvention/Overview/tabid/3351/Default.aspx>
- Stockholm Convention on Persistent Organic Pollutants 2001. Retrieved from: http://chm.pops.int/Portals/0/Repository/convention_text/UNEP-POPS-COP-CONVTEXT-FULL.English.PDF
- U.S. Department of State (n.d.). Stockholm Convention on Persistent Organic Pollutants. Retrieved from: <http://www.state.gov/e/oes/ecqt/chemicalpollution/83009.htm>
- UNECE a (n.d.). Protocol on Persistent Organic Pollutants (POPs). Retrieved from: http://www.unece.org/env/lrtap/pops_h1.html
- UNECE b (n.d.). Protocols. Retrieved from: http://www.unece.org/env/lrtap/status/lrtap_s.html
- UNECE c (n.d.). The Convention – The 1979 Geneva Convention on Long-range Transboundary Air Pollution. Retrieved from: <http://www.unece.org/fileadmin/DAM/env/lrtap/full%20text/1979.CLRTAP.e.pdf>
- UNEP/AMAP (2011). Climate Change and POPs: Predicting the Impacts. Report of the UNEP/AMAP Expert Group. Retrieved from: <http://www.amap.no/documents/doc/climate-change-and-pops-predicting-the-impacts/753>
- United Nations (1982). United Nations Convention on the Law of the Sea. Retrieved from: https://www.un.org/Depts/los/convention_agreements/texts/unclos/unclos_e.pdf
- United Nations (n.d.). Treaty Collection. Retrieved from: https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-1-g&chapter=27&lang=en
- Waghiyi, V. (2015). An Arctic thank you for UN action against toxins that accumulate in traditional food. *Alaska Dispatch News*. Retrieved from: <http://www.adn.com/article/20150707/arctic-thank-you-un-action-against-toxins-accumulate-traditional-food>
- Wang, Z., Na, G., Ma, X., Ge, L., Lin, Z., & Yao, Z. (2015). Characterizing the distribution of selected PBDEs in soil, moss and reindeer dung at Ny-Ålesund of the Arctic. *Chemosphere*. 137:9-13.
- WHO. World Health Organization (n.d.). Climate change and infectious diseases. Retrieved from: <http://www.who.int/globalchange/climate/summary/en/index5.html>
- Young, O. R. (2010). Arctic Governance-Pathways to the Future. *Arctic Review*. 1(2): 164-185.

Briefing Note

The Arctic Council's Task Force on Arctic Marine Cooperation

Peter Oppenheimer & Molly Ma

Creation of the Task Force

In early 2015, the United States proposed that the Arctic Council create a task force or expert group to assess the need for a new mechanism to enhance international cooperation and coordination in managing the Arctic Ocean (*US Concept Paper*, 2015: 1). Recognizing that the Arctic marine environment is rapidly changing and presents unforeseeable shared challenges and opportunities, the United States believed it was necessary to begin efforts to consider what type of mechanisms could improve how Arctic States work together to manage the uncertain future (*US Concept Paper*, 2015: 1). It envisioned that types of potential mechanisms for coordination fell along a spectrum, from treaty-based “hard” coordination with binding measures to “soft” coordination that facilitated convening relevant authorities and exchanging information (*US Concept Paper*, 2015: 1). The proposed task force would conduct an analysis to assess the need for a new mechanism and propose the basic elements of a cooperation mechanism, including its mandate, scope, legal form, and relationship to the Arctic Council (*US Concept Paper*, 2015).

On April 24, 2015, at the Ninth Ministerial Meeting of the Arctic Council in Iqaluit, Canada, the Ministers of the eight Arctic States and representatives of the six Permanent Participants¹ adopted the Iqaluit Declaration. It established a Task Force on Arctic Marine Cooperation (TFAMC) with a mandate “to assess future needs for a regional seas program or other mechanism, as appropriate, for increased cooperation in Arctic marine areas” (5). The detailed mandate in the Report of the Senior Arctic Officials (SAOs) to Ministers presented a series of questions for the Task Force to answer in a 2017 report to Ministers.

Peter H. Oppenheimer is Chief, International Section, Office of General Counsel, National Oceanic and Atmospheric Administration. Molly Ma is Law Student Intern, International Section, Office of General Counsel, National Oceanic and Atmospheric Administration, U.S. Department of Commerce. The views expressed in this Briefing Note are those of the authors alone. They do not necessarily represent the views of the National Oceanic and Atmospheric Administration, the U.S. Department of Commerce or the U.S. government.

International Legal Context

The TFAMC was created within an active international legal space. Human activities in the Arctic marine environment are governed by several binding legal instruments and guided by numerous legally non-binding declarations, strategic plans, and recommendations. The 1982 United Nations Convention on the Law of the Sea is the overarching legal framework for the sustainable use of the oceans and their resources, including the Arctic marine environment. Article 197 of the Law of the Sea Convention (LOSC) provides that “States shall cooperate...directly or through competent international organizations, in formulating and elaborating international rules, standards, and recommended practices... for the protection and preservation of the marine environment.”

The Arctic Council, established in 1996 by the Ottawa Declaration, is a high-level intergovernmental forum that promotes cooperation and coordination among the eight Arctic States: Canada, Kingdom of Denmark, Finland, Iceland, Norway, Russian Federation, Sweden, and the United States (“20 years of the Arctic Council,” 2016). The Arctic Council’s mandate is to address issues of relevance to the Arctic region, in particular environmental protection and sustainable development. The chairmanship of the Council rotates every two years among the Arctic States. From 2015 to 2017, the Arctic Council is under U.S. Chairmanship led by U.S. Secretary of State John Kerry. Under the theme “One Arctic,” the U.S Chairmanship has defined three pillars of focus: 1) the economic and living conditions of Arctic communities, 2) Arctic Ocean safety and security, and 3) the impacts of climate change (One Arctic: Shared Opportunities, Challenges, and Responsibilities, 2015).²

The Arctic Marine Strategic Plan 2015-2025 (AMSP), approved by the Arctic Ministers in 2015, provides a framework for the Arctic Council to protect marine ecosystems, promote sustainable use of the marine environment, and enhance the well-being of Arctic inhabitants. It outlines four goals: 1) improve knowledge of the Arctic marine environment; 2) conserve and protect ecosystem function and marine biodiversity; 3) promote safe and sustainable use of the marine environment; and 4) enhance the economic, social and cultural well-being of Arctic inhabitants, and strengthen their capacity to adapt to the changing Arctic environment (AMSP, 2015).

Other Views on Arctic Marine Cooperation

Arctic marine cooperation is a topic of increasing interest, and a number of academics and NGOs have considered the future of Arctic cooperation, and the function and design of a potential cooperative mechanism. In 2010, the Arctic Governance Project called for strengthening Arctic governance by broadening the mandate of the Arctic Council and enhancing existing treaties and arrangements (17). Some scholars have emphasized the importance of cross-scale integration of stewardship through a polycentric governance model that coordinates processes and decisions across multiple levels (Chapin, Sommerkorn, Robards, & Hillmer-Pegram, 2016: 214). The World Wildlife Federation recommends that a cooperative mechanism draft Programmatic Action Agendas on key strategic issues to be implemented by national governments or regional and international bodies (Eichbaum, 2016: 3). A regional seas arrangement has been proposed as the most politically acceptable platform for cooperation (Baker, 2016).³

Mandate and Objectives

The TFAMC is charged with delivering a report to the Ministers in 2017 identifying future needs for strengthened cooperation in Arctic marine areas (*SAO Report*, 2015: 77). The objectives of this report are to propose recommendations on the nature and scope of such a mechanism, its relationship to the Arctic Council, and its potential legal form (*SAO Report*, 2015: 77). However, the decision to form the Task Force did not constitute a decision to establish the cooperative mechanism (*SAO Report*, 2015: 77).

Composition

The TFAMC is co-chaired by the United States, Iceland and Norway. Each of the eight Arctic States, as well as Permanent Participants, are represented on the TFAMC. Accredited Arctic Council Observers such as the European Union and the World Wildlife Federation have also attended TFAMC meetings.⁴

Progress to Date

The first meeting of the TFAMC took place in Oslo, Norway, on September 21-22, 2015 (*1st Meeting Summary Report*, 2015: 1). All eight Arctic States, three Permanent Participants (the Saami Council, the Inuit Circumpolar Council, and the Aleut International Association), and nine Observers attended. The purpose was to establish a common baseline understanding of the Arctic Council's work to date relevant to the Task Force, and of regional marine cooperation mechanisms around the world. Various organizations such as the International Council for the Exploration of the Sea (ICES), North Pacific Marine Sciences Organization (PICES), International Arctic Science Committee (IASC), and the Sargasso Sea Commission gave presentations providing context on relevant existing cooperative mechanisms (*1st Meeting Summary Report*, 2015: 1).

In discussions at the first meeting, several delegations indicated that they looked forward to identifying opportunities for future cooperation, in addition to identifying existing gaps, though also cautioning that any new budgetary proposals would be closely scrutinized (*1st Meeting Summary Report*, 2015: 1-2). Several delegations identified desirable values for Arctic marine cooperation, such as the importance of involving local communities, coordinating on a regional basis, and being flexible and adaptable to change. Delegations generally agreed that the AMSP would be a good point of departure for their work. Additionally, delegates identified certain preliminary needs in international cooperation, such as utilizing an ecosystem approach, coordinating across Arctic Council subsidiary bodies on cross-cutting issues, and ensuring stable funding for monitoring of the environment.

On November 18, 2015, the Co-Chairs proposed an approach for intersessional work in their first non-paper. The proposed approach started with the strategic objective established at the Ministerial level, identified gaps and opportunities in achieving the strategic objective, and proposed which of these gaps or opportunities the coordinating mechanism could address (Intersessional Non-Paper, 2015: 2). The Arctic Council had identified as a strategic objective the implementation of an ecosystem-based approach to management through the 2013 Kiruna Declaration and Kiruna Vision Statement as well as the 2015 Iqaluit Declaration (Intersessional Non-Paper, 2015: 3). The Co-Chairs stressed that the Task Force's mandate encompassed not only *gaps* (what is missing), but also *opportunities* (things that could be done better or more efficiently) (Intersessional Non-Paper,

2015: 2). Using the four goals outlined in the AMSP as a framework, the Co-Chairs identified as potential gaps or opportunities the coordination and funding for monitoring, cooperation in the formulation and measurement of ecological quality indicators and objectives, the management of Arctic marine areas beyond national jurisdiction, a framework for multiple States to coordinate management of marine ecosystems transcending their national jurisdictions, and a regional mechanism for coordinating area-based management (Intersessional Non-Paper, 2015). The task at this stage was for delegations to decide whether they wanted to address these identified gaps and opportunities, and to determine the priorities of the TFAMC.

In January of 2016, the Co-Chairs produced a second non-paper that synthesized the delegations' feedback on the first non-paper and developed a proposed work plan through the 2017 Ministerial Meeting. This non-paper also organized clusters of questions for the next meeting to help solidify abstract discussions (Co-Chair's Non-Paper, 2016).

The second meeting of the TFAMC was held in Stockholm, Sweden, on February 4-5, 2016 (Co-chairs' Summary Meeting II, 2016). Over two days, delegations proposed principles and values to guide future Arctic marine cooperation. There was broad agreement that future cooperation should take place within the framework of the Arctic Council, and that there should be involvement of Arctic indigenous peoples. Delegations also proposed four types of cooperative mechanisms: 1) a ministerial process that allows for ministers to regularly convene for coordinated action; 2) a marine commission within the Arctic Council comprised of senior officials with marine expertise and Permanent Participants; 3) deputy SAOs to serve a coordinating function, and 4) dedicated SAO meetings on marine cooperation issues (Co-Chairs' Non-Paper, April 2016: 1). Delegations additionally noted that answering the specific questions of the second non-paper would require further intersessional work involving domestic constituencies.

In April 2016, the Co-Chairs produced a third non-paper to facilitate discussions at the third meeting of the TFAMC (Co-Chairs' Non-Paper, April 2016). The non-paper synthesized values and principles to guide Arctic marine cooperation, summarized deliberations to date, and posed questions to facilitate discussion at the third meeting. (Co-Chairs' Non-Paper, April 2016: 5).

The third meeting of the TFAMC took place in June 1-2, 2016, in Reykjavik, Iceland. At this meeting, a consensus began to emerge regarding the functions that a cooperation mechanism might possess. Several delegations agreed that the mechanism should be located within the Arctic Council and strengthen existing Arctic Council structures; preserve all rights to which the Permanent Participants are entitled; be on-going rather than provisional or ad hoc; convene marine experts and managers; have sufficient stature and credibility to enable an integrated approach to marine stewardship; facilitate scientific coordination; formulate ecological quality objectives and indicators; serve as a forum for information exchange; have area-based stewardship functions; and facilitate follow-through on the Arctic Council's policy recommendations. No consensus emerged on the form of the mechanism, though many delegations expressed the view that it should not be legally binding.

Future Steps

As this article was going to press, the TFAMC was scheduled to hold its fourth meeting in Portland, Maine, on 22-23 September 2016, during which delegations will continue to revise their discussions and take up an initial draft report prepared by the Co-Chairs. Intersessional work will take place in

preparation for the final meeting of the current biennial cycle in February 2017, during which outstanding issues will be resolved and the report finalized.

The final report and recommendations of the TFMAC are expected to be delivered to Ministers in 2017. Thus far, the work of the TFMAC itself has been an excellent example of how the Arctic States and Permanent Participants can cooperate to address shared challenges, which demonstrates the potential of a future cooperative mechanism in protecting and enhancing the Arctic marine environment.

Notes

1. Permanent Participants are Arctic organizations of indigenous peoples with majority Arctic indigenous constituency, representing a single indigenous people resident in more than one Arctic State, or more than one Arctic indigenous people resident in a single Arctic state. The designation of an organization as a Permanent Participant is made by the Council (*Ottawa Declaration*, 1996: 2).
2. For more details on specific initiatives under the U.S. Chairmanship, see the descriptions by the U.S. Department of State at <http://www.state.gov/documents/organization/249166.pdf>.
3. Regional Seas programs aim to address the governance of oceans and seas at the regional level. They are multilateral agreements, usually including an Action Plan and a legally-binding Convention. There are eighteen such programs across the world. The United Nations Environment Programme (UNEP) administers seven programs (Hasegawa, 2016; 10).
4. Observer status is open to non-Arctic states, intergovernmental and inter-parliamentary global and regional organizations, and non-governmental organizations, which the Arctic Council determines can contribute to its work. (*Ottawa Declaration*, 1996: 3).

References

- Arctic Council. (2016). "20 years of the Arctic Council." Retrieved from <http://www.arctic-council.org/index.php/en/about-us/arctic-council/20-year-anniversary>.
- Arctic Council. (2016). Arctic Marine Strategic Plan 2015-2025. Retrieved from <https://oaarchive.arctic-council.org/handle/11374/413>.
- Arctic Council. (2015). *Iqaluit Declaration*. Retrieved from <https://oaarchive.arctic-council.org/handle/11374/662>.
- Arctic Council. (1996). *Declaration on the Establishment of the Arctic Council* ("Ottawa Declaration"). Retrieved from https://oaarchive.arctic-council.org/bitstream/handle/11374/85/00_ottawa_decl_1996_signed%20%284%29.pdf?sequence=1&isAllowed=y.
- Arctic Council. (2015). *Senior Arctic Officials' Report to Ministers*. Retrieved from <https://oaarchive.arctic-council.org/handle/11374/494>.

- Arctic Council Task Force on Arctic Marine Cooperation. (2015). *1st Meeting Co-chairs summary report*. Retrieved from http://www.research.kobe-u.ac.jp/gsics-pcrc/sympo/20151218/documents/03Ocean/03Ocean_04TFAMC1_Report.pdf.
- Arctic Council Task Force on Arctic Marine Cooperation. (2015). Co-Chairs' Intersessional Non-Paper of November 18, 2015. On file with the author.
- Arctic Council Task Force on Arctic Marine Cooperation. (2016). Co-Chairs' Non-Paper of January 29, 2016. Retrieved from http://www.sdwg.org/wp-content/uploads/2016/02/TFAMC_Non-Paper_1-29-16.pdf.
- Arctic Council Task Force on Arctic Marine Cooperation. (2016). Co-Chairs' Summary: Meeting II, February 4-5, 2016. Retrieved from http://www.arctic-council.org/images/Password-Area/SAO_Fairbanks_2016/8/EDOCS-3328-v1-ACSAOUS202_Fairbanks_2016_8-3_TFAMC_02_2_Page_Report.pdf.
- Arctic Council Task Force on Arctic Marine Cooperation. (2016). Co-Chairs' Non-Paper of April 28, 2016. On file with the author.
- Arctic Governance Project. (2010). Arctic Governance in an Era of Transformative Change: Critical Questions, Governance Principles, Ways Forward. Retrieved from <https://mail.google.com/mail/u/0/#inbox/1561414cafa367a2?projector=1>.
- Baker, B. (2016). Designing a Regional Seas Arrangement for the Arctic Ocean: Legal, Scientific, and Observational Support. *Arctic Observing Summit*. Retrieved from http://www.arcticobservingsummit.org/sites/arcticobservingsummit.org/files/Baker_Betsy-ShortStatement-AOS2016.pdf.
- Chapin, S., Sommerkorn, M., Robards, M., & Hillmer-Pegram, K. (2015). Ecosystem stewardship: A resilience framework for arctic conservation. *Global Environmental Change*, 34: 207-217.
- Eichbaum, W. (2016, June 24). The Whys and Hows of a Cooperative Mechanism for the Arctic Marine Environment. *Polar Record*. DOI: <http://dx.doi.org/10.1017/S0032247416000462>.
- Hasegawa, K. (2016). The regional seas agreements: lessons learned. *WWF Magazine*, 9-11. Retrieved from http://wwf.panda.org/wwf_news/?268990/The-Circle-0216.
- United Nations. (1982). *United Nations Convention on the Law of the Sea*. Retrieved from http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.
- United States. (2015). *Concept Paper for a Possible Arctic Regional Seas Program*. On file with the author.
- United States. (2015). One Arctic: Shared Opportunities, Challenges, and Responsibilities. Retrieved from <http://www.state.gov/e/oes/ocns/opa/arc/uschair/index.htm>.

Briefing Note

Arctic Research Across the Baltic States: Re-Integrated in the Northern Europe, Getting Closer to the Arctic Frostbites

Zane Šime

When talking about scientific research in the Arctic region, the three Baltic States are far from being the countries which first come into mind. In other words, it might be a hopeless endeavour to try to find Estonia or Latvia in the headlines announcing grand scale field research initiatives in the northernmost territories. Nevertheless, in the context of increased EU focus on enhancing its position and involvement in the polar region, 2016 is the best timing to stir a discussion regarding scientific activities of Estonia and Latvia in the Arctic.

The aim of this briefing note is twofold, covering both scientific and policy domains. On the one hand, it aims to map Estonian and Latvian research activities to provide a comprehensive overview for wider audiences, as well as explain whether there are any supportive planning or policy documents, as well as partnerships and coordination formats which would facilitate the Arctic research process. Therefore, existing national institutional frameworks allow identifying strengths, as well as challenges faced by relatively small countries in a broader landscape of international Arctic research. In, addition, it should be noted that the briefing note presents the first comprehensive and internationally accessible overview of Latvian research activities related to the Arctic.

On the other hand, article's purpose is to illustrate how Estonia and Latvia channel their interests among domestic stakeholders, as well as in broader foras related to EU-led initiatives. Consequently, the public consultation on Arctic facilitated by Directorate General of Maritime Affairs and Fisheries (hereafter – DG MARE), serves as a good example which explains, why lack of national advocacy on specific policy initiative should not be interpreted as a country having no interest in the issue as such. In addition, this briefing note reveals the EU multilayered dynamics which are taking place outside the Arctic Council but in a near vicinity of the northernmost region.

The briefing note is structured in four sections. First two sections lay out the scientific activities of both Baltic States. Third section is dedicated to explain motivations and interests of Estonia and

Latvia behind their seemingly passive stance when it comes to EU-led dialogue on Arctic matters. Fourth or the last section provides an outlook on the future of Arctic research in both countries, as well as Lithuania, with a set of recommendations on how to support the sustainability of Arctic research. It should be mentioned in advance that the briefing note aims at covering mainly Latvia and Estonia. It does not offer a section dedicated solely to Lithuania, since there is scarce and very fragmented evidence of its research activity and no particular political interest related the Arctic domain.

Estonia

In brief, Estonia can be singled out as the most active Baltic country. It prides itself with a rich history of polar research, which is documented in a considerable body of academic publications.¹ For example, several pioneers of polar research exploration originated from Estonian Baltic Germans (Vaikmäe, 2015).² Moreover, in comparison to other Baltic States, Estonia very early demonstrated an active stance on international level by joining the Svalbard Treaty already in 1930 (Bryza, Mõru, Stoicescu, & Jegorova, 2014: 45). In 1930s Estonian geologists worked in East Greenland in a Danish-led expedition (E.Kaup, personal communication, 4 June 2016). During the Soviet period Estonian scientists, as well as supporting personnel, participated in Arctic and Antarctic expeditions delivering internationally acclaimed results in such domains as glacier and polar icecap research (Vaikmäe, 2015).

Over the last 15 years Estonia has developed solid research basis in areas of polar atmosphere, permafrost-related, sea-ice and limnological research. Estonian scientists are collaborating with their Russian, Polish and, most closely, Norwegian counterparts (Bryza and others, 2014: 51). Namely, the Norwegian Polar Institute can be singled out as a partnering institution with joint investigations in Svalbard of the present and past 800 years of climate by means of shallow ice core records (Vaikmäe, 2015). This collaboration takes place in the framework of the project Sensitivity of Svalbard glaciers to climate change (SvalGlac) 2010-2014 (R.Vaikmäe, personal communication, 11 May 2016).



Fieldwork in Ny-Ålesund area glaciers, project "Community Coordinated Snow Study in Svalbard (C2S3)", April 2016. Photo by Tonu Martma.

Despite its vibrant work, currently the Estonian polar research community faces several challenges. Firstly, it aims at restructuring its research to a more continuous and long-term orientation. A solution has been found in drafting a comprehensive polar research programme 2014 – 2020, known as ESTPOLAR 2014-2020. Currently, the draft programme is a subject of ministerial evaluation before it is handed to the government for an adoption (R.Vaikmäe, personal communication, 6 April 2016). Therefore, in comparison to other Baltic States, Estonia has taken one step closer towards sustainability and planning of its polar research. However, the ministerial evaluation process has been taking place for one year and there are no definite dates known, when the estimated adoption might take place.

To put ESTPOLAR 2014-2020 in a wider context, it should be noted that in parallel a working group is analysing the options of observer status for Estonia in the Arctic Council (Estonian Academy of Sciences, 2015: 22). Its work entails defining the scope and strengths of Estonian engagement in the Arctic. The report produced by the working group might provide further details on Estonian considerations as regards to the application for an observer status at the Arctic Council (T.Maiberg, personal communication, 20 May 2016). Consequently, due to these on-going policy paper drafting processes and consultations, at the moment it is hard to make any judgements what could be the potential impact of ESTPOLAR 2014-2020 on advancing Estonian polar research during the upcoming years.

Secondly, Estonian Arctic research has to overcome several traditional silos. On the one hand, it aims at tackling the science–policy gap. Estonian research community is looking for a clearer concept on how to use research findings in order to better inform policy makers, thus helping to raise the overall quality of national policies (Vaikmäe, 2015). Surely, judging from the vast array of academic literature on this matter, it is a challenge of a considerable magnitude with no quick solutions.

On the other hand, the scientific community has been advised to look for cooperation options with the business community (Bryza and others, 2014: 48). This suggestion has been incorporated in the priorities of Estonian polar research. Namely, one of such promising areas is polar shipping. Estonia is planning to build a multipurpose icebreaker which could navigate beyond the Baltic Sea. Likewise, the sea ice data produced by the Estonian scientists, especially in the wake of Northern Sea Route opening, has the potential to attract the interest of the growing Estonian logistics sector. The third area of mutual science-industry interest could be bioprospecting for bioactive compounds and organisms. The Estonian scientific community argues that findings on biological diversity with adaptation to the evolving climate change could be used in pharmacology, medicine, material technology, industrial processing and food industry. (Vaikmäe, 2015)

Thirdly, Estonia faces a human resources' challenge. In order to provide the overall picture, it should be noted that up to 100 people are currently engaged in polar studies in Estonian higher education and research institutions (Bryza and others, 2014: 48). Forty-to-fifty researchers of this community are working on Arctic matters, having demonstrated expertise in ice core studies and paleoclimatology. While many leading scientists are close to their retirement age, there is a lack of young researchers who could swiftly fill this expertise and research capacity gap (Vaikmäe, 2015).

However, not to paint too gloomy a picture, it should be also noted that there are already timely steps made in order to fill this gap. Some of the early career scientists are planning to undertake internships in internationally acclaimed research institutes. For example, the Centre for Ice and

Climate (Niels Bohr Institute) at the University of Copenhagen during the fall 2016 semester will host an Estonian Master student, who will complete his project on modelling of the North East Greenland Ice Stream (also known by the abbreviation NEGIS) (R.Vaikmäe, personal communication, 3 June 2016). This one of the examples how Estonian Arctic research community is promoting and investing in its next generation scientists with early acquisition of research experience in an international environment.

Fourthly, Estonia has taken a shift from focusing on national research infrastructure development to advancing its international outreach and strengthening bilateral and multilateral partnerships. Consequently, the Arctic research in Estonia has been evolving due to national as well as EU funding. An example of multilateral cooperation is Estonia's participation in the Polar View initiative led by the European Space Agency and the European Commission (*European Arctic Initiatives Compendium*, 2013: 38). Likewise, the previously mentioned SvalGlac project is another example of Estonian successful participation in EU-wide initiatives, supported by national funding (R.Vaikmäe, personal communication, 16 May 2016). SvalGlac project is performed under the European Polar Consortium: Strategic Coordination and Networking of European Polar RTD Programmes (EUROPOLAR) ERA-NET consortium's programme EuroClimate. The Estonian Research Council is a member of this consortium (Community for Research and Development Information Service, n.d.). As one of the most recent examples, it should be mentioned that Estonia takes part in a Horizon 2020 project called EU-PolarNet. It is a five year project (2015-2020) aimed at developing the European Polar Research Strategy (R.Vaikmäe, personal communication, 6 April 2016).

In terms of funding, the Estonian Research Council does not have a specified classification for Arctic-related research in the Estonian Research System. Therefore, mapping funding sources allocated to the northernmost-related scientific activities would require another in-depth study including a drafting of a tailored methodology.

All in all, in comparison to other Baltic States, Estonia can be singled out as an actively engaged nation in bilateral and multilateral research as well as policy shaping initiatives. Its presence in such foras at the European Polar Board, EUROPOLAR and EU PolarNet ensures its awareness of the latest developments in terms of international Arctic research governance. Its participation in international projects ensures regular exchange of expertise with counterparts from other countries, enduring hands-on/applied research opportunities, as well as awareness of internationally promoted best practices and latest scientific findings. Estonia's potential to advance its Arctic research largely depends on adoption of ESTPOLAR 2014-2020, and further on, on its ability to strengthen partnerships with its international cooperation partners and develop systematic collaboration with the industry.

The visibility on a national level of Estonian scientific activities in the northernmost territories could also benefit from the publication of the expert report on Estonia's engagement in the Arctic with potential references to Estonia's future stance as regards to the national-level relationship with the Arctic Council. The goal to acquire observer status was defined already in April 2014. As one of the arguments supporting the Estonian interest in acquiring more insight in the work of the Arctic Council was its interest to "engage in applied cooperation concerning nautical and optical (light) navigation equipment with states having similar conditions, and to find partners among companies and maritime agencies" (Ministry of Foreign Affairs of the Republic of Estonia, 2014).

Thus far Estonia has also been a supporter of EU's application for observer status in the Arctic Council, in order to strengthen regional cooperation and use the full potential of EU's environmental protection capacities, and other capacities related to the maritime domain (T.Maiberg, personal communication, 20 May 2016). To conclude, it should be added that Estonia's interest in acquiring an observer status is also one of the milestones of the current Estonian government (R.Vaikmäe, personal communication, 11 May 2016). Therefore, in Estonia Arctic research benefits not only from overall awareness of the governmental institutions regarding acquired expertise and necessities for further research development and expansion, but also enjoys an enduring commitment from the political leadership.

However, at least in the current nascent phase of both documents, ESTPOLAR 2014-2020 can be judged as more relevant, since it outlines in more detailed terms the Arctic science agenda and necessary steps to bring these activities forward. All in all, these efforts to draw short- to mid-term plans might help not only to enhance Estonia's niche expertise but also to ensure sufficient resources and applied research opportunities for early career scientists in future years.

Latvia

Although Latvia has not acquired a rich Arctic research and exploration experience, its name appears in the connection of famous Arctic expeditions. For example, Alexander Ivanovitch Tronheim, a Norwegian descent German-speaking Latvian from Riga is known for his knowledge of the River Ob basin and mastery of Arctic travel, which supported successful completion of Nansen's Fram voyage (Huntford, 2001: 209). At the beginning of 20th century geophysicist Leonīds Slaucītājs can be singled out as one of the most vocal proponents of polar research in Latvia. He authored several publications regarding the Arctic exploration. For example, he informed wider academic audiences about Latvian membership in the international association Aeroarctic led by Fridtjof Nansen (Slaucītājs, 1929: 155). He also did research on Antarctic, as well as promoted Latvian awareness of famous polar explorations by co-authoring a book with Latvian diplomat Alfrēds Bīlmanis on the life of Fridtjof Nansen (Slaucītājs & Bīlmanis, 1934).

Latvian scientists were also involved in other multilateral science-related foras with ambitious research agendas. Latvia together with other Baltic States, as well as Denmark, Sweden, Finland, Poland, Germany and Russia formed the Baltic Geodetic Commission. The organisation was involved in Arctic matters by its plans to extend the 52nd parallel into Asia as far as Bering Strait, further across the strait into Alaska, where it would connect with Alaskan triangulation, which in turn would be connected to the geodetic triangulation on Canada. It was a plan which would form the longest geodetic triangulation in the world (L. W. D., 1931). The Latvian participation in this fora ceased after the Soviet occupation of Latvia. Consequently, due to these geopolitical shifts in the Baltic Sea Region, the Geodetic Commission transformed itself into a smaller forum. In 1953 the Nordic Geodetic Commission was formed, with Norway and Iceland becoming its fully fledged members (Nordic Geodetic Commission, n.d.).

In the contemporary setting, in comparison to Estonia, Latvia has acquired a more limited expertise on the Arctic region. As regards to the microflora, both Augusts Kirhenšteins Institute of Microbiology and Virology at Rīga Stradiņš University and Latvian Institute of Aquatic Ecology have never participated in scientific research mid- or long-term projects or field research in the Arctic region (Vargulis, 2014: 201). So far research has been organised on ad hoc basis. For

example, the Latvian Institute of Aquatic Ecology once received an order from the Technical University of Denmark to analyse the content and amount of phytoplankton species (I.Jurgensone, personal communication, 29 March 2016).

However, the Latvian Institute of Aquatic Ecology is not the only Latvian cooperation partner to the Technical University of Denmark. In comparison to the previously discussed example, the Faculty of Building and Civil Engineering at the Riga Technical University has acquired a broader insight in the Arctic research in the field of gravimetric analysis. It has established cooperation with the Division of Geodynamics of the National Space Institute at the Technical University of Denmark (J.Kaminskis, personal communication, 12 May 2016). As a cooperation partner of the Technical University of Denmark, the Latvian staff has acquired not only expertise in processing of Arctic data but also is well aware of developments regarding the Nordic agenda of geodetic research. However, Latvian participation in field research in Greenland is hampered by the scarce resources (J.Kaminskis, personal communication, 24 May 2016). Such engagement with Danish partners would require additional funding from university's budget, national or other funding sources.

Faculty of Building and Civil Engineering at the Riga Technical University has also to a certain degree re-established the historic ties to the Geodetic Commission. Consequently, Latvian researchers (among other representatives from the Baltic States) regularly attend meetings of the Nordic Geodetic Commission (J.Kaminskis, personal communication, 12 May 2016).³

Consequently, this enduring cooperation has contributed to other foras dedicated to the Global Navigation Satellite Systems. For example, both parties shared their experience during United Nations Office for Outer Space Affairs' Workshop of the Applications of Global Navigation Satellite Systems which took place in Riga, in 2012 and was attended by 30 nations (J.Kaminskis, personal communication, 21 May 2016; "Noslēgusies GNSS veļtīta ANO konference Rīgā," 2012; United Nations Office for Outer Space Affairs, 2012). Such gatherings serve as occasions for Latvian representatives to inform about their activities as well as seek options of future engagement in multilateral cooperation.

In addition, the Faculty of Building and Civil Engineering at the Riga Technical University, participates in research, preservation and public awareness initiatives related to the 200 years old station points of Struve Geodetic Arc, which were included in the United Nations Educational, Scientific and Cultural Organization (hereafter – UNESCO) List of World Heritage in 2005. The Struve Geodetic Arc is a triangulation chain that was measured during the first half of the 19th century. It covers a line connecting Fuglenæs, near Hammerfest at the Arctic Ocean, with Staro-Nekrassowka, near Ismail, on the Black Sea shores, along more than 2,800 km (J.Kaminskis, personal communication, 21 May 2016; Latvian National Commission for UNESCO, n.d.; UNESCO World Heritage Centre, n.d.). This arc crosses all three Baltic States.

Faculty's engagement in research of 16 station points located in Latvia serves as one of the examples how Latvia contributes to the preservation of Arctic-related research and promotion of historical heritage related to the Arctic research. It also shows faculty's enduring engagement in multilateral cooperation, since the research performed in Latvia is in sync with the project partners from other Arc's countries. For example, one of the latest developments are the recent discussions in September 2016 in Estonia regarding options for upgraded research involving global positioning system in order to acquire more precise data on Arc's parameters. In addition, faculty's involvement

in research of Struve Geodetic Arc is an example of engagement with the local-level authorities. Namely, Jēkabpils municipality tapped the potential of this scientific heritage and invested its resources. It hosted the Conference of the Coordinating Committee in 2008, as well as developed the triangulation point as one of its tourism attractions (Land Board of the Republic of Estonia, n.d.; J.Kaminskis, personal communication, 24 May 2016).

The mere fact that a limited number of Latvian scientists have gained an opportunity to perform their research in the northernmost territories is the reason why recently conducted and in the near future planned expeditions of geology researchers from the University of Latvia to Iceland and Greenland are framed in the national media as the re-birth of Latvian polar research (Čunka, 2016). By far the researchers from the Faculty of Geography and Earth Sciences are the only scientists who, as representatives of Latvian academic institutions, have done several field works in the Arctic environment. The 2016 expedition to Russell Glacier will be the third expedition of the team which consists of four or five people. Similarly to previous expeditions, this one will be also aimed at mapping subglacial topography, englacial and subglacial channels of outlet glaciers with ground penetrating radar, as well performing other fieldwork concerning sedimentological, geomorphological and geochemical research.

The initiative of faculty's academic staff to plan several expeditions in the northernmost territories is a good example how Latvian higher education workforce is advancing towards organising field research in relatively distant regions. It helps to identify potential strengths and challenges to the academic advancement.



Ground-penetrating radar measurements on Múlajökull outlet glacier. Photo by Kristaps Lamsters.

First and foremost, Latvian pioneers are well aware of the need to deepen their niche expertise on specific polar issues. Through international foras Latvian scientists have acquired understanding of the major trends in Arctic and polar research, which generally focuses on macro-level assessments

such as ice cap modelling from data acquired via satellite or an aircraft. Therefore, Latvian scientists have chosen to advance micro-level data acquisition in a specific limited area in order to look for water canal patterns in glaciers and assess their development in the context of climate change (Karušs, Bērziņš, & Lamsters, 2015; Karušs, Lamsters, & Bērziņš, 2015; Lamsters, Karušs, Bērziņš, & Rečs, 2015; J.Karušs, personal communication, 8 April 2016). In short term, the findings of the research team have been useful in informing wider audiences in Latvia on the developments linked to climate change (Buševica & Gulbinska, 2015). In longer term, these area-specific findings could become instrumental to explain irregularities of macro-level assessments or feed into gaps identified in the large scale models.

Secondly, Iceland and Greenland expeditions also serve as good examples of close partnership between researchers and Latvian companies. The field work is conducted using ground-penetrating radar software and equipment developed and manufactured by a Latvian company Radar Systems Inc. Moreover, the support of private sector is not limited only to technological matters. The team's expeditions were sponsored by several companies based in Latvia (e.g. road construction company Igate). The exception was one student who was part of the research team and his participation was covered by a grant awarded by the Student Council of the University of Latvia.

Thirdly, the availability of financial support plays an important role in the advancement of field research. In general, there are no particular funding schemes designated to Arctic-specific research in Latvia. For example, the programming period of 2007-2013 of EU funds did not consist of any thematic priorities or their subsections which would explicitly refer to research in northernmost territories (I.Paune, personal communication, 11 April 2016).

In earlier publications (Vargulis, 2014: 202) it has been argued that one of the reasons for limited Arctic research activity Latvian institutions name the lack of resources. Also in the case of Iceland and Greenland expeditions, one could argue that all rests on the enthusiasm of researchers involved. Usually the acquired funding can cover the basic expedition needs and does not include any remuneration for the work done by the research team (J.Karušs, personal communication, 8 April 2016). In the current form it could be judged as an extra-curricular workload performed by the university's academic staff out of their mere interest in advancing geological and earth sciences in Latvia.

So far Latvian research institutions have not participated in research projects supported by the EU funding. Since EU project preparation, management and reporting would have to be done by the same academic staff, who conducts the field research, it might turn out to be too much of an administrative burden in the context of their duties at the faculty. The experience acquired during Iceland and Greenland expeditions prove that in the current form on non-existing support structures, it is a considerable multi-tasking challenge for the academic team. Currently, besides the field work itself, team members cover the full spectrum of tasks related to their field research. They search for options on how to attract private and university funds, they file administrative papers, they plan expeditions, as well as ensure the publicity of their activities both in academic circles and wider public. Also in terms of other future polar expeditions, all tasks, such as application for funding, writing of project proposal, liaison with potential cooperation partners, are done by the team members themselves. (J.Karušs, personal communication, 8 April 2016)

While in an early phase of acquiring experience in planning and implementation of distant field expeditions it might be a more or less agreeable organisational set-up, it is clear that without

substantial administrative and more sustainable financial backing these activities might not result in sustainable advancement of academic expertise.

Also in terms of financial support, it should be mentioned that previous estimates of expedition costs might be judged as bloated, either due to consisting relatively high remuneration rates or use of expensive research station facilities. Namely, it was estimated that the average funding per institute in 2013 was 321,000 EUR which could cover at best two scientific expeditions to the Arctic (Vargulis, 2014: 202). That means that earlier estimates were based on the assumption that one expedition might cost around 160,000 EUR. However, the expedition planning of researchers from the Faculty of Geography and Earth Sciences at the University of Latvia shows that a short field work visit for five people team lasting up to ten days can be implemented on a 7000-10,000 EUR budget, which does not include remuneration for the research staff involved. Whereas a one month long expedition of four people to the Antarctic station of one of the East European partnering nations would cost 30,000-35,000 EUR (J.Karušs, personal communication, 8 April 2016). It is important to note these differences in financial estimates. Otherwise, so far polar expeditions have been undeservedly portrayed as impossible or unattainable due to the extremely high costs, which could hardly fit with any source of Latvian academic funding.

All in all, the scarcity of Arctic related research examples and lack of prioritisation of polar research in policy and planning documents of ministries or universities are factors, which explain, why Latvia does not have an overarching coordination framework for northernmost matters. Researchers, who are interested in advancing their expertise on northernmost regions, search calls for project proposals of a broader thematic nature, e.g., climate change or support for bilateral, multilateral academic or research cooperation.

There are no signs that in the upcoming years Latvia could experience a major shift, since Arctic does not top the political agenda. Over the last years there have been very brief remarks expressed on the role of the northernmost region during the annual reviews of Latvian foreign policy in 2014 and 2016 (Ministry of Foreign Affairs of the Republic of Latvia, 2014: 3; Zvirbulis, 2016), but a more prominent role of the Arctic region cannot be completely ruled out.

The Faculty of Geography and Earth Sciences of the University of Latvia can be singled out as the sole hub for future Arctic expertise in Latvia in terms of polar field research. Riga Technical University has established cooperation with a Nordic partner and it has acquired understanding, institutional memory and overall awareness regarding the gravimetric analysis performed by research institutions in the Nordic and Baltic countries. However, there are no signs of Riga Technical University's ambition to pursue its own field research in Greenland or other polar areas.

The potential success of furthering polar expertise at the Faculty of Geography and Earth Sciences of the University of Latvia lies in the fact that in a very early stage the research team has identified its niche and how their specialisation would fit in a broader international polar research agenda. However, it is too early to say whether the first successful expeditions will result in a sustainable and regular engagement in the international polar research, due to the fact that at the moment the University of Latvia does not provide any administrative support and there are no regular funding schemes in place which could ensure a long-term planning of expeditions.

EU Arctic Strategy

In September 2014, the DG MARE launched a public consultation on streamlining EU funding in the Arctic. The public consultation lasted until 1 December 2014 (DG MARE, n.d.). On 27 April 2016 EU published its Joint Communication “An integrated European Union policy for the Arctic”.

None of the Baltic States or research institutions based in the Baltic States contributed to the public consultation (“Replies to the consultation,” n.d.). One of explanations behind the absence of written contribution from the Baltic States is that national institutions tend to be weary regarding policy initiatives which do not fall in the category of their top priorities (I.Paune, personal communication, 11 April 2016). For example, both Latvian and Lithuanian Ministries of Education focus on their engagement in the Joint Baltic Sea System Research Programme (BONUS). Lithuania is looking forward to extend the BONUS programme (R. Rudokienė, personal communication 7 April 2016).

However, the Estonian case should be treated with specific attention. At first glance it seems surprising that Estonia did not take part in the public consultation, since there was such a great initiative shown among EU member states engaged in the Arctic. Namely, from all inputs assembled during the consultation 60% of the respondents were based in an Arctic state (Finland, Denmark, Sweden, Norway and Iceland) and 25% of contributors were based in a country with an observer status in the Arctic Council (France, Germany, Poland, the United Kingdom and Italy) (DG MARE, 2014: 2). Following the logic of Estonian sustained focus on Arctic research and governance foras, it seems that this Baltic country should have followed the Arctic enthusiast trend.

However, as one of the explanations for the Estonian inactivity serves its vibrant domestic work in relation to Arctic policy. Estonia differs in this matter with its on-going consultation on the ESTPOLAR 2014-2020 and current work on the expert report on Estonia’s stance in Arctic Council matters. Since neither of these documents has reached the final adoption phase, it serves as an explanation, why Estonia, an active maritime nation with an interest in northernmost matters, did not contribute to DG MARE’s consultation.

Despite its lack of engagement Estonia supports the newly published communication (T.Maiberg, personal communication, 20 May 2016). All in all, Estonian interests as such are mirrored in the new EU Arctic policy because it highlights, EU PolarNet as one of the most important EU funded initiatives oriented towards the Arctic. As previously stated, EU PolarNet is one of the latest initiatives, where Estonian research community is taking part.

In addition, it should be mentioned that this section of the briefing note does not treat the EU Arctic policy in a siloed manner. Therefore, it should be also mentioned that during the last stages of the drafting process of the Joint Communication “An integrated European Union policy for the Arctic”, EU’s stance in Arctic matters was put in the spotlight also in the context of EU’s foreign affairs and the on-going public debates regarding the EU Global Strategy on Foreign and Security Policy (hereafter – EUGSFSP). Namely, European External Action Service (hereafter – EEAS) showed signs of its readiness to devote special attention to the Arctic as one of the four geographic directions to be defined in the EUGSFSP, which is to be launched in June 2016. Such statements might give an impression that the ground has been laid for the establishment of close

interconnections between these two policy documents. However, it remains yet to be seen in June 2016, whether it is the case.⁴

In broad lines, it should be pointed out that Heather Exner-Pirot quite bluntly states that the new document does not provide a substantially new approach towards the Arctic. Her position on the document is that “The EU keeps telling us it cares about the Arctic. I’m not sure the Arctic cares about it” (Exner-Pirot, 2016). However, when taking a more nuanced look at the communication, I would argue that EU is not simply telling us that it cares about the Arctic. The document allows us to familiarize in what particular matters and through which specific initiatives EU is committed to care about the Arctic and contribute to the Arctic affairs during the upcoming years. Namely, several initiatives have been stated, such as the EU PolarNet, where Estonia is taking an active part, the document also features Copernicus programme and the European Global Navigation System (Galileo), as well as special attention is allocated to the seabed exploration and the European Marine Observation and Data Network (hereafter – EMODnet).

By highlighting these specific initiatives, the EU also allows to understand how national contributions are positioned in the broader European picture *a propos* the Arctic. Nevertheless, the EU has not elaborated in more detail how these specific projects fit the global Arctic research agenda or which particular features of these projects are relevant to the northernmost region. For example, such facts as Tallinn Technological University participation in EMODnet Physics and EMODnet Chemistry, Estonian engagement in EMODnet Baltic Sea Checkpoint (E.Kadastik, personal communication, 16 May 2017), Lithuanian former participation in the EMODnet (I.Kiškis, personal communication, 16 May 2016), and participation of Latvian Environment, Geology and Meteorology Centre in EMODnet Geology (A.Jansone, personal communication, 17 May 2016) does not *per se* allow calling the Baltic States as actively engaged in the Arctic. They have joined these projects for various reasons; among them is their interest in summarising and harmonising maritime geological data and its accessibility to users (A.Jansone, personal communication, 17 May 2016). In many cases the participation is more tied to the Baltic Sea geographical setting, rather than polar areas.

Another major flaw of the document is that it is merely silent on its interconnections with other European strategic documents, such as the EU Maritime Security Strategy (hereafter – EUMSS), also facilitated by DG MARE, and the EU Global Strategy on Foreign and Security Policy (hereafter – EUGSFSP). In my previous comments on the EUGSFSP (Šime, 2016), I have already pointed out that it would be advisable for EU not only to increase the quantity of its strategic documents but also raise their overall standard of quality, by including in these documents a more detailed context on institutional and domain specific overlaps and interconnections. Therefore, the quality of these documents could be judged in terms of, how well does a new strategy fits in a broader landscape of existing pool of EU strategies and other overarching policy documents. The drafting process should be in line with the following question. Does the new document contribute by bringing some specific, or even measurable added value to the strategic steering of existing multilateral initiatives, or simply borrows some elements from its notional predecessors for an enrichment of its content?

As it was said before, the new EU Arctic policy brings to the fore several relevant initiatives but it does not state a clear agenda on how to mobilise member state engagement. Therefore, the vagueness of EU’s new Arctic policy as such might lead to wrongful conclusions. Consequently,

EU is advised to draft a progress report in the implementation of its new Arctic policy which would include more explicit information regarding areas where steady progress is most needed or where previous joint member states' commitment has been falling short.

Further paragraphs of this section are dedicated to evaluate EU Arctic policy in the context of other relevant EU strategic initiatives. Here are just some examples of overlaps between documents, which, in order to avoid the paper tiger critique, could benefit from clearer guidelines in future on the specific goals and expected results in the Arctic, foreign or neighbourhood relations, as well as maritime security-specific context. This analysis is complemented by remarks on their relevance in the Latvian and Estonian Arctic research context, as well as recommendations for further action.

First, in a brief and general manner regional smart specialisation strategies are highlighted in both the EU Arctic policy as well as the EUMSS, but stressing different use of these policy documents and their envisaged outcomes. The EUMSS aims at integrating industrial and research assets related to maritime security into regional smart specialization strategies (*EUMSS Action Plan*, 2014: 12, 3.1.10.§). Whereas EU Arctic policy sees regional smart specialisation strategies as enablers of sustainable growth and job creation in the European Arctic (*Joint Communication to the European Parliament and the Council. An integrated European Union policy for the Arctic*, 2016: 3). Taking into consideration the fact that generally drafting and implementation of smart specialisation strategies are not high on Latvian and Estonian local agendas, and Estonian and Latvian local communities have not established close ties with Arctic regions in terms of scientific cooperation, none of these references seem relevant in the Baltic context.

Next, in the case of maritime surveillance, both policy documents show a varied and more nuanced picture. EUMSS in a more general manner acknowledges the importance of coordinated implementation of existing and planned maritime surveillance initiatives, naming the Earth Observation Programme (Copernicus) and Galileo among others (*EUMSS Action Plan*, 2014: 9, 2.3.1.§). The new EU Arctic policy explains that the Copernicus already provides surveillance and monitoring services with satellites in polar orbits and Galileo's future coverage of the Arctic will ensure safe and reliable navigation capabilities for air, maritime and ground applications. In general terms none of the EU documents states any level ambition towards which EU should advance in order to enhance its maritime sector related or Arctic-specific interests. For example, it does not reflect on the potential role of mid-term review of Copernicus and Galileo (European Commission, n.d.).

However, on a more promising note the EU Arctic policy informs on its potential future interconnections with the Space Strategy and European Defence Action Plan (*Joint Communication to the European Parliament and the Council. An integrated European Union policy for the Arctic*, 2016: 12). Therefore it is yet to be seen, whether these new intersections will result in more engagement of the European Defence Agency (European Defence Agency, 2016), as one of facilitating bodies of both EU defence initiatives, in the EU Arctic matters. Since both the Space Strategy and European Defence Action Plan are in the drafting process, then at the moment it is hard to judge how these two documents fit in the context of the Baltic scientific research interests in the Arctic. However, it should be already noted that in terms of the Space Strategy, Estonia and Latvia could highlight the expertise acquired by its academics and further their activities. In the Estonian case it is participation in the PolarView initiative. In the Latvian case relevant national authorities would be

advised to consult with the Directorate-General for Internal Market, Industry, Entrepreneurship and SMEs (also known by the abbreviation DG GROW) and evaluate how EU or national funding could be allocated to enhance the expertise of Riga Technical University experts, by pursuing broader cooperation options with their long-standing partners from the Technical University of Denmark. Since none of the Arctic related research results have thus far been applied in the military industrial sectors of Estonia and Latvia, the synergies of the EU Arctic policy and the European Defence Action Plan seem irrelevant to the scientific communities discussed in this briefing note.

Last, both EU documents dwell on the importance of the United Nations Convention on the Law of the Sea (hereafter – UNCLOS). EUMSS commits EU to promoting the dispute settlement in line with the UNCLOS, while also stressing the importance of confidence building measures and regional codes of conduct (*EUMSS Action Plan*, 2014: 7, 1.6.§). The EU Arctic policy, on its part, briefly reinstates the commitment to the UNCLOS (*Joint Communication to the European Parliament and the Council. An integrated European Union policy for the Arctic*, 2016: 14). In future the EU Arctic policy could be complemented by details on, whether EU sees value of establishing new confidence building measures and the Arctic code of conduct, or the Arctic Council is the central forum, which successfully covers both of these areas. However, as far as the immediate interests of Estonian and Latvian Arctic research community interests are considered, UNCLOS-related sea-bed exploration matters do not fall in their range of expertise, thus does not bear relevance to the national scientific advancement agenda.

Conclusions

The discussion of Arctic research in Latvia and Estonia in particular, and Lithuania in rather general terms, allows to conclude that in each country the acquired scientific expertise, forms of engagement in the Arctic research, as well as ties between specific Arctic research projects and national scientific, as well as EU priorities, vary significantly from country to country.

In terms of field research and Arctic research tradition in general, in comparison to Latvia, Estonia has acquired more experience and expertise, and is in the process of consolidating its short- and mid-term priorities in two policy documents. Estonia's potential to advance its Arctic research largely depends on the adoption of ESTPOLAR 2014-2020, and further on, on its ability to strengthen partnerships with its international cooperation partners and develop systematic collaboration with the industry.

Latvian capacity to engage more actively in international scientific cooperation currently is hampered by the absence of administrative support structures as well as the lack of sustainable funding sources. The only viable future prospects for development of the Latvian Arctic research is to acquire ad hoc funding for field research under various thematic funding schemes or bilateral, cross-border, national and university support programmes.

In each state researchers have acquired different niche expertise. Apart from research heritage preservation initiatives such as Struve Geodetic Arc, they have not been involved in joint research projects or joint field research in the northernmost region. Rather Arctic researchers in each of the Baltic States seek out partnerships with well-established polar research nations. In most cases those are partners from Nordic (and to a lesser extent Eastern European) countries. The situation, that thus far there have not been any joint (notionally) Baltic research projects in the northernmost region, can be explained by two factors. First, due to cost effectiveness and lack of existing national

research facilities in the Arctic, scientists from all three nations are interested in acquiring access to the research facilities operated by other European nations.

Second, on the national level there have not been political incentives to promote joint Baltic research projects in the Arctic. In Latvia Arctic related research has not benefited from any attention among the policy makers and political leadership. On the contrary, in Estonia, its Arctic-related expertise is well known and discussed in two policy documents (ESTPOLAR 2014-2020 and report on the potential national application for the observer status at the Arctic Council) currently being prepared for adoption.

Coming back to the idea of joint Baltic initiatives related to the Arctic, one way, how the young generation of Arctic researchers in the Baltic States could enhance an exchange of information and overall awareness of their activities, is to pursue a bottom-up initiative by establishing national committees in the framework of the Association of Polar Early Career Scientists (hereafter – APECS). On the one hand, it would help to promote their work among peers from other countries. On the other hand, such committees could serve as a springboard for annual joint meetings of all three Baltic committees with an aim to engage in a mutual exchange of information regarding their latest activities, as well as explore opportunities for joint projects or cooperation in broader multilateral initiatives. The viability of this recommendation largely depends on two factors. First, whether the Arctic researchers in the Baltics want to establish new structures as discussion foras with an aim to increase regional ties, or they prefer to stick to the existing international gatherings and follow the established patterns of international cooperation. Second, an impetus towards Baltic dialogue could be drawn from similar research interests. Currently, Estonian and Latvian scientists do not share the same research interests in the Arctic, thus there are less points of intersection in terms of their expertise. However, in the long run it cannot be ruled out that both Estonian and Latvian Arctic research agendas might reach some commonalities by integrating new areas of expertise acquisition.

It should also be pointed out that in the Latvian setting, where there are no coordinating structures of Arctic related research, the APECS national committee might fill the notional vacuum. Since there are no coordinating formats, where Arctic-related research interests could be summarized and channeled further to policy makers, this committee could implement this function. Moreover, it cannot be ruled out that Arctic could be brought to the spotlight in future political discussions. In case the Arctic would top the political agenda and policy makers would start seeking for some expert advice, this committee might turn out the sole hub or nodal point which could deliver an overview on Latvian engagement in the northernmost research. Otherwise, right now the information on Arctic related research engagement remains scattered among various governmental and research institutions with no joint fora, where an overarching view on the on-going processes could be obtained.

The two national case studies also illustrate that being a passive observer of EU public consultation process does not necessarily mean that a country is a laggard in the specific policy domain or does not have any interest in the region. While there are no signs of Latvian policy makers' intentions to promote or enhance specifically Arctic-related research, a completely opposite situation can be traced in Estonia. Estonia did not contribute to the public consultation process of the EU Arctic policy, but it is an active participant of various Arctic-related EU-supported research projects. Moreover, the EU Arctic policy's interconnections with other upcoming EU-level strategic

documents, such as the European Space Strategy, provide potential to further Baltic scientific activities, if backed by the respective national governing bodies, and thus, contribute to the implementation of the EU goals.

Moreover, since EU governance as well as EU's approach in managing its external relations is characterized by multi-level and multi-nodal environment, the Estonian case shows that representatives of the same nation might choose different venues to articulate the same interests and ensure practical engagement in a specific region. On the one hand, it is mirrored by the Estonian multi-faceted support to reinforced engagement in the Arctic. Estonia supports EU's bid for the observer status at the Arctic Council, and meanwhile prepares also its own stance regarding the potential national bid for the observer status in this regional format. In addition, Estonia actively engages in EU Arctic-related initiatives, while not scrutinising and expressing its views on every EU strategic policy document which holds relevance to the Estonian conducted research in relation to the Arctic.

On the other hand, the analysis provided regarding thematic intersections and overlaps between different EU strategic policy documents clearly indicate that, in terms of issue management, an EU member state is in a privileged position to decide which specific policy document and its discussion fora fits best to its interests. It can decide to express its support for one particular cause on several occasions, since the vagueness of EU strategic policy documents and a limited scope of their orderly interconnectedness allows dwelling on the same topic on multiple occasions. Therefore, a further analysis of Latvian and Estonian engagement in EUMSS management and EUGSFSP drafting could shed more light on how national Arctic-related research contributes to or does not play a role in the shaping of national position as regards to these strategic documents.

The information obtained for this briefing note also reveals that the EU is far from the only international organisation which holds relevance in terms of national Arctic research agenda. One example is the relevance of the UN in the context of the preservation of research heritage. All three Baltic States, among other countries of Struve Geodetic Arc, collaborate by exchanging information on the progress of mapping and analysing the station points in their respective territories. Thus it serves as an example that Arctic-related research is being performed within the Baltic States in close cooperation with UN's specialized agency UNESCO.

The three Baltic States have also regained awareness of their colleagues' work in the Nordic countries during the meetings of the Nordic Geodetic Commission. Although the Baltic States have not regained their pre-World War II status within the Commission, their presence rather than formal status ensures regular exchange of information regarding domain-specific developments. Nevertheless, it would be wrong to assume that the Commission plays an equal role in the national Arctic research agenda of both examined countries. For Latvia this Commission serves as an important forum in the Arctic context. On the contrary, it has no relevance in the Estonian case, since Estonia is involved in a non-Arctic related research under the auspices of the Commission.

All in all, it can be concluded that with or without the support of a national policy framework, thus at differing speed, both Latvia and Estonia are advancing towards acquiring their niche expertise in the Arctic research. Therefore, their efforts cannot be necessarily characterised by grand titles as "pivoting to the North Pole", but steadily in a step-by-step approach Latvian and Estonian researchers are amassing expertise, which if backed by more steady national support towards

internationalisation and cooperative networks, in time might increase in relevance in a broader scientific community.

Notes

1. E.g. Erki Tammiskaar should be named as one of most active analysts of Estonian polar research history.
2. E.g. Admiral F.v. Bellingshausen has an Antarctic-based Russian research station named after him, Ferdinand Wrangell has Wrangell Island (situated in the Arctic Ocean) named after him. Other famous figures are K.E. von Baer, A. T. Von Middendorf and Eduard Gustav von Toll.
3. In comparison, the Estonian engagement in the Nordic Geodetic Commission is focused on the issues of Fennoscandian land uplift related to melting of the Scandinavian Ice Sheet at the end of the last glaciations, which took place about 10 000 years ago. This research is not related to the Arctic (R.Vaikmäe, personal communication, 3 June 2016).
4. This briefing note was prepared and submitted for publication during the first half of June 2016. Therefore, there are no specific analysis provided regarding the EU Global Strategy which was released at the end of June 2016.

References

- Bryza, M., Mõru, O., Stoicescu, K., & Jegorova, N. (2014). *Cooperation and Conflict in the Arctic: A Road Map for Estonia*. Tallinn. Retrieved from: <http://www.icds.ee/publications/article/cooperation-and-conflict-in-the-arctic-a-road-map-for-estonia>
- Buševica, A., & Gulbinska, P. (2015). Zinātnieki grasās pārzīmēt kartes. Kāpēc ledāji kūst? *Public Broadcasting of Latvia*. Retrieved April 24, 2016, from: <http://lr1.lsm.lv/lv/raksts/zinamais-nezinamaja/zinatnieki-grasas-parzimet-kartes.-kapec-ledaji-kust.a55305/>
- Community for Research and Development Information Service. (n.d.). The European Polar Consortium: Strategic Coordination and Networking of European Polar RTD Programmes. Retrieved May 29, 2016, from: http://cordis.europa.eu/project/rcn/75895_en.html
- Čunka, J. (2016). Latvijā atdzimst polāro pētījumu zinātne. *Public Broadcasting of Latvia*. Retrieved March 28, 2016, from: <https://www.lsm.lv/lv/raksts/tehnologijas/dzive/latvija-atdzimst-polaro-petijumu-zinatne.a175260/>
- DG MARE. (n.d.). Streamlining EU funding in the Arctic. Retrieved May 15, 2016, from: http://ec.europa.eu/dgs/maritimeaffairs_fisheries/consultations/arctic-eu-funding/index_en.htm
- DG MARE. (2014). *Results of the public consultation on streamlining EU funding in the European Arctic 1. THE CONSULTATION*. Retrieved from: http://ec.europa.eu/dgs/maritimeaffairs_fisheries/consultations/arctic-eu-funding/doc/results_en.pdf
- Estonian Academy of Sciences. (2015). *Estonian Academy of Sciences Year Book XX (47) 2014*. (J. Engelbrecht, Ed.) (20th ed.). Tallinn: Estonian Academy of Sciences. Retrieved from: <http://www.digar.ee/id/nlib-digar:273249>

- European Arctic Initiatives Compendium*. (2013). Retrieved from: <http://www.arcticinfo.eu/en/news/83-european-arctic-initiatives-compendium-published>
- European Commission. (n.d.). Roadmap “A Space Strategy for Europe.”
- European Defence Agency. (2016). EDA presents hybrid threat exercise findings to Defence Ministers. *European Defence Agency*. Retrieved from: <https://www.eda.europa.eu/info-hub/press-centre/latest-news/2016/04/19/eda-presents-hybrid-threat-exercise-findings-to-defence-ministers>
- European Union Maritime Security Strategy - Action Plan (2014). Brussels. Retrieved from http://ec.europa.eu/maritimeaffairs/policy/maritime-security/doc/20141216-action-plan_en.pdf
- Exner-Pirot, H. (2016). The EU’s Arctic policy – A means, not an end. *Eye on the Arctic*. Retrieved May 15, 2016, from: <http://www.rcinet.ca/eye-on-the-arctic/2016/05/03/blog-the-eus-arctic-policy-a-means-not-an-end/>
- Huntford, R. (2001). *Nansen: the explorer as hero*. London: Abacus.
- Joint Communication to the European Parliament and the Council. An integrated European Union policy for the Arctic (2016). Brussels. Retrieved from http://ec.europa.eu/arctic_region/docs/160427_joint-communication-an-integrated-european-union-policy-for-the-arctic_en.pdf
- Karušs, J., Bērziņš, D., & Lamsters, K. (2015). *Hofsjegidla ledāja pētījumi ar radiolokācijas metodi*. Riga. Retrieved from: http://www.geo.lu.lv/fileadmin/user_upload/lu_portal/projekti/gzzf/Konferences/LU_73_konf/LU_73_Karuss_islande_radiolokacija.pdf
- Karušs, J., Lamsters, K., & Bērziņš, D. (2015). The geomorphology and ground penetrating radar survey results of the Múlajökull and Þjórsárjökull surge-type glaciers, central Iceland. *Geophysical Research Abstracts*, 17, EGU2015, 7258. Retrieved from: <http://meetingorganizer.copernicus.org/EGU2015/EGU2015-7258.pdf>
- L. W. D. (1931). the Baltic Geodetic Commission. *Science*, 73(1887): 227–227. doi:10.1126/science.73.1887.227
- Lamsters, K., Karušs, J., Bērziņš, D., & Rečs, A. (2015). Subglacial topography of the marginal zone of Múlajökull surge-type glacier, central Iceland. In C. H. Tjijm-Reijmer, F. Navarro, & M. Sharp (Eds.), *LASC Workshop on the dynamics and mass budget of Arctic glaciers. Abstracts and Programme* (pp. 23–25). Benasque: IASC Network on Arctic Glaciology. Retrieved from <http://nag.iasc.info/workshop>
- Land Board of the Republic of Estonia. (n.d.). Struve-Tenner Meridian Arc. Retrieved May 29, 2016, from https://www.maaamet.ee/index.php?lang_id=2&page_id=436
- Latvian National Commission for UNESCO. (n.d.). Strūves ģeodēziskais loks. Retrieved May 22, 2016, from: <http://www.unesco.lv/lv/kultura/pasaules-mantojums/struves-geodeziskais-loks/struves-geodeziskais-loks-1/>
- Ministry of Foreign Affairs of the Republic of Estonia. (2014). Foreign minister Urmas Paet: Estonia is considering observer status in the Arctic Council. *Ministry of Foreign Affairs of the Republic of Estonia*. Retrieved May 15, 2016, from: <http://vm.ee/en/news/foreign-minister-urmas-paet-estonia-considering-observer-status-arctic-council>
- Ministry of Foreign Affairs of the Republic of Latvia. (n.d.). Ārlietu ministra ikgadējais ziņojums par paveikto un iecerēto darbību valsts ārpolitikā un Eiropas Savienības jautājumos. Retrieved May 29, 2016, from: http://www.mfa.gov.lv/data/02012014_arlietu_ministra

[zinojums.pdf](#)

Nordic Geodetic Commission. (n.d.). Nordic Geodetic Commission. Retrieved May 29, 2016, from: <http://www.nordicgeodeticcommission.com/>

Noslēgusies GNSS vēltīta ANO konference Rīgā. (2012). Retrieved May 22, 2016, from: <http://www.mernieks.lv/article/1624?lang=ru>

Replies to the consultation. (n.d.). Retrieved May 15, 2016, from: http://ec.europa.eu/maritimeaffairs/consultation-replies-arctic/replies_to_questions.htm

Šime, Z. (2016). EU's Conundrum of Strategies: Is There an Orderly Jigsaw on the Horizon? *European Governance*. Retrieved May 15, 2016, from: <http://europeangovernance.ideasoneuropa.eu/2016/01/27/eus-conundrum-strategies-orderly-jigsaw-horizon/>

Slaucītājs, L. (1929). Jaunākie arktiskie ceļojumi. In R. Putniņš (Ed.), *Ģeogrāfiski raksti - Folia Geographica* (Vol. I, pp. 139 – 157). Rīga: Armijas Spiestuve.

Slaucītājs, L., & Bīlmanis, A. (1934). *Fridtjofs Nansens: dzīve un darbi*. Rīga: A.Raņņa grāmatu tirgotavas apgādība.

UNESCO World Heritage Centre. (n.d.). Struve Geodetic Arc. Retrieved May 22, 2016, from: <http://whc.unesco.org/en/list/1187>

United Nations Office for Outer Space Affairs. (2012). United Nations/Latvia Workshop on the Applications of Global Navigation Satellite Systems. Retrieved May 22, 2016, from: http://www.unoosa.org/oosa/en/ourwork/psa/schedule/2012/workshop_latvia_applicationsgnss.html

Vaikmäe, R. (2015). A glimpse on: Estonian Polar Research. *EU PolarNet*. Retrieved March 28, 2016, from: <http://www.eu-polar.net/european-polar-science/europe-and-the-polar-regions/estonian-polar-research.html>

Vargulis, M. (2014). Latvia in the Arctic: a case study of risks and opportunities for a small sub-Arctic countries. In A. Sprūds & T. Rostoks (Eds.), *Perceptions and Strategies of Arcticness in sub-Arctic Europe* (pp. 193 – 215). Rīga: Latvian Institute of International Affairs. Retrieved from: <http://www.lai.lv/lv/publications/perceptions-and-strategies-of-arcticness-in-sub-a/>

Zvirbulis, Ģ. (2016). Saeima ikgadējās ārlietu debatēs aptvēra tematiski un ģeogrāfiski plašu jautājumu loku. *Latvijas Avīze*. Rīga. Retrieved from: <http://www.la.lv/no-arktiskas-lidz-afrikai/>

Briefing Note

The Fulbright Arctic Initiative: An Innovative Model for Policy Relevant Research & Public Outreach

*Ross A. Virginia, Michael Sfraga, Tom Arnbom, Linda Chamberlain, Susan Chatwood, Asli Tepecik Diş, Gunhild Hoogensen Gjørvi, Tamara K. Harms, Anne Hansen, Gwen Holdmann, Noor Johnson, Trevor Lantz, Bjarni Magnússon, Itty S. Neuhaus, Gregory Poelzer, Laura Sokka, Maria Tysiachniouk, Øystein Varpe, and Niels Vestergaard

Introduction

Arctic peoples are experiencing profound environmental, social, and economic change caused by climate change, resource development, and globalization. The Arctic is confronted with critical policy challenges on issues of community health and wellness, energy resources, environmental protection, sustainability of the Arctic Ocean, infrastructure, indigenous rights, and regional governance. The eight nations of the Arctic have an established history of peaceful cooperation, especially around scientific research, but this cooperation is constantly tested as the Arctic becomes more prominent in the global geopolitical landscape.

The Arctic nations are joined together in dialog through the Arctic Council. Founded in 1996 as a high level international forum, the Arctic Council serves to promote cooperation and coordination among the Arctic states. Its working groups provide important assessments on issues such as environment and climate, biodiversity, Arctic peoples, oceans, and shipping. In a relatively short time, the Arctic Council has achieved a measure of success in setting an agenda focused on the key

The Fulbright Arctic Initiative is a new multidisciplinary, multinational team research program designed around specific applied research challenges in the areas of water, energy, health and infrastructure. The Initiative is designed to have an immediate impact on our understanding of these Arctic issues within the timeframe of the U.S. Chairmanship of the Arctic Council (2015-2017). The Fulbright Arctic Initiative brings together leading scholars, policy makers, government officials, indigenous peoples and other stakeholders to identify critical Arctic issues, conduct policy-relevant research, and widely share findings and recommendations.

policy issues facing the region. But the Arctic Council is dependent on access to policy relevant research for setting priorities and allocating resources to assessments and outreach.

The Chairmanship of the Arctic Council rotates among the member states every two years, providing an opportunity for the Chair to focus its agenda on issues of special importance at the national level and for the entire region. In May 2015, the United States assumed the Chairmanship from Canada at the Ministerial Meeting in Iqaluit, Canada. The U.S. Chairmanship program under the Department of State identified three focus areas: improving economic and living conditions for Arctic communities; Arctic Ocean safety, security and stewardship; and addressing the impacts of climate change.

In support of the ongoing need for policy relevant research to aid the Arctic Council's mission, the U.S. Department of State's Bureau of Educational and Cultural Affairs announced the [Fulbright Arctic Initiative \(FAI\)](#) in Fall 2014. Operating outside the Arctic Council, the FAI was designed to support and complement the needs of the Arctic Council for innovative multidisciplinary and interdisciplinary research in thematic areas of interest to the Arctic Council and the U.S. Chairmanship program. This Briefing Note describes the events leading to the FAI, its mission and structure, and reports on activities and accomplishments to date. The FAI seeks to address the policy challenges confronting the Council and Arctic nations, as captured in the following comments:

"The Arctic region is the last global frontier and a region with enormous and growing geostrategic, economic, climate, environment, and national security implications for the United States and the world."

- U.S. Secretary of State John Kerry, February 14, 2014

"Many of the social and economic challenges faced by Inuit today are therefore influenced by global factors. This is why ICC supports the proposed themes and projects for the USA Arctic Council Chairmanship. The themes are crucial to the Inuit, and indeed, they are indivisible from our identity, way of life, and our future."

- Inuit Circumpolar Council Chair, Okalik Eegeesiak, April 24, 2015

The Fulbright Program

The Fulbright Program was established in 1946. It has become the U.S. flagship international educational exchange program administered by the Bureau of Educational and Cultural Affairs (ECA) within the Department of State. The broad goal of Fulbright is "to increase mutual understanding between the people of the United States and the people of other countries." This has been accomplished largely by supporting individual scholar and student exchanges bridging more than 160 countries across the world. The collective action of Fulbright participants leads to an increase in global capacity to address major challenges such as climate change, sustainable energy, health, and food security.

The Fulbright Arctic Initiative (FAI)

The Arctic Initiative emerged during a Fulbright Workshop ("Shaping Arctic Change through Conscious Choices") held in Abisko, Sweden, in October 2013, sponsored by the U.S. Embassy in Stockholm and the Swedish Ministry of Foreign Affairs, in cooperation with the Stockholm Environmental Institute and the World Wildlife Fund for Nature/Sweden. Conceived by U.S. Ambassador to Sweden Mark Brzezinski and the Chairman of the Fulbright Foreign Scholarship

Board, Tom Healy, the Workshop brought together approximately 40 Fulbright scholars and alumni and regional Fulbright program officers, who recommended a new type of Fulbright effort, one that featured coordinated team research on critical policy challenges facing Arctic nations.

An ongoing dialog between Fulbright and Arctic experts identified key research areas where multinational and multidisciplinary teams could work in thematic areas broadly supportive of the U.S. Arctic Council Chairmanship program and other key Arctic stakeholders, i.e., water, energy, health and infrastructure.

The FAI was announced by Ambassador Brzezinski in a U.S. network television interview. A call for applications was made in October 2014 at the Arctic Circle Assembly in Reykjavik, Iceland, by Steve Money (U.S. State Department, Bureau of Educational and Cultural Affairs). Scholar applications were solicited from October 2015 into February 2016 and a peer-review selection committee recommended 17 scholars from the eight Arctic nations to the Fulbright Board to form the inaugural cohort of FAI scholars, directed by Co-Lead Scholars Michael Sfraga and Ross Virginia.

The Scholar Support System

Structure and Expectations

The FAI has key features that distinguish it from most other Fulbright programs. FAI scholars participate for 18 months, including an individual exchange of 1.5-3 months to pursue their proposed independent research projects. Each scholar also conducts collaborative work within a thematic research team. The team produces policy relevant research and engages with the public through outreach activities and broad dissemination of their work. The scholars were organized into thematic research teams by the co-lead scholars with the goal of creating interdisciplinary dialog and diversifying international perspectives on solutions to pan-Arctic problems. The thematic working groups were formed around a set of questions:

- Energy: How will oil, gas, and other natural resources be developed in the Arctic? What can be done to promote clean renewable energy, reduce pollutants, guarantee the inclusion and rights of indigenous people, and protect the environment?
- Water: How can we understand, mitigate, and adapt to the dramatic changes occurring and projected for the Arctic Ocean environment and fresh water regimes, such as changes to fisheries, oil spills, the emergence of invasive species, and shifts in the food supply for local communities?
- Health: What specific issues do coastal communities face, such as erosion and storm surge, subsistence activities and food supply, availability of medical care, transportation, telecommunications, protection and continuity of their identities as indigenous peoples? What opportunities and vulnerabilities can be addressed for the sustainability of affected communities?
- Infrastructure: How can we rethink ports, pipelines, freshwater storage and treatment, and other infrastructure and security issues? What measures and policies should be developed to promote multi-national cooperation on search and rescue, emergency environmental response, and safe shipping?

The Co-lead Scholar Model

The FAI functions with a co-lead scholar model. The co-leads share responsibility for the academic focus of the program and for assisting the scholars in their individual and group research. They serve as mentors and are the scholar interface with the administrative staff and leadership at the State Department's Bureau of Educational and Cultural Affairs and the Institute of International Education (IIE). The co-leads organize monthly plenary seminars using a web-based platform (Basecamp) to sustain group identity and promote project integration. Guest speakers provide examples of innovative research and outreach and serve to connect the research to policy issues. In addition, the co-lead scholars have major responsibility for three multi-day group seminars during which the scholars work on research and present results to the public and the policy communities. The co-lead scholars actively publicize the work of the FAI scholars and present at national and international seminars, conferences, and symposia.

The Fulbright Arctic Plenary Seminars

The face-to-face plenary seminars are an essential investment in the FAI program. The success of the FAI is contingent on the group's identity as scholars working on shared problems. They each bring a research network and experiences shaped by their national identity, discipline, and career path.

In May 2015, the [founding plenary seminar](#) hosted by Fulbright Canada was held in Iqaluit, Nunavut, where just a month earlier the U.S. assumed the Arctic Council chairmanship from Canada. Holding the inaugural FAI plenary meeting in the Arctic allowed the group to define its goals within the context of the sustainability challenges facing Iqaluit and Arctic communities in general. A set of guiding principles emerged that helped group projects develop with a common purpose and shared methodology. The group affirmed that community research needs should be prioritized, partnerships with northern peoples and stakeholders were important to all FAI work, and sharing results with the public was expected. The working groups developed public outreach strategies and began the process of building model frameworks for their collaborative research.



Scholars from the eight Arctic countries gathered in Iqaluit, Nunavut, Canada, for their first official meeting as participants of the Fulbright Arctic Initiative.

In Iqaluit, community leaders Peter Taptuna, premier of Nunavut, Ekho Wilman, mayor of Iqaluit, and Okalik Egeesiak, chair of the Inuit Circumpolar Council challenged the FAI scholars to design research relevant to peoples of the North. David Balton, U.S. Ambassador for Oceans and Fisheries and Chair of the Senior Arctic Officials, Julie Gourley, U.S. Senior Arctic Official, and CanNor President Janet King provided an international perspective by discussing U.S. and Canadian government priorities for the region. Arctic researchers, including Gwen Healy, director of the Qaujigiartiit

Health Research Center, and Mary Ellen Thomas, senior research officer at the Nunavut Research Institute, spoke to the particular challenges of conducting research in the Arctic and the importance of adopting a community scale lens for viewing Arctic issues.

The [midterm plenary meeting](#), in February 2016, was co-hosted by Fulbright Finland and the University of Oulu. In a public and web-streamed event, the FAI scholars had the first opportunity to present their ongoing research as part of a broader public symposium (“Towards a Sustainable Arctic Future”) that gathered together Arctic scientists, students, policymakers, industry, and NGO representatives and other key stakeholders as well as the general public. During working sessions over the 5-day plenary, FAI scholars presented their ongoing work for critique by Arctic experts and formed new research network connections. FAI research was featured in the session “Informing Policy Through Collaborative Research.” The symposium included welcoming video comments by U.S. Secretary of State John Kerry, who highlighted the need for interdisciplinary team research to address climate change.

[Fulbright Arctic Week](#), October 24-28, 2016, in Washington D.C., will focus on sharing the policy relevance of individual and group research projects and offer public outreach that highlights the importance of the Arctic to our global environment and international relations. Events will be held at the Smithsonian National Museum of Natural History, the U.S. National Academy of Sciences, the U.S. Department of State, and the Carnegie Endowment for International Peace. The FAI scholars will meet as individuals or in small groups with influential public and private stakeholders to share key policy recommendations stemming from their research.

Thematic Research Progress and Impact

The scholars are organized into three thematic working groups, each creating new collaborative research that is beyond the scope of their individual research projects. The general approach, key findings and anticipated policy relevance of the three working groups is described below.

Energy Working Group

The Energy Working Group draws on diverse disciplinary backgrounds including international law, engineering, sociology, anthropology, political science, and environmental studies to understand the impacts of extractive industries and the transition to renewable energy in the Arctic. In their individual research projects, scholars tackle issues related to the legal framework for energy development, the social, environmental, and economic impacts of both renewable and non-renewable energy, and the business and investment opportunities emerging from renewable energy sector development.

As a core driver of economic and social development, energy is central to discussions of geopolitics and national and human security. The U.S.-Nordic Leaders’ Summit in May 2016 noted the “foundational role energy plays in our economies and that energy security is key for overall security.” As evidenced by the COP21 (Paris) and the GLACIER (Anchorage, Alaska) conferences in 2015, there has been a significant uptick in political will to support a transition from non-renewable to renewable energy sources. The energy sector alone accounts for more than two-thirds of global greenhouse gas emissions; renewable energy can deliver half of all emission reductions needed to meet global targets. While the Arctic region bears much of the brunt of the impacts of climate change, the region is also poised to play a global leadership role in the deployment of

renewable energy. The Arctic Energy Summit (Fairbanks, Alaska) in 2015 demonstrated this through multiple success stories, from the development of microgrids to the deployment of renewable wind, hydro, solar, and geothermal technologies. However, renewable energy development across the Circumpolar North is highly variable, suggesting the need for further research and investment and the importance of strong and supportive policy.

Group process to develop policy recommendations

The Energy Group is developing policy recommendations in support of the development and deployment of renewable energy in the Arctic region. From June 27–July 1, 2016, the International Centre for Northern Governance and Development at the University of Saskatchewan hosted a group workshop and retreat and identified a set of significant policy challenges and opportunities for the wide-scale development and adoption of renewable energy. Governments, communities, and the private sector will need to address:

- Human capacity challenges to manage renewable energy deployment at the community level;
- Financial capital to invest in renewables at the local level;
- Technical challenges associated with deployment of renewables in islanded, micro-grid communities, as well as variable renewable energy sources (wind, solar, run-of-river hydro);
- Challenges associated with integrating renewable energy with the transportation and heating sectors.

If the full social and economic benefits of a future clean energy sector are to be realized, governments, communities, and industry should seek opportunities to build:

- Alignments between complementary industries, such as forestry and biomass energy, to create expanded and sustainable economic development strategies;
- A global export energy industry for rural and remote regions through the capturing economies of scope through circumpolar cooperation in the renewable energy sector.

The Energy Working Group drew upon its national perspectives, comparative research exchange experiences, as well as diverse disciplinary strengths to identify principles and best practices that could help overcome the challenges of creating a sustainable energy future for the Arctic. Best practices include the importance of early stage consultation and the impact assessment process and the need for strong investment in early stage renewable energy funds to promote public-private partnerships.

In particular, our assessment of the global policy environment suggests that Arctic nations would be well served to develop Arctic Council renewable energy guidelines on policies and practices for use during planning, assessment, development, and production. Energy Group recommendations are intended to inform the development of such guidelines and to encourage the creation of standards appropriate to local, environmental, and cultural contexts in Northern regions.

Health and Infrastructure Working Group

Building on the intersection of biology, ecology, engineering, and epidemiology, the Health and Infrastructure Working Group has focused on issues of sustainability, resiliency, and health policy in the Arctic region. This investigation is developing an integrated model of socioecological interactions, relationships and outcomes that impact health and wellness in circumpolar countries.

The overarching goal of the group is to explore how multidisciplinary approaches could enhance the understanding of community wellness in the Arctic.

There is a recognition that community wellness in Arctic regions is influenced by a multitude of factors also known as determinants of health. In Arctic regions these determinants include education, material resources, housing and associated infrastructure, mental wellness, early childhood development, social exclusion, personal security, culture and language, food security, climate change, environmental contaminant exposures, and governance and self-determination. The convergence and interactions of multiple stressors impact the health and wellbeing of Arctic communities and fuel social and economic inequities in the Arctic region.

A comprehensive scoping review revealed that multidisciplinary approaches to research around community wellness were generally lacking. There is a need for governments and the private sector to support research initiatives that bring together multiple disciplines and local and traditional knowledge to consider how Arctic communities define wellness and to develop research partnerships that answer questions that meet the priorities of Arctic peoples.

A workshop at Dartmouth College, in January 2016, brought together additional experts and community perspectives on health care and delivery, infrastructure challenges, youth engagement, and traditional knowledge. The Dartmouth workshop was a consensus seminar featuring facilitated panel discussions by experts, break out sessions, and non-traditional and holistic approaches, including a traditional talking circle to ground the academic discussion in the shared, first-hand experiences of community members and health providers. The key determinants of community wellness that were described include human capacity building and local training, cultural connection, trauma, access to health care services and self-determination. Critical infrastructure challenges could not be separated from issues of wellness, and included safe housing and access to affordable and sustainable energy.

Ongoing research and development of an innovative multidisciplinary model focused on the determinants of Arctic health and wellness will build on the findings of the scoping review and the community workshop.

This model will provide guidance for stakeholder collaborations so that they meet key objectives of Arctic residents, including:

- Exploring more holistic definitions and connotations of wellness in Arctic communities by drawing from the perspectives of multidisciplinary teams and traditional and academic knowledge bases;
- Providing new avenues for collaborative research between academic sectors, indigenous knowledge holders and non-governmental and governmental entities to link infrastructure challenges with wellness;
- Expanding an evidence base for public and health policy within circumpolar nations.

Findings from this collaboration are being shared through publications, conference presentations, and a collection of digital stories from the North that feature lived experiences and emphasize the impacts of the determinants of health in Arctic communities.

Water Working Group

Changing climate and increased freshwater delivery to the Arctic Ocean will have significant ecological, economic, and social impacts on marine life and the sustainability of Arctic

communities. The Arctic Ocean is the earth's most land-influenced ocean, and as a result, inputs of freshwater and associated sediment and solute loads from land may have disproportionate influence on ecological processes in the Arctic Ocean, relative to other oceans. The governance structure for the management of Arctic Ocean natural resources will determine how the Arctic region can adapt to environmental change and build a resilient Arctic Ocean management system. The Water Working Group is investigating:

- Consequences of increased precipitation and altered flow in major Arctic rivers and changes in the delivery of nutrients and sediments to the Arctic Ocean ecosystem;
- Influences of a changing Arctic Ocean environment on the abundance of wildlife important for commercial and subsistence harvest and ecosystem sustainability;
- Impacts of sea-level rise on the Arctic Ocean ecosystem and its coastal margins caused by the thawing of permafrost and the melting of glaciers and the Greenland Ice Sheet.

The Water Working Group is addressing an array of issues facing people and ecosystems dependent on marine and freshwater resources. The group includes scholars with individual research projects and interests in hydrology, biology, glaciers, food webs, fisheries, marine mammals, visual arts, and governance and policy.

A Changing Arctic Ocean

Changing climate and increased freshwater delivery to the Arctic Ocean are expected to have significant ecological, economic, and social impacts on marine life and the food security of Arctic communities. Climate change is profoundly influencing the distribution, physical state, and quality of water in Arctic lakes and rivers as well as in the Arctic Ocean. For example, the Arctic Ocean is increasingly free of sea ice, and Arctic lakes and rivers are ice-covered for shorter periods. Increased duration and spatial extent of open water present new opportunities for accessing shipping corridors and fishing grounds in the Arctic Ocean, but impede winter travel over ice required by industry and subsistence hunters. Many Arctic lakes are disappearing due to drainage following permafrost thaw, which reduces habitat for freshwater species, but may curtail methane emissions from saturated sediments.

The distribution of resources that support productivity in aquatic ecosystems is also changing. For example, permafrost thaw may cause increased availability of growth-limiting nutrients, including nitrogen and phosphorus, in freshwater and subsequent delivery of these nutrients to the ocean. Melting of ice sheets not only releases freshwater of sufficient volume to potentially contribute to sea-level rise, but also delivers limiting nutrients to the ocean. Climate change is also causing increased precipitation at high latitudes, both due to northward movement of warmer, wetter air and to increased evaporation from the increasingly ice-free surface of the Arctic Ocean. Increased precipitation results in greater runoff of freshwater from land to the ocean, and enhances delivery of resources essential to biota by rivers, which may in turn alter patterns of marine productivity.

Strengthened terrestrial-marine coupling as mediated by river discharge has myriad potential consequences in marine environments including altered abundance and species composition of biota, altered seasonality of resource availability, and changes in the spatial distribution of productivity hot spots. However, the realization of altered marine productivity and potential human responses to changing resource availability are the result of processes interacting across spatial and temporal scales, each of which is accompanied by significant uncertainty. For example, thawing

permafrost may cause increased yields of limiting resources delivered by rivers, but the magnitude and timing of permafrost thaw remains uncertain. The effect of new inputs of carbon and nutrients to the Arctic Ocean depends upon the physical attributes of coastlines and shelves shaping currents and development of land-fast sea ice. Spatial and temporal redistribution of biota is occurring, but the many interacting drivers of species distributions, including migration of temperate species, warming and acidifying waters, and nutrient-driven increases in primary productivity, remain difficult to predict. Human responses to altered productivity of the Arctic Ocean are similarly uncertain, and will be dependent on local economies and fishing pressures driven by the pace of economic development at a global scale.

Predicting and responding to a changing Arctic Ocean therefore requires approaches that can accommodate significant uncertainty. The Water Working Group is implementing a scenario analysis approach to consider multiple potential future states of the Arctic Ocean. These scenarios can be built upon information from many sources including traditional knowledge, and models and data derived from western science. Importantly, scenarios can facilitate thinking about events with low probability but catastrophic outcomes that are difficult to accommodate in quantitative models, but are essential to developing policy options for Arctic decision makers.

Individual Research and the Exchange Experience

Each FAI scholar has completed a Fulbright exchange visit of 1.5 to 3 months (Table 1). The non-U.S. scholars visited institutions within the United States and U.S. scholars conducted their exchange visits at institutions within Canada, Denmark, Finland, Iceland, Norway, Russia, or Sweden. The disciplinary diversity represented by the scholars is high and includes a wide range of career stages and professional affiliations. The group research projects are informed and strengthened by the individual research programs.

The exchange visits expand the Fulbright network across the Arctic region and add to the richness of the Fulbright inspired collaboration.

Table 1: The Fulbright Arctic Initiative Scholars exchange locations, thematic working groups, and individual project descriptions.

Name	Home	Host	Discipline	Group*	Project description
Tom Arnbom	Sweden	Dartmouth & University of Alaska Fairbanks, USA	Biological Science	W	International frameworks for the protection of walrus
Linda Chamberlain	USA	University of Oulu & University of Jyväskylä, Finland	Public Health	H&I	Trauma-informed framework for health and wellness in the Arctic
Susan Chatwood	Canada	University of California, Los Angeles, USA	Public Health	H&I	Health systems performance in Arctic regions
Asli Tepecik Diş	Sweden	Massachusetts Institute of Technology, USA	Spatial Plan	H&I	Arctic as a test site for new spatial planning practices

Gunhild Hoogensen Gjørsv	Norway	University of Washington, USA	Political Science	E	Tensions between energy and environmental security in the Arctic
Anne Hansen	Denmark	University of Alaska Fairbanks, USA	Env Science	H&I	Impact assessment and offshore oil development in the Arctic
Tamara K. Harms	USA	University of Umeå, Sweden	Env Science	W	Flow regimes of Arctic rivers
Gwen Holdmann	USA	National Energy Association of Iceland	Engineering	E	Renewable energy systems for remote Arctic communities
Noor Johnson	USA	University of Alberta, Canada	Anthropology	E	Knowledge and consultation practices in offshore and gas decision-making in the Canadian Arctic
Trevor Lantz	Canada	University of Hawaii, Manoa, USA	Env Science	H&I	Impacts of sea level rise and storm surge on community infrastructure
Bjarni Magnússon	Iceland	Duke University, USA	Law	E	Can the United States establish the outer limits of its extended continental shelf under international law?
Itty S. Neuhaus	USA	Memorial University of Newfoundland, Canada	Visual Art	W	Lifecycle of an iceberg, in a series of multimedia installations
Gregory Poelzer	Canada	University of Alaska Anchorage, USA	Political Science	E	Arctic energy policy and governance from a First Nations perspective
Laura Sokka	Finland	Stanford University, USA	Env Science	E	Sustainable use of forest bioenergy in the Arctic
Maria Tysiachniouk	Russia	University of Washington, USA	Sociology	E	Developing global standards in the Arctic: Toward sustainability of indigenous communities in the areas of resource extraction
Øystein Varpe	Norway	Woods Hole Oceanographic Institution, USA	Biological Science	W	Seasonal ecology of Arctic marine ecosystems: Fundamentals, multidisciplinary approaches, and relevance to society
Niels Vestergaard	Denmark	University of California, Santa Barbara, USA	Economics	W	Bioeconomics of Arctic fisheries
Michael Sfraga	USA	University of Alaska Fairbanks, USA	Geography		Co-Lead Scholar
Ross Virginia	USA	Dartmouth College, USA	Env Science		Co-Lead Scholar

* W=Water, H&I=Health & Infrastructure, E=Energy

Lessons to Date & Looking Forward

This Briefing Note presents a history of the nascent Fulbright Arctic Initiative and summarizes its progress to date, roughly 75% into the 18-month program. The Initiative includes a formal evaluation process and much has been learned to date.

The esprit generated by a diverse team of scholars and practitioners spurred a high level of research productivity and public engagement, including wide dissemination of results to the academy, policymakers, and the public at large. FAI scholars organized workshops and conferences to diversify knowledge input to their collaborative work, and presented their research at, or have helped organize, many of the major international Arctic meetings. Their research is being published in peer-reviewed journals, and also as opinion-editorials in newspapers and blogs.

Scholars are undertaking video storytelling to share the Arctic perspective on pressing issues with the public. They also are involved with Arctic Council working groups and policy organizations in their home countries. As the scholars connect their individual networks, the FAI network is expanding rapidly. The collaborative, multidisciplinary team research model has emerged as a powerful and vibrant component of the program.

How can the FAI be improved and sustained? The co-lead scholars and the greater Fulbright team are aware of the tensions placed on scholars trying to complete their individual research projects while meeting the demands of working at a high level of performance with a new group of people across 12 time zones. Face-to-face meetings are essential for addressing time allocation issues and for helping thematic groups meet their schedules and goals. Early clarity on the multifaceted nature of the FAI and the expectations for scholarship and outreach can help scholars work with their institutions or organizations to gain time and support in order to reap the most from the FAI experience. The FAI scholars also recognize the limits of what can be accomplished within the timeframe of an 18-month program. One of the anticipated outcomes of the Initiative is a self-sustaining network of scholars and experts with a pan-Arctic perspective who will continue to collaborate once the formal program has ended.

The Arctic Initiative can serve as a model for other applied research programs addressing complex, rapidly changing social and environmental issues. As a result of the skills gained from collaborative research and the policy and communication experiences provided by the Fulbright team, a new kind of Fulbright scholar is emerging.

Acknowledgments

A large number of dedicated professionals from the U.S. Department of State, the Fulbright Program, The Institute for International Education, and the community of Arctic scholars came together to create and support this innovative initiative. We are indebted to the many Arctic communities and their leaders who participated in and supported the research of FAI scholars. Primary funding for the Initiative was provided by ECA, with additional funds from the government of Canada.

We wish to especially thank:

Tom Healy (then Chair) and the entire J. William Fulbright Foreign Scholarship Board for their vision, leadership and support of this initiative

The Fulbright Directors and CEOs of the Arctic Nations: Michael Hawes (Canada), Terhi Mölsä (Finland), Petter Næss (Norway), Belinda Theriault (Iceland), Marie Mønsted (Denmark), Joel Ericson (Russia), Eric Jönsson (Sweden) and the Fulbright hosts and staff for the Iqaluit and Oulu Plenary meetings and our honored guest speakers

U.S. Department of State Bureau of Educational and Cultural Affairs: Evan Ryan, Mary Kirk, Steve Money, Lana Muck

Institute of International Education: María de los Ángeles Crummett, Lawrence Mason, Korin Hofmann, and Anais DiCrocce

U.S. Department of State Arctic Chairmanship Team: Admiral Robert J Papp, Jr., Ambassador David Balton, Hon. Fran Ulmer, Julia Gourley, and Jen Ey

U.S. Ambassador to Finland, Charles Adams, Jr.; U.S. Ambassador to Iceland, Robert C. Barber; Ambassador Mark Brzezinski, Executive Director, U.S. White House Arctic Executive Steering Committee; and Director John Holdren, White House Office of Science and Technology Policy

Other colleagues who participated in our monthly online plenary sessions or helped in program development and scholar selection: Melody Brown Burkins, Mike Castellini, William Fitzhugh, Gail Fondahl, Bruce Forbes, Lars Kullerud, Mary Pete, and Oran Young

The co-lead scholars thank Lee McDavid (Dartmouth) and Kelly Wilson (University of Alaska Fairbanks) for their invaluable editorial and administrative support.



Monumental Melt, Itty S. Neuhaus, altered photographs; Disko Bay, Greenland and Twillingate, NL; pastel on vellum 3' x 12'. A contribution from the individual project "Lifecycle of an iceberg, in a series of multimedia installations."

* Ross A. Virginia is Myers Family Professor of Environmental Science and Director of the Institute of Arctic Studies, Dartmouth College, USA. Michael Sfraga is Vice Chancellor of University of Alaska Fairbanks, USA. Tom Arnbom is Senior Conservation Officer, World Wildlife Fund, Sweden. Linda Chamberlain is Founding Director and Public Health Specialist, Alaska Family Violence Prevention Project, University of Alaska Anchorage, USA. Susan Chatwood is Executive and Scientific Director, Institute for Circumpolar Health Research, and Assistant Professor, University of Toronto, Canada. Asli Tepecik Diş is Research Fellow, Nordregio (Nordic Center for Spatial Development), Sweden. Gunhild Hoogensen Gjorv is Professor, University of Tromsø, the Arctic University of Norway. Tamara K. Harms is Professor, Department of Biology & Wildlife and Institute of Arctic Biology, University of Alaska Fairbanks, USA. Anne Hansen is Associate Professor, The Danish Center for Environmental Assessment, Aalborg University, Denmark. Gwen Holdmann is Director, Alaska Center for Power and Energy, USA. Noor

Johnson is Senior Advisor, Office of International Relations, Smithsonian Institution, USA. Trevor Lantz is Assistant Professor, School of Environmental Studies, University of Victoria, Canada. Bjarni Magnússon is Associate Professor, School of Law, Reykjavik University, Iceland. Itty S. Neuhaus is Associate Professor, School of Fine and Performing Arts, State University of New York at New Paltz, USA. Gregory Poelzer is Associate Professor, Department of Political Studies, University of Saskatchewan, Canada. Laura Sokka is Senior Scientist, VTT Technical Research Centre of Finland, Ltd. Maria Tysiachniouk is Researcher and Chair, Department of Environmental Sociology, Centre for Independent Social Research, Russian Federation. Øystein Varpe is Associate Professor, Department of Arctic Biology, University Centre in Svalbard, Norway. Niels Vestergaard is Professor, Department of Environmental and Business Economics, University of Southern Denmark.

Briefing Note

The Polar Data Catalogue: A Vehicle for Collaboration, Northern Community Partnerships, & Policy-Making

Dana L. Church, Julie E. Friddell & Ellsworth F. LeDrew

In 1996, eight countries came together to form The Arctic Council, which is:

“ . . . the leading intergovernmental forum promoting cooperation, coordination, and interaction among the Arctic States, Arctic Indigenous communities, and other Arctic inhabitants on common Arctic issues, in particular on issues of sustainable development and environmental protection in the Arctic” (<http://www.arctic-council.org/index.php/en/about-us>).

The eight member countries of the Arctic Council are: Canada, the Kingdom of Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden, and the United States. The Arctic Council also includes Permanent Participants, which are organizations representing Arctic Indigenous peoples, as well as Observers, which are non-Arctic states and other organizations wishing to participate. The work of the Arctic Council is mainly carried out by its six Working Groups, in the form of regular, scientific, comprehensive, cutting-edge assessments. These assessments cover diverse issues within the domains of environmental, ecological, and social sciences, and have strong influence on policy development. Due to the impact of these scientific assessments, the Arctic Council has been referred to as a “cognitive forerunner” (Nilsson, 2012). Indeed, a 2012 survey found that the Arctic Council’s scientific assessments by its Working Groups were considered its

most effective “products” (Kankaanpää & Young, 2012). Thus, although the Arctic Council may not have legal prowess, it has been influential through its “soft” power (Nilsson, 2012), which is “the ability to get what you want through attraction rather than through coercion” (Nye, 2004).

Around the same time that the Arctic Council was established, a number of researchers in Canada recognized the importance of storing and archiving Arctic data in accessible formats, rather than leaving the data to rest forever in the depths of personal filing cabinets or in outdated software programs. As a result, the Canadian Cryospheric Information Network (CCIN) was born. Spearheaded by Professor Ellsworth LeDrew at the University of Waterloo, Ontario, and in partnership with the Canadian Space Agency, Environment Canada (now Environment and Climate Change Canada), Natural Resources Canada, and Noetix Research Inc., the CCIN archived and publicly provided metadata and datasets contributed by cryospheric scientists associated with the CRYSYS (CRYosphere SYStem in Canada) program and other research programs in Canada. In addition to data archiving services, the CCIN has maintained an educational website for the public, scientists, and policy makers (www.ccin.ca) that includes snow water equivalent (SWE) maps for the Canadian Prairies and northern Canada, children’s games, photographs and videos, an “Ask an Expert” service, links to newsletters and publications, and interactive visualizations of SWE and lake ice data that have been developed in partnership with the Global Cryosphere Watch of the World Meteorological Organization. Content for the website is guided by a Scientific Advisory Council composed of experts in cryospheric research and data management (CCIN, 2015a). As will be discussed, over the years, the increased need for safe storage and accessibility of Arctic data led the CCIN to develop the Polar Data Catalogue (PDC).

The overlap between the Arctic Council—a forum for cooperation, coordination, and interaction among Arctic States, Arctic Indigenous communities, and other Arctic inhabitants—and the PDC—a “forum” for data availability, accessibility, and preservation—is the focus of this paper. We will show how the PDC can be a vehicle for collaboration, Northern community partnerships, and policy-making, which aligns with the objectives of the Arctic Council. The PDC has been, and continues to be, a valuable resource for the Arctic Council. There is opportunity to strengthen the relationship between the PDC and the Arctic Council, so that the PDC can support and further solidify the Arctic Council’s reputation as a “cognitive forerunner” in Arctic policy development.

History and Background of the PDC

When the CCIN was established in the mid-1990s, there was growing interest in Canada’s Arctic regions and, as a result, a wealth of Arctic data was beginning to accumulate. There was also growing acceptance of the concept of open access to data (Science International, 2015). Open access allows data to be explored and used in ways beyond that for which it was originally intended, and, in regards to Arctic data in particular, open data provides the opportunity to make new predictions, new discoveries, and hopefully new solutions to climate change and other challenges. The CCIN was a response to these two needs: the need to archive the increasing wealth of Arctic research data, and the need to make this data available to researchers, policy-makers, and the public—especially northern communities where the research was taking place.

The CCIN website and repository services had been in existence for almost a decade when the ArcticNet Network of Centres of Excellence of Canada was established in 2004. ArcticNet is a symbol of the gaining momentum of interest in the Arctic regions: it includes over 150 researchers,

1000 graduate students, postdoctoral fellows, research associates, technicians, and other specialists from 34 Canadian universities, 20 federal and provincial agencies and departments, and more than 150 partner organizations across 14 countries, all working toward the common goal of understanding the impacts of climate change and modernization in the coastal Canadian Arctic (www.arcticnet.ulaval.ca).

ArcticNet researchers recognized the necessity to provide an online data management system for scientists to archive information about their datasets, and to give the public a means to access them, especially northern residents where the research was occurring in their backyards. Up to this point the CCIN had been archiving data for cryospheric scientists associated with CRYSYS and other research programs in Canada. When ArcticNet identified the CCIN as a data repository for its multitudes of research projects, the CCIN needed to significantly upgrade its data management capabilities and infrastructure. This was eventually made possible by partnerships between the Government of Canada Program for International Polar Year, Noetix, and the Department of Fisheries and Oceans Canada. The resulting product was the Polar Data Catalogue (PDC; www.polardata.ca). Launched in 2007, the PDC was initially developed as a metadata-only “discovery portal” to allow for the exchange of information about datasets between researchers, Northern communities, international programs, decision makers, and the interested public (CCIN, 2015b). In 2011, functionality was added to archive and share data files to accompany the rapidly growing metadata collection. As of June 15, 2016, the number of metadata records in the PDC has reached 2,443. We also hold over 2.6 million data files, including almost 28,000 RADARSAT images of northern Canada and Antarctica. Partnering with ArcticNet also led to the addition of social science research into the catalogue, which is a collection that continues to grow today.

The PDC as a Vehicle for Collaboration

Collaboration between the Arctic States is one of the main objectives of the Arctic Council. The Arctic Council addresses this objective by providing a forum for collaboration. When Arctic Council members convene to discuss issues such as sustainable development and environmental protection in the Arctic, information is key. Where and how they get their information is of utmost importance, for policy is only as good as the data upon which it is based.

The PDC promotes collaboration by being a publicly accessible metadata “discovery portal” upon which informed discussions and decisions about the Arctic can be based. Metadata records provide the description of research: the who, what, where, and when of the data. The records also include the funding program and the formal citation of the dataset for use by others (CCIN, 2015b). Figure 1 is a screenshot from the PDC of an example of a metadata record.

Metadata records are found by using the PDC Geospatial Search (www.polardata.ca/pdcsearch/), one of the PDC’s three online applications. The PDC Geospatial Search, featured in Figure 2, is a full-featured search engine and download portal for metadata and data belonging to a variety of collections. It includes research and monitoring datasets, Canadian Ice Service Sea Ice Charts, and RADARSAT satellite imagery from the Arctic and Antarctic. Users can search using latitude and longitude, start date and/or end date of the research, or word or phrase.

The screenshot displays the Polar Data Catalogue (PDC) Geospatial Search interface. The top navigation bar includes the PDC logo, 'Home | Help Manual | PDC Lite Low-bandwidth Search', and 'v. 4.3.0'. The main content area is divided into a map on the left and a metadata record on the right. The map shows the Arctic region with various cities and locations marked, including Inuvik, Tuktoyaktuk, Repulse, and others. The metadata record is titled 'Metadata Record (ISO standard)' and includes the following information:

Metadata Record (ISO standard)	
Viewing first result.	
File Identifier	11380_iso
Language	English, Canada
Character Set	UTF-8
Hierarchy Level	Dataset
Contact	
Contact Person	International Polar Year
Contact Organization	IPY Data Assembly Centre Network
Address	Government of Canada IPY Programme
City	Ottawa
Province	ON
Postal Code	K1A0H4
Country	Canada
Email	ipy_dacn@scholarsportal.info
Phone Number	N/A
Website	N/A
Role	Point Of Contact
Date Stamp	08 Jan 2013
Metadata Standard Name	North American Profile of ISO 19115:2003
Metadata Standard Version	2009-01-01
dataSetURI	www.polardata.ca/pdcsearch/PDCSearchDOI.jsp?doi_id=11380
Identification Information	
Title	Pan-Arctic Tracking of Beluga Whales (PATOB)
Responsible Parties	Jean-François Gosselin, principalInvestigator

The footer of the page includes the Canadian Cryospheric Information Network (CCIN) logo, 'Links about the North | Canadian IPY Publications | Canadian NCP Publications', 'Contact Us | Privacy Policy', 'ArcticNet' logo, and 'Polar Data Catalogue @ Canadian Cryospheric Information Network 2016'.

Figure 1: Screenshot of a portion of a metadata record from the PDC

Another PDC application, the PDC Lite Search, was developed in 2012 as a result of user feedback. A survey of northern Canadians, commissioned by ArcticNet, revealed that users with low-speed Internet connections—which are very common in northern Canada—often experienced long waiting times when using the full-featured PDC Search application. In response, PDC Lite is up to 90% faster than the full-featured PDC Search and has a different search interface focused on community-specific project investigation (see Figure 3). In the future we will continue to work with our northern partners and with northern community members to improve the PDC Lite to serve their specific needs for data and information (Friddell, LeDrew, & Vincent, 2014a; Friddell, LeDrew, & Vincent, 2014b).

Polar Data Catalogue

Polar Data Catalogue Geospatial Search Home | Help Manual | PDC Lite Low-bandwidth Search v. 4.2.2

Arctic Antarctic

PDC Search Results Metadata Data

Polar Data Catalogue Search
Choose a different data collection...

Select an area of interest and/or enter dates or keywords to filter results. Advanced search options are available for text searching.

Area of Interest (Click on the map to make a 4-cornered box or enter coordinates)

Latitude	Longitude
85.1373783067	166.597230228
64.4310461994	-137.514354081
63.3416033531	-75.1069097822
73.2433878719	-36.3368892883

Update Points
Apply Changes
Delete Last
Clear All

Start Date Month Day Year
End Date Month Day Year

Word or Phrase sea ice
 View downloadable datasets only
 View Map Viewer datasets only

Advanced Search Number of Search Options: 1
Northwest Passage Purpose
Search Clear

Quick Search
CCIN Reference No. Search

Map courtesy of the NSIDC
58.47805, 59.31608

CCIN CANADIAN CRYOSPHERIC INFORMATION NETWORK
Links of Interest to Northerners | Canadian IPY Publications | Canadian NCP Publications
Contact Us | Privacy Policy
ArcticNet
Polar Data Catalogue @ Canadian Cryospheric Information Network 2016

Figure 2: The PDC Geospatial Search application. The main search interface is shown with a sample search area (polygon) on the map.

The third PDC online application is PDC Input: a metadata and data entry application that scientists and research groups use to submit the metadata and data they have collected into the PDC. Figure 4 shows a screenshot of the new PDC Input front page that was launched in August 2016. Compared to the former PDC Input, the new PDC Input has been completely rebuilt using the latest web technologies and tools, features enhanced security for users, is fully mobile enabled, and the second version to be released later this year will be bilingual in English and French.

Thus, the PDC Geospatial Search, PDC Lite, and PDC Input foster collaboration between researchers, the interested public, policy-makers and other decision-makers, by making polar research and monitoring information easily and freely available. Users can access information about what projects are occurring or have occurred in the Arctic, the findings of the research (if available), and who to contact for more details.

POLAR DATA CATALOGUE

Home Keywords Help Register for PDC Forgot Password

Email Password Sign In

PDC Input

The PDC Data and Metadata Input application provides an interface for researchers in partner programs and organizations to upload and share data with other scientists and the general public. Log in above to submit your metadata and data to the PDC repository.

The Polar Data Catalogue is a searchable database of metadata and data that describes and provides access to data and information produced by Arctic and Antarctic researchers. Launched online in 2007, the PDC contains thousands of datasets, satellite images, and links to other polar data archives for use by scientists, decision makers, and the public. The PDC metadata records follow ISO 19115 (North American Profile) and Federal Geographic Data Committee (FGDC) standard formats to facilitate discovery and exchange with other data centres. The scope of the research in PDC covers a range of disciplines, from natural sciences to policy to health and social sciences.

METADATA: Metadata is data about data. Metadata provides the what, where, when of data and by whom it was collected, as well as its current location. Metadata facilitates the understanding, use, and management of data and is a tool for networking and collaboration. Standardized metadata allows automatic interoperability and sharing of information between polar data repositories around the world.

Background

The wealth of knowledge and data generated by polar research must be managed, to ensure and maximize the exchange and accessibility of relevant data, and to leave a lasting legacy. The Polar Data Catalogue was developed as a collaborative effort between the ArcticNet Network of Centres of Excellence, Aboriginal Affairs and Northern Development Canada, the Department of Fisheries and Oceans Canada (DFO), and the Canadian Cryospheric Information Network (CCIN) to facilitate exchange of information about the Canadian Arctic among researchers and other user groups, including northern communities and international programs. For more information about the organizations and agencies participating in PDC development, including programs which have contributed metadata and data to the PDC since 2007, click [HERE](#).

Our Sponsors

CCIN CANADIAN CRYOSPHERIC INFORMATION NETWORK

UNIVERSITY OF WATERLOO

ArcticNet

Noetix Research

CENTRE D'ÉTUDES NORDIQUES

CSA ASC

IPY API International Polar Year / Année polaire internationale

Canada

Environnement et Changement climatique Canada

Environnement and Climate Change Canada

Pêches et Océans Canada

Indigenous and Northern Affairs Canada

The Arctic and Antarctic metadata and data repository for Canada

Figure 4: The PDC Input application. The login interface is shown.

A new data visualization tool in the PDC (<https://ccin.ca/home/ccw/seaice/current/thickness>) shows the Canadian Ice Service's (CIS) Ice Thickness Program Collection (ITCN) data (2002-present). The visualization of ITCN data displays sea and lake ice thickness graphically, via both an animation (where the stations on the map change color as ice thickness changes over the winter) and graphs (which provide a snapshot of thicknesses for all stations over a winter or over the full range of years). The animation (Figure 5) shows evolution of ice thickness over the winter, and the graphs provide a visual comparison of sea ice trends of different stations.

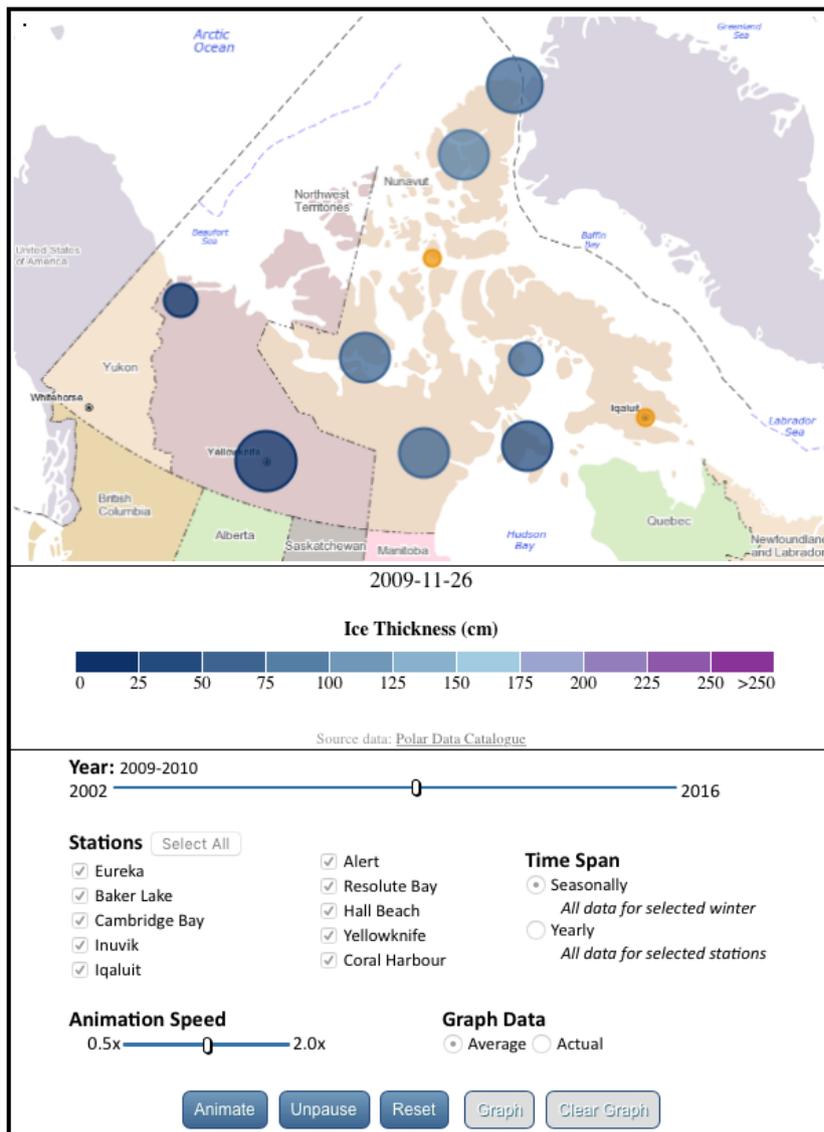


Figure 5: The Ice Thickness Program Collection data visualization tool. Shown is ice data with the animation paused.

A new Map Viewer data visualization graphically displays oceanic and sea ice data from the Arctic: https://www.polardata.ca/pdcsearch/PDC_ViewMapApp.ccin?ccin_datasets. This Map Viewer (Figure 6) is integrated into the PDC Search application and has recently been expanded to incorporate datasets of long-term oceanic observatories. Other data visualizations are easily accessible through the CCIN homepage, such as for snow water equivalent (SWE) and lake ice cover. We plan to continue developing visualizations of pertinent cryospheric data so that information about Canada's North can be more readily available to those who seek it.

It should be noted that the scientific assessments by the Arctic Council's Working Groups, such as the 2011 Snow, Water, Ice, and Permafrost ("SWIPA") report (AMAP, 2012), have the similar goal of making Arctic research and research findings more accessible to scientists, policy makers, and the public. These plain-language, illustrated reports are available online to whomever wishes

to access them. Our online visualizations aligns with the work of the Arctic Council and can be used as supplementary information to that which is found in a number of their reports.

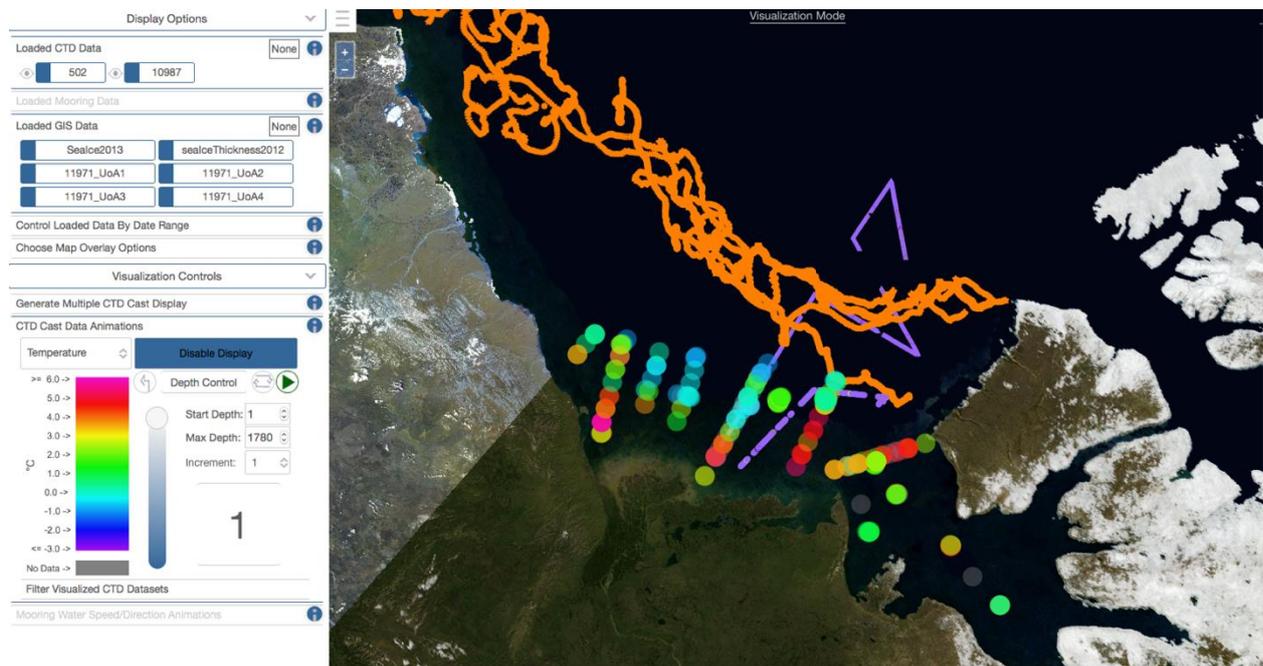


Figure 6: Screenshot of the Polar Data Catalogue’s new Map Viewer data visualization, showing sea ice and oceanic data in the Beaufort Sea.

Another major focus of the PDC toward collaboration is through its linkages and interoperability with other data repositories around the world. One of the lessons learned from the International Polar Year (IPY), was that given the diversity of data needed to understand a system as complex as the Arctic, a “one-stop shop” data repository can become unwieldy and perhaps be impossible to implement. Instead, a “data bazaar” is preferable, in which a federation of specialized data systems and portals uses open web services to communicate and provide data to users (Mokrane & Parsons, 2014; Parsons et al., 2011). The PDC is one of these “vendors” in the online bazaar of polar data.

Interoperability is required for this online “bazaar” of polar data to be successful. Interoperability means that all the different “vendors” (i.e., data repositories or catalogues) must be able to network and work together: to communicate with each other, execute programs in common, and transfer metadata. If two data repositories are interoperable, this means that users can search for metadata in either repository and find the same result; each repository accesses the same metadata entry instead of each having to enter its own copy into its collection. Thus, standardization of metadata is important: users can expect the same type of information, labeling, and formatting of metadata entries regardless of the repository in which they are searching (Neiswender & Montgomery, 2009). The PDC conforms to international metadata standards and we require metadata and data contributors to abide by our Best Practices guidelines (Michaud & Friddell, 2011). Readers interested in more details about the standards and Best Practices are directed to Friddell, LeDrew, and Vincent (2014b).

The PDC’s metadata sharing efforts have focused on extending and solidifying linkages with polar

data portals in Canada and abroad. At this time, PDC metadata are provided for harvesting by other repositories in three different internationally standardized web services protocols: OAI-PMH (Open Archives Initiative - Protocol for Metadata Harvesting), CSW (Catalog Service for the Web), and WMS (Web Map Service of the Open Geospatial Consortium). We have established one-way or two-way sharing links with the portals listed below:

- Northwest Territories Discovery Portal, Cumulative Impacts Monitoring Program
- Environment and Climate Change Canada
- Scholars Portal/Ontario Council of University Libraries
- Circumpolar Biodiversity Monitoring Program (CBMP), Conservation of Arctic Flora and Fauna (CAFF)
- Arctic Data Centre, Norwegian Meteorological Institute
- National Institute of Polar Research, Japan
- British Antarctic Survey
- National Snow and Ice Data Center (NSIDC), United States
- Arctic Data Explorer, NSIDC
- Alaska Ocean Observing System
- Global Cryosphere Watch portal
- Australian Antarctic Data Centre

The PDC metadata collection has also been registered with the Canadian federal government Open Data website and the GEO/GEOSS Component and Service Registry (a metadata brokering system). Finally, metadata from the PDC can be accessed through the Alaska Ocean Observing System (AOOS - www.aoops.org).

To summarize, the PDC aligns with the Arctic Council's goal of collaboration through its online applications (PDC Geospatial Search, PDC Lite, and PDC Input), its online data visualizations, and its interoperability with an increasing number of Canadian and international data portals. The PDC's resources support informed discussions not only between members of the Arctic Council, but also between members of northern communities, the interested public, scientists, policy-makers, and other decision makers.

The PDC as a Vehicle for Northern Community Partnerships

The Arctic Council promotes cooperation, coordination, and interaction among the Arctic states and Arctic Indigenous communities. A primary target audience for the PDC is northern and Indigenous Canadians. Many of our partners in northern communities have expressed the desire to know more about the research being conducted in the north, usually by southern Canadians. Although the data and information that these researchers collect in the natural, social, and health sciences are extremely useful to Indigenous peoples, it is often difficult to find or access. It is the goal of the PDC to better serve the people in Canada's northern communities by making data and information more accessible and available. This is particularly important as northern communities experience environmental and social change. One example in which the PDC serves Indigenous

and northern communities is production of the PDC Lite application, described earlier, which is designed for areas with slower Internet speed. The PDC Lite also allows the user to search according to specific northern communities.

Academic and institutional research is not the only source of Arctic data. Indigenous peoples have vast data and information resources in the form of Traditional or Local Knowledge (TLK). In order for Arctic data management systems to be complete, they must be capable of preserving and sharing TLK. However, TLK may not fit comfortably within Western research regimes (Scassa, unpublished) or metadata standards. TLK is a cumulative body of knowledge and beliefs, handed down through generations by cultural transmission, about the relationship of living beings (including humans) with one another and with their environment. Defined in this way, TLK is not just a collection of discrete pieces of knowledge; it is a knowledge system. TLK may be acquired and used in ways that are very different from Western systems of knowledge. We cannot expect that what is archived as TLK is complete, does not need additional context or interpretation, and can be analyzed and quantified (Scassa, unpublished). Thus, the archiving and access requirements of all research involving TLK may be considered on a case-by-case basis.

A primary knowledge gap in the polar data management community is an understanding of the capacity, interest, and concerns of Indigenous people in preserving TLK. This information can be sensitive and may require additional protections. What appropriate protections are needed? Do Indigenous people want to preserve the TLK in local repositories? And is there capacity to do so? For data management systems to meet the needs of Indigenous peoples, and to preserve TLK for future generations, the concerns, requirements, and capabilities of all partners must be understood (Pulsifer, Laidler, Taylor & Hayes, 2011).

To facilitate dialogue and collaboration with Northern and Indigenous people and partners, in 2015, CCIN/PDC, in collaboration with numerous partners, co-led two major data management meetings in Canada: the *Canadian Polar Data Workshop* and the international *Polar Data Forum II*. Representatives from the Inuit Circumpolar Council (ICC), an organization with Permanent Participant status in the Arctic Council, participated in both of these events, and the CBMP data management team attended the Polar Data Forum II (CBMP, 2015).

The aim of the *Canadian Polar Data Workshop* was to coordinate the growing polar data community in Canada and to develop and implement best practices and sustainability in data stewardship, including the ability of Indigenous people to steward their own data resources, particularly TLK. The *Workshop* was held in Ottawa in May 2015 and was attended by 50 participants. Relevant outcomes of the Workshop included:

- Explicit acknowledgement that TLK and some other northern and Indigenous data and information will need to be exempted from expectations of open data sharing, due to confidentiality or other concerns of sensitivity.
- Stated interest by Indigenous and northern participants in the Workshop, as well as participants in the national online pre-Workshop consultation, to participate fully in the coordination exercise.
- Acknowledgement of the need to improve “human interoperability”: that relationships should be strengthened through more extensive collaboration with northern and Indigenous people and communities. This can be facilitated by attendance at meetings

through provision of funding support for travel, as well as holding meetings in northern Canadian communities.

The second meeting held in 2015 was the *Polar Data Forum II: International Collaboration for Advancing Polar Data Access and Preservation* (www.polar-data-forum.org). This major international conference was held in October in Waterloo, Canada, and was attended by over 110 participants from 18 countries. This meeting aimed to build collaborations and systems for long-term preservation and access to data and information from the Arctic and Antarctic. Funding was secured to bring six people from Indigenous and northern communities and organizations to the Forum, to ensure in-person participation and input on northern and Indigenous perspectives. The University of Waterloo Aboriginal Student Association opened the Forum with songs and drums, and an Aboriginal Evening event included a local women's drum circle, a smudging ceremony, and locally sourced Indigenous foods. Key outcomes of the Forum included:

- Recommendation that incorporation of Arctic Indigenous perspectives is critical to the success of international polar data management.
- This may be accomplished through support for Indigenous participation in polar data activities, including increasing capacity for self-management of Inuit data and TLK.

We plan to continue discussions on data management with Indigenous and northern peoples by hosting a second *Canadian Polar Data Workshop* in early 2017. Additional plans for enhancing future collaborations include:

- Seeking partnerships and funding to build systems for managing project tracking and research licensing in northern communities;
- Adding language support for Inuktitut to the online PDC tools;
- Writing articles and news items about the PDC, our services, and the motivations and benefits of proper data management;
- Increasing use of the CCIN/PDC websites and social media accounts to enhance outreach and education about northern Canada to students and the public and to reach northern Canadians who seek data and information related to their communities;
- Expansion of metadata sharing with northern organizations;
- Listening to our northern and Indigenous partners to understand their needs related to data management and access to information;
- Providing expertise and infrastructure, as needed and as feasible, to our northern and Indigenous partners; and
- Using surveys and other methods to receive feedback on our websites and services, including our Facebook and Twitter sites.

We value the input of our northern and Indigenous partners and look forward to further feedback to ensure we are addressing northern needs through the PDC.

The PDC as a Vehicle for Policy-Making

Given the influence of the Arctic Council on policy, we seek to show here how the PDC directly contributes to the Arctic Council. The direct relationship between the PDC and the Arctic Council begins with the ABDS, the Arctic Biodiversity Data Service (ABDS - www.abds.is), which is a publicly searchable database. Included in this database is research conducted by CAFF, one of the Arctic Council's six Working Groups. CCIN has an ongoing, long-standing partnership with CAFF. The PDC stores metadata for the Circumpolar Biodiversity Monitoring Programme

(CBMP), which is one of CAFF's programs (CBMP, 2015). As of May 2016, the PDC holds 189 metadata for the CBMP's Marine Group project inventory and 305 metadata for the CBMP Terrestrial Group. The ABDS actively harvests CBMP metadata from the PDC. In order to be housed at the PDC, this metadata must pass the specific standards outlined previously; thus, the PDC acts not only as a repository of metadata for CAFF but also as metadata quality control.

CAFF has produced a number of comprehensive, cutting-edge reports based on data housed in the ABDS, and thus harvested from the PDC. We are currently working to strengthen the PDC's existing relationship with CAFF as well as foster new relationships with the other Working Groups of the Arctic Council.

The PDC can be regarded as a vehicle for developing consistent policy between northern countries. Currently we are writing guidelines on data management requirements for a set of northern research and monitoring programs in Canada, and we are learning much from this exercise regarding unifying data management practice and expectations across programs. It will simplify work for researchers and data managers in all countries by making metadata and data requirements consistent. This same approach of consistent data policy could be applied across Arctic Council Working Groups and member states.

Summary, Recommendations & Opportunities

The mid-1990s saw the birth of two “forums”: The Arctic Council, as a forum to promote cooperation, coordination, and interaction among the Arctic States, Indigenous communities and other northern inhabitants; and the CCIN—along with its later product, the PDC—as a “forum” for polar data stewardship, management, and access. The PDC has become a vehicle for collaboration, developing and strengthening northern community partnerships, and for policy-making, all in alignment with the objectives of the Arctic Council. The PDC is a vehicle for collaboration by providing open access to Arctic research metadata and data, data visualizations, and through interoperability with other data portals around the world. The PDC's network of interoperability and partnerships continues to grow, and opportunities exist for the PDC to serve other Arctic Council Working Groups, Task Forces, and Expert Groups. The PDC is a vehicle for policy-making, as evidenced by the archival of data used by CAFF, one of the Arctic Council Working Groups. Finally, the PDC strives to cooperate, coordinate, and interact with northern and Indigenous communities to discuss, discover, and address their data and information needs. Face-to-face dialogue was fostered through the *Canadian Polar Data Workshop* and the *Polar Data Forum II*, and work continues to develop a more “Indigenist” data management system (Pulsifer et al., 2011) that can adequately accommodate and preserve TLK and Indigenous science.

The Arctic Council has been described as a “cognitive forerunner,” in reference to its comprehensive, cutting-edge scientific assessments of Arctic issues that have been used for policy development and decision-making (Nilsson, 2012). In order for the Arctic Council to maintain this status, data management must be a priority. Indeed, a report released by CAFF (2015) entitled “Actions for Arctic Biodiversity” highlights the following future goals:

- “Develop tools for data sharing in order that data collected can be used by a wide range of people engaged in Arctic biodiversity science, policy, and management” (7).
- “Advance and sustain the Arctic Biodiversity Data Service (ABDS)” (11).

- “Establish the Arctic Biodiversity Data Service (ABDS) as the supporting framework to facilitate long-term data sharing and as a source of data for modeling and ecosystem-based management” (12).

Based on the PDC’s successful archiving of metadata and data from CAFF and numerous other partners, there is opportunity for the PDC to assist the Arctic Council in fulfilling these goals, as well as opportunity to host data from other Arctic Council Working Groups, Task Forces, and Expert Groups. Given that Canada is a Member State of the Arctic Council, and that the PDC is Canada’s primary repository for polar data, the PDC is a viable option for providing future and enhanced access to relevant data for the Arctic Council’s scientific assessment work. Further, given the maturing expectations of open access to data and the development of data stewardship requirements and policies around the world (Science International, 2015), the PDC is positioned to support the Arctic Council to ensure implementation of effective and consistent data policy across the Member States. Finally, as described earlier, efforts of the PDC, including providing access to information about research in northern communities and/or providing face-to-face meetings on polar data issues, provide a forum in which to increase the role of northern and Indigenous peoples in data management and decision-making. Of course, there are other organizations which are similarly positioned to provide service to the Arctic Council, and may already be doing so, with whom the PDC could form a coordinated network.

Recently there have been suggestions in the literature that the Arctic Council undergo various degrees of structural organization (Conley & Melino, 2016; Wilson, 2016). To our knowledge, the potential effects of reorganization on data availability and accessibility for the Working Groups, should it occur, have not been addressed. If the data management services of the PDC continue to be used by the Arctic Council, the intention of the PDC is to hold polar data in perpetuity, providing a safe and secure archive for data, regardless of the organizational structure or existence of the data contributor(s).

This paper has discussed how the PDC embodies the same goals as the Arctic Council. However, from the opposite angle, the Arctic Council can also be a vehicle for data stewardship, by providing a transformative opportunity for the views, needs, and information of its northern and Indigenous partners to be served by the technical advances in modern data management.

Science International (2015) has stated that, “Openness and transparency have formed the bedrock on which the progress of science in the modern era has been based” (4). Yet it is not enough to simply make data “open,” or accessible. Data should be “intelligently open,” which requires that data are discoverable, accessible, intelligible, assessable, and usable (Science International, 2015). This paper demonstrates that the PDC satisfies these requirements for intelligently open data. With its experience, capacity, and expertise, the PDC can support the Arctic Council in remaining a “cognitive forerunner” on issues of sustainable development and environmental protection in the Arctic.

References

- AMAP. (2012). Arctic Climate Issues 2011: Changes in Arctic Snow, Water, Ice, and Permafrost. SWIPA 2011 Overview Report.
- CAFF. (2015). *Actions for Arctic Biodiversity, 2013-2021: Implementing the recommendations of the Arctic Biodiversity Assessment*. Conservation of Arctic Flora and Fauna, Akureyri, Iceland. ISBN: 978-9935-431-41-7.
- CBMP. (2015, Spring). e-CBMP Newsletter. 9(1). Retrieved from: <http://archive.constantcontact.com/fs150/1102157694644/archive/1120991966569.html#PDF>
- CCIN. (2015a). *About us*. Retrieved from: <https://ccin.ca/home/about>
- CCIN. (2015b). *The Polar Data Catalogue*. Retrieved from: <https://ccin.ca/home/aboutpdc>
- Conley, H. A., & Melino, M. (February, 2016). *An Arctic redesign: Recommendations to rejuvenate the Arctic Council*. A Report of the Center for Strategic & International Studies (CSIS) Europe Program. Washington: CSIS.
- Friddell, J. E., LeDrew, E. F., & Vincent, W. F. (2014a). The Polar Data Catalogue: Data management for polar and cryospheric science. *70th Eastern Snow Conference, Huntsville, Ontario, Canada*, 113-126.
- Friddell, J. E., LeDrew, E. F., & Vincent, W. F. (2014b, 30 October). The Polar Data Catalogue: Best practices for sharing and archiving Canada's polar data. *Data Science Journal*, 13: PDA1-PDA7.
- Kankaanpää, P., & Young, O. R. (2012). The effectiveness of the Arctic Council. *Polar Research*, 31, 171-76. Available at: <http://dx.doi.org/10.3402/polar.v31i0.17176>
- Michaud, J., & Friddell, J. (Eds.). (2011). Best practices for sharing and archiving datasets. Retrieved from: https://polardata.ca/pdcinput/public/PDC_Best_Practices_FULL.pdf
- Mokrane, M., & Parsons, M. A. (2014, 30 October). Learning from the International Polar Year to build the future of polar data management. *Data Science Journal*, 13: PDA88-PDA93.
- Neiswender, C., & Montgomery, E. (2009). Metadata interoperability: What is it, and why is it important? In: *The MMI Guides: Navigating the World of Marine Metadata*. Retrieved from: <http://marinemetadata.org/guides/mdataintro/mdatainteroperability>
- Nilsson, A. E. (2012). *Chapter 7: Knowing the Arctic: The Arctic Council as a cognitive forerunner*. Originally presented during *The Arctic Council: Its place in the future of Arctic governance*, January 17-18, 2012, Munk-Gordon Arctic Security Program and the University of Lapland. ISBN # 978-0-9737651-5-1.
- Nye, J. Jr. (2004). *Bound to lead: The changing nature of American power*. Public Affairs: New York.
- Parsons, M. A., Øystein, G., LeDrew, E., de Bruin, T. F., Danis, B., Tomlinson, S., & Carlson, D. (2011). A conceptual framework for managing very diverse data for complex, interdisciplinary science. *Journal of Information Science*, 37(6): 555-569.
- Pulsifer, P. L., Laidler, G. J., Taylor, D. R. F., & Hayes, A. (2011). Towards an Indigenist data management program: Reflections on experiences developing an atlas of sea ice knowledge and use. *The Canadian Geographer*, 55(1): 108-124.
- Scassa, T. (unpublished). Intellectual property and research data: Key issues and challenges in the Canadian North (draft paper).

Science International (2015). *Open data in a big data world*. Paris: International Council for Science (ICSU), International Social Science Council (ISSC), The World Academy of Sciences (TWAS), InterAcademy Partnership (IAP).

Wilson, P. (2016). Society, steward or security actor? Three visions of the Arctic Council. *Cooperation and Conflict*, 51(1): 55-74.

Calotte Academy 2016

Building Arctic Resilience through Open Communication

Gerald Zojer & Laura Olsén

The Calotte Academy is an annual traveling symposium which was first organized in the early 1990s. The Academy inherited its name from the North Calotte region (Cap of the North), which comprises the northern parts of Finland, Norway, Sweden, as well as the very northwest of the Russian Federation. This region has left its footprint not only in the name of this academic happening, but traveling within this region is one of the core characteristics of the Calotte Academy. The aim of this multidisciplinary event is to bring together senior researchers, PhD candidates, as well as various local stakeholders, in order to have a broad and open dialogue on an annually changing theme.

This year's Calotte Academy ran under the overarching topic: "[Resilience related to Sustainable Development in Globalization](#)". In order to achieve a meaningful and thorough dialogue between all the participants, the Calotte Academy is designed in a way to provide more time for joint discussions than for the presentation of each individuals' work. Spending time together while traveling through the [North Calotte region](#) furthermore provides space for additional and informal debates, and also offers a possibility to experience this region and to visit some of the interesting locations and sights along the way. Moreover, traveling within the region also allows to get in touch with the local inhabitants and some of the various stakeholders that are involved in the development of this area. Altogether, this traveling symposium is not just a place for young and experienced researchers to present their work and results, but much more it offers a venue for

active and lively discussions, for getting to know the region, and for meeting and brainstorming with people that share overlapping interests.

In the past years the different sessions of the Calotte Academy have been organized in various places within three of the North Calotte countries, and like in the past two years, also the 2016 edition of the Academy was planned to take place in Finland, Norway, and the Russian Federation. While the original intention was to make a round trip crossing the Finnish-Norwegian border in Neiden, the Norwegian-Russian border at Storskog, and eventually the Russian-Finnish border in Salla, due to a bilateral Finnish-Russian agreement on closing the two northernmost border stations between these two countries for the duration of six month for third country citizen, the original route turned out to be impossible to follow this year. Due to the international background of the Calotte Academy's attendees, the bilateral agreement disallowed many of the participants to cross the last border along the originally planned route, which essentially also shows how this agreement makes it more difficult to carry out scientific cross-border cooperation in the European North. As a consequence the organizers of the 2016 Calotte Academy had to put their plan C into action, which was shortening the route of the Academy and taking the same way back instead of making a round trip.

The Academy began in Rovaniemi like in the past few years, and the first stop along the way was in Inari, both in Finland. The sessions in Norway were held in Kirkenes, before continuing to Murmansk, in the Russian Federation, where the final sessions were held. While the original plan was to continue the travel to Apatity to have the final sessions at the Kola Science Centre, the group instead had to turn around already in Murmansk. Recent migratory activities apparently not only affected the border regime between Finland and the Russian Federation: To our surprise – also for the frequent travelers – even on the usually open Finnish-Norwegian border the participants had to present their passports for a thorough border check. Consequently, border crossing issues and international migration remained a reoccurring side-theme for the whole duration of this year's Academy.

Theoretical Discussions on Resilience & Sustainable Development

The official start of the 2016 Calotte Academy took place in the evening of Sunday, 29th of May, when the mayor of Rovaniemi, Esko Lotvonen, invited the participants for a reception at the town hall, and where the group got the first chance to get to know one another. During the reception the participants also learned more about the first host city, as well as about some recent developments in Finnish Lapland.

The first sessions then were held at the University of Lapland on Monday 30th of May, starting with a theoretical discussion connected to the main theme "About Resilience and Sustainable Development". The first speakers reminded us about the reasons why we need to discuss these concepts, namely that global and local developments of the past decades led to severe environmental degradation and were insufficient to reduce hunger in parts of the world, or more generally speaking, they led to numerous global and local inequalities. The group discussed how and when the concepts of sustainable development and resilience have been introduced, how they have been used, and how suitable they are for analyzing or tackling the source problems. Some argued that a common challenge for many political concepts is that they may get hijacked by groups which use them for different intentions than for which such concepts have been introduced. For

example, the group discussion suggested that the concept of resilience only got introduced after the sustainable development discourse has been rendered meaningless by not understanding that it calls for a fundamental change, but instead by utilizing it in order to promote *business as usual* policies. However, simply replacing concepts that got hijacked may not be fruitful, as this process could be repeated with any newly introduced concept. Thus it was discussed if it is necessary to establish new discourses, or if rather established concepts should be continued to be used in an attempt to keep their original intention alive or to revitalize them if necessary.

The second session, in which also a member of the Finnish parliament, Katri Kulmuni, joined our group, focused on the implementation and adaptation of the concepts of sustainable development and resilience on regional and sub-national governmental levels. The discussions centered on interplays between economic and demographic developments and how they are related to environmental challenges. Based on the discussion on how to introduce more “resource fairness” regarding the local population, one of the conclusions was that the implementation of sustainable development in an Arctic context is still driven by mass scale development of the region’s natural resources in order to satisfy international markets.



Visiting Northern Communities

After the Monday sessions at the University of Lapland the group members entered the bus which would be the main means of transportation for the upcoming week, and started to head towards the North. Inari, which became a constant in the Calotte Academy’s tradition, is a municipality where three

different Sámi languages are actively spoken. Also the Sámi parliament of Finland is located in Inari, and became the host venue for our next sessions. In the Sájos building we got introduced to some local perspectives, also thanks to the presentations by the director of the Sámi education institute as well as the mayor of the Inari municipality.

Furthermore, the theoretical discussions from the first day continued, but also got deepened by more intensively discussing aspects from the social sphere of the sustainable development and resilience concepts. The debates focused on issues such as language preservation; on the impacts of national and international developments on local communities; how tourism and mining affect northern communities, and how local residents can take part in such developments in a way to be able to maintain and preserve their traditions; or how local inhabitants – and in particular indigenous people(s) – can or may participate in decision making processes.

From Theory to Practice

The warm temperatures and the midnight sun invited the participants to continue their discussions on the lake shore long after the official sessions were over, while enjoying some local food jointly

prepared over an open fire. After some socializing in the evening, the travel continued early next morning, by soon crossing the Norwegian border where the participants got the chance to stretch their legs during a short visit to the Skoltefossen waterfalls near Neiden.

The next actual session took place in Kirkenes, where our partners from the Barents Institute and the International Barents Secretariat enriched the group discussions. Kirkenes' unique location next to the border of the Russian Federation in a relatively remote area which is rich in minerals, provoked a lot of questions concerning for example the economics and industries of the city and its co-operation with different Russian stakeholders. Our first day in Kirkenes, on Wednesday 1st of June, centered on best practices of resilience and sustainable development implementations. Among the topics discussed were renewable energy production in both North-American and Russian Arctics. The presentations addressed the great challenges which the governments face when promoting sustainable development and renewable energy production in Arctic regions, due to remoteness, national legislations, and economic and political developments.

The morning session on Thursday 2nd of June, in Kirkenes was dedicated to "Freedom of Expression and Media", where journalists from the Kingdom of Denmark, Norway, and the Russian Federation analyzed the northern media landscape. Main topics were the representation of climate change as well as the Arctic and its regions in international media, but also pressure on investigative journalists both in Norway and in the Russian Federation. Presentations introduced fresh and valuable perspectives to the critical issues mentioned above, while the discussions raised up the need for a continuation of this kind of open dialogue between academia and different stakeholders in the Arctic region. After the thought-provoking sessions in Kirkenes it was time to exit Norway and continue eastwards towards Russia via the Storskog border crossing station.

We next drove to the city of Murmansk, traveling through the northernmost parts of the Kola Peninsula. On the way the bus passed the towns of Nikel, Zapolyarna and Pechenga. Heavily



polluted landscape near Nikel triggered strong reactions, and visualized the devastating consequences that industrial pollution can cause for the environment. Also passing by military bases and memorials of the Second World War set the frames for the conversations that dominated those few hours spent in the bus on the way to Murmansk.

Devastated landscape around smelter in Nikel. Picture by Gerald Zojer.



Visit to war memorial in Litsa valley. Picture by Gerald Zojer.

Varying Discourses of Security in the Arctic

On Friday 3rd of June, the sessions took place on the premises of a new host, the Murmansk Arctic State University. In the morning session under the theme “Urbanization and regional development of the Arctic” the presentations covered topics such as economic and technological development on the regional level in the Russian Arctic, and the change of the Arctic Council’s agenda from an environmental to an economy-centered focus. Moreover the theoretical and practical approaches to energy security in the Arctic were touched upon in several presentations, and also the usage of the Internet as a space to make politics was discussed. Despite the rainy weather in Murmansk, after the session the participants visited the Alyosha Monument in Cape Green and had a chance to admire the view over the city, which spreads along the coastline of the Kola Bay. In the evening participants enjoyed a varietal dinner in a Georgian restaurant in the heart of the city, which was accompanied by several speeches from the Academy’s participants.

The last session was held on Saturday 4th of June, under the theme “Resilience and sustainable development, and oil and gas drilling in the Arctic”. The presentations concentrated on changing discourses among the stakeholders in the oil and gas sector in the Arctic, and on Norwegian-Russian cooperation in this sector. Additionally the discussions touched on the changing geopolitical situation in the Arctic and a shift of the security discourse from traditional military security to environmental security.



Group photo in Murmansk Arctic State University. Picture by Gerald Zojer.

The last presentation dealing with tourism development in the Barents region well demonstrated the multidisciplinary and versatility of the discussions and topics dealt within the sessions of the Calotte Academy. After having had 35 presentations during 8 sessions it was time to turn the bus around towards the Norwegian border and straight forward towards the Finnish border, to our last overnight stop in Neiden. Early on Sunday morning the group continued its way back to Rovaniemi, via Sevettijärvi and Inari.

The Calotte Academy 2016 once again brought together senior and early-career researchers from different parts of Europe, Russia and North-America, and from different fields of sciences. Additionally there were also journalists and professionals from numerous other fields among the speakers. This year's Calotte Academy demonstrated very well how it is possible with a strong will and innovative thinking to cross boundaries and borders and to bring together people despite of a changing geopolitical situation and other challenges faced. It also gave an excellent example of the importance and benefits gained from the open dialogue between academia and other stakeholders from different fields of profession. The need for this kind of open communication between academia, politics, and journalism – also for the future – got highlighted, and the Calotte Academy once again proved that it offers a very suitable and well established forum for such an exercise.

Commentary

The Arctic Marine Shipping Assessment: Key Arctic Council Framework for Protecting Arctic Communities and the Marine Environment

Lawson W. Brigham

The Arctic Council's Arctic Marine Shipping Assessment (AMSA) released in April 2009 is a key assessment and policy document whose recommendations were negotiated by the eight Arctic states. The 17 AMSA recommendations represent a framework for how the Arctic states will pursue protection strategies and marine safety issues in response to increasing Arctic marine use. It is important to note at the outset of this brief review that the entire AMSA effort can be viewed in three ways: as an historic baseline or snapshot of Arctic marine activity early in the 21st century; as a strategic guide for the Arctic states, the Permanent Participants, and a host of Arctic and non-Arctic actors and stakeholders; and, as a policy document of the Arctic Council since the report and recommendations were approved by consensus of the Arctic states.

As of November 2016 and the publishing of this Yearbook, AMSA remains highly relevant and the AMSA recommendations continue to be implemented by the Arctic states primarily through the work of the Protection of the Arctic Marine Environment (PAME) Working Group, and international bodies such as the International Maritime Organization (IMO).

Dr. Lawson W. Brigham is Distinguished Fellow, Center for Arctic Policy Studies and Faculty, International Arctic Research Center at the University of Alaska Fairbanks. During 2004-09 he was chair of AMSA and Vice Chair of PAME. Dr. Brigham is Chair of the Arctic Yearbook's Editorial Board. Funding for this research has been provided by U.S. National Science Foundation grant 1263678.

The genesis of AMSA came from the Arctic Climate Impact Assessment (ACIA), likely the most influential study in the history of the Arctic, and the Arctic Marine Strategic Plan (AMSP), both released at the 2004 Arctic Council Ministerial Meeting in Reykjavik. ACIA included ten key findings, one of which is related directly to the potential for increasing Arctic marine use: ‘reduced sea ice is very likely to increase marine transport and access to resources.’ The AMSP, developed by PAME and endorsed by the Council, included 29 strategic actions including calling for the conduct of a comprehensive assessment of Arctic shipping. Thus, there are significant linkages of AMSA with earlier work of the Arctic Council, a critical continuity and foundation to move forward a new, interdisciplinary study. Canada, Finland, and the United States stepped up to the challenge as ‘lead countries’ within PAME to coordinate the new assessment; all recognized from the outset that the 8 Arctic states (their technical maritime experts in PAME and other Council working groups), the Permanent Participants, the Council observers, and the global maritime industry would have to make many contributions for the assessment to be comprehensive and successful.

More than 200 marine experts contributed to AMSA and the AMSA team conducted 13 major workshops on such diverse topics as scenarios of the future, marine infrastructure, marine insurance, environmental impacts, indigenous use, and more. It was also important that the assessment keep within the mandates of the Arctic Council on environmental protection and sustainable development and focus its efforts on marine safety and environmental protection measures.

One of the initial challenges for the AMSA team was to build a circumpolar database of Arctic commercial marine use, something that the team believed had never before been attempted. Prior to conducting such a survey, the AMSA team and the PAME country representatives had to come to grips with what is meant by the term ‘Arctic shipping.’ Since AMSA was focused on a holistic approach to impacts, ‘Arctic shipping’ was defined broadly to include all commercial marine operations; some government vessel operations such as icebreaking, marine research and surveying would be included, but strictly naval operations would not be part of the survey. Included in the survey would be an array of ship and vessel types including: fishing vessels, tankers, bulk carriers, icebreakers, general cargo ships, survey/research vessels, offshore support ships, ferries, ferries, tug-barge combinations, container ships, and more.

The electronic survey instrument for AMSA was directed to the Senior Arctic Officials so that the data response would in essence be the official data of the Arctic states, by whatever means that data was gathered by each country. Each of the Arctic states would submit their shipping and marine operations data for their respective Arctic region that they define (not an Arctic definition designated by AMSA or the Council). The survey and GIS-based traffic maps developed by Canada revealed some 6000 vessels operating in the Arctic marine environment in a given year with 4 primary vessel activities: community resupply, fishing vessels, bulk carrier transport, and marine tourism. The traffic maps also showed the seasonal nature of Arctic marine traffic with a concentration of ships in a short navigation season in July, August and September. Any future data marine traffic data collection (an AMSA data update) should be conducted by the Arctic states together where each nation provides its official data (regardless as to how it is collected) to a team under PAME within the Arctic Council.

Central to any Arctic Council activity or study is the engagement of the Permanent Participants. In this regard AMSA held 14 town hall meetings in Arctic communities in Canada, Iceland, Norway

and the United States. This was a critical outreach by the AMSA team to local citizens so that they could share their concerns about increasing marine traffic and their perspectives on the importance of Arctic marine waters to their way of life. Some residents recognized the potential economic benefits of increased marine activity while also expressing concern for oil spills and the disruption of traditional hunting. Social, cultural and environmental impacts were widely discussed as was the importance of early engagement with local communities where new marine projects were envisioned. Importantly, there was significant Permanent Participant engagement at all of the AMSA key workshops and the PAME meetings where AMSA was briefed during 2004-09. Human dimension findings are summarized in a chapter of the AMSA report and human security issues are addressed throughout the report and in the final recommendations. One key finding was the need for a circumpolar survey of Arctic indigenous marine use, particularly when ecosystems-based management and marine spatial planning tools are to be applied in Arctic marine areas.

One of the challenges facing the AMSA effort was how to deal with the complexity of the global shipping enterprise and its relationship with a new, more accessible Arctic Ocean. A scenarios-based approach was used to identify the key drivers and uncertainties of Arctic marine navigation out to 2050 and create a set of plausible futures. The AMSA scenarios workshop participants identified 120 driving forces or factors that can influence the levels of future Arctic marine activity. Select drivers included: global oil prices; world trade patterns; legal stability and overall governance; IMO agreements for Arctic ships; new natural resource discoveries; an Arctic marine disaster; Arctic transit fees; the seasonality of Arctic marine operations; climate change severity; role of the marine insurance industry; and more. Two selected factors – resources and trade, and governance – became the anchors as axes of uncertainty for a scenarios matrix used to frame the development of plausible futures (narratives or stories of 1500-2000 words). The scenarios work highlighted that future Arctic navigation is closely linked to global commodities prices and Arctic natural resource development. The continued retreat of Arctic sea ice was assumed to provide greater marine access and potentially longer seasons of navigation; however global economics and links to Arctic natural resources are considered primary drivers.

The AMSA scenarios effort facilitated new and unconstrained thinking, and assisted in the education of the Arctic Council regarding Arctic marine operations and shipping issues. While the AMSA workshops identified the main drivers of future Arctic navigation, it also highlighted the linkages of the maritime Arctic to the global economic system.

Three critical topics required in depth AMSA review: the legal and governance framework; environmental concerns and impacts; and the lack of Arctic marine infrastructure. Not surprisingly, since the region is one of earth's oceans, the UN Convention on the Law of the Sea Convention (UNCLOS) is the legal framework for the regulation of marine operations and shipping according to maritime zones of jurisdiction. An international team of maritime legal scholars led by Canada's Dalhousie University detailed the rights of the Arctic Ocean coastal states as well as the national standards for regulating ship-source pollution in the Arctic. The International Maritime Organization (IMO) was identified as the appropriate and competent UN body to address issues related to Arctic maritime security, safety and environmental protection. Noted in AMSA was the IMO's (then current) voluntary guidelines for ships operating in Arctic ice-covered waters; there were no specific mandatory rules for Arctic ships that were different than safety and marine environmental protection conventions for ships sailing the global oceans.

An AMSA science team tackled the broad issues related to environmental impacts of current and future Arctic marine activity. The team found that the most significant threat to the Arctic marine environment is the release of oil from accidental or illegal discharge. Other key and select impacts addressed included: alien species introduction from ballast water, cargo and hull fouling; ship strikes and potential noise impacts on marine mammals; regional impacts of black carbon; impacts on natural chokepoints and migration corridors; impacts of Arctic ship emissions; and, the impacts of plausible lengthening of the Arctic marine navigation season. In a final chapter in the AMSA report, the lack of Arctic marine infrastructure in most of the Arctic (except for the coasts of Iceland, northern Norway and northwest Russia) was highlighted. The lack of a safety net that marine infrastructure provides is a significant and grave concern for the Arctic states. Such a huge deficit in the mostly remote and harsh Arctic environment makes risk analyses of Arctic marine operations very difficult to evaluate. Huge investments are required in elements of infrastructure such as hydrography and charting, environmental observing, communications, ports, and more to ensure safe navigation. AMSA suggested that new public-private partnerships will be necessary to reduce this infrastructure deficit so that safety and emergency response can be greatly enhanced. The Arctic marine infrastructure challenge remains today as a vexing and strategic needs issue seven years after the release of the AMSA report.

The integration and final phase of AMSA took place at an Integration Workshop in Cornwall, Canada in October 2008. It proved to be one of AMSA's most important and complex meetings. AMSA's 17 recommendations were shaped at this venue and three inter-related themes emerged for communicating these outcomes: Enhancing Marine Safety; Protecting Arctic People and the Environment; and, Building the Arctic Marine Infrastructure. It was at this AMSA workshop that the infrastructure deficit gained status as one of the greatest concerns and most significant outcomes of AMSA. Once the final draft report and recommendations were passed to PAME, a lengthy negotiation process began from late October 2008 to March 2009. The lasting strength of AMSA is that consensus was reached among the Arctic states regarding the AMSA recommendations and the final report. The Arctic Ministers in Tromsø in April 2009 approved AMSA and PAME was requested there to begin a process of implementation of the AMSA recommendations with status reports due back to the Ministers during future Arctic Council Ministerial meetings. AMSA Implementation Status Reports have been approved during the last three Ministerial meetings in Nuuk (April 2011), Kiruna (May 2013), and Iqaluit (April 2015), and a fourth report is due at the May 2017 Ministerial in Fairbanks, Alaska.

The Arctic Ministers and Senior Arctic Officials have signaled a commitment to carrying out implementation of AMSA's diverse recommendations, a clear example of using AMSA as a policy document where the body of approved recommendations represent strategic directions for protection of Arctic people and the marine environment. The Arctic SAR Agreement, the Arctic Oil Spill Preparedness and Response Agreement, progress at IMO on a mandatory IMO Polar Code (to go into force 1 January 2017), greater linkage of the Arctic states on Arctic issues within international organizations (for example, IMO, IHO, and WMO), and greater engagement with Arctic communities (among others) are key accomplishments that stem from the AMSA effort. AMSA remains a cornerstone Arctic state and Arctic Council framework and strategic guide to meeting the many challenges of safe Arctic marine use in the 21st century.

Commentary

From Inspiration to Action, from Action to Institution: Some Early Interventions of Arctic Collaboration in Sustainable Development

Eeva Furman

The need to enhance environmental impact assessment in the Arctic is today more topical than ever before due to manifold plans, strategies and activities for exploitation that have intensively been developed. Rapidly evolving technologies and the warming of the climate raise new opportunities to use Arctic natural resources, maritime and land areas. The Arctic Council's role to facilitate circumpolar collaboration for ensuring that the ongoing and future development in the Arctic will take place in a sustainable manner is key. Here, an Environmental Impact Assessment (EIA) process that is targeted to the Arctic context plays an important role.

This is not, however, the first time that the need for collaboration on environmental impact assessment has been on the Arctic agenda. Let's look back some twenty-five years ago. We lived in a time when the Soviet Union was in its last years and Mikhail Gorbachev was preparing for his presidency of the Union. In his speech in Murmansk (September 1987) Gorbachev raised the issue that environmental issues are something that all Arctic countries share and that putting efforts together would be beneficial to all. This was a smart step to open difficult political discussions in the circumpolar north with a neutral theme that everyone shared and required collaborative actions to solve.

But at that time, the Soviet Union also had big internal issues to manage before serious action could be taken on environmental issues. Conversely, Finland took the idea forward, and in 1989 the eight Arctic countries joined efforts to protect the Arctic environment. The planning was finalized in 1991, when the Arctic Environmental Protection Strategy (AEPS) was signed by Ministers of all the Arctic countries.

The AEPS was structured around five programs: Sustainable Development and Utilization (SDU), Arctic Monitoring and Assessment Program (AMAP), the Conservation of Arctic Fauna and Flora (CAFF), Emergency Preparedness and Response (EPPR), and Protection of the Arctic Marine Environment (PAME). The AMAP evolved to an extensive and coherent program while others became umbrellas under which several activities took place. SDU was of this kind and here the development of the guidelines for an Arctic EIA took place.

The initiative was launched by Finland's Minister of the Environment Sirpa Pietikäinen in 1994 and after some intensive negotiations and a workshop later that year, the idea was accepted and the work started in 1995. This was followed by an intensive process which included identification of issues specific for carrying out an EIA in the Arctic, desk studies of EIA guidelines and other protocols in the various Arctic countries and beyond, as well as face to face negotiations and drafting in the form of workshops with EIA experts from all parties of the AEPS. The ongoing work was regularly reported to the political process of the AEPS for approval to ensure its continuation. After acceptance of the "Guidelines for Environmental Impact Assessment (EIA) in the Arctic" at the Senior Arctic Officials' level, they were finally presented to the Arctic Environment Ministers in 1997. In their declaration in Alta, Norway, the Ministers noted their appreciation in receiving the guidelines and agreed that they should be applied. At this moment, the Arctic Council had been materialized in 1996 (i.e. Ottawa Declaration) and had taken the AEPS to be part of its work – including the guidelines of Arctic EIA.

The Arctic cooperation in the form of the AEPS has been raised as one of the success stories of international environmental collaboration. Its success refers to certain key requirements. Firstly, there was a clear need to build trust between the circumpolar states in a cold war and post-cold war context. Environmental issues are common to all Arctic states and politically neutral (i.e. their character did not stop at national borders). Thus the environmental problem became a common issue for all parties involved in circumpolar affairs.

This was linked to the second element. With the United Nations, countries and regions were globally preparing for the Rio Process, including the Biodiversity Strategy. The process of AEPS was most likely influenced by the Rio process, not the least due to the fact that not only the countries, but in many cases also the experts and civil servants were similar in both processes. Both Rio and AEPS brought indigenous peoples' groups to the process. In the case of AEPS, it brought them to the table with the Ministers.

Thirdly, the momentum was influenced by a shared intuition of the importance and success of the AEPS in internal assemblies of high officials and Ministers when the AEPS was being discussed and planned. At this point, there was already enough knowledge to convince the Ministers of the upcoming challenges which led to a flow of understanding the need to act. Environmentally disastrous accidents, such as the Exxon Valdez oil spill in Alaska, boosted the discussions of the need to combat jointly environmental challenges in the Arctic.

Fourthly and finally, the intentional nature of the AEPS process, and as a so-called soft-law mechanism, has been seen as one of the elements behind its success. Legally binding agreements have been seen as burdensome processes to develop and implement. In addition, violations of such agreements are dealt with on a legal level, while in non-voluntary agreements offenses are dealt with at the political level, seen as a signal of the country's weak commitment to the issue in question.

Twenty years have now passed since the *Guidelines for Environmental Impact Assessment (EIA) in the Arctic* were introduced. At the beginning, the use of the guidelines was boosted in several ways. It was made a living document with a web based platform, the ARIA (Arctic Environmental Impact Assessment) which collected Arctic EIAs from the entire circumpolar region, to serve as examples in other parts of the Arctic. It was also tested in area-based training sessions such as those in northwestern Russia. And it was a topic touched upon by the UArctic. Progressively, the guidelines got diluted, and the small booklet was shelved, and its content lost in the web.

Today, there is a need to place the Arctic EIA once again on the agenda. The regulatory frameworks, the practices, the ways to communicate, the institutions, and most importantly, the activities that need to be assessed, are taking new forms. The Arctic EIA therefore has regained its relevance for the Arctic states. The political agenda in the world is again in a shifting situation where Russia is playing a specific role.

Maybe it is time to rethink the words of Gorbachev in 1987 and see, if the circumpolar environmental agenda has once again something to contribute to the otherwise difficult political negotiations between the circumpolar nations.

References

- Young, Oran R. (1998). *Creating Regimes. Arctic Accords and International Governance*. Ithaca: Cornell University Press.
- Arctic Environmental Protection Strategy (1997). *Guidelines for Environmental Impact Assessment (EIA) in the Arctic. Sustainable Development and Utilization*. Finnish Ministry of the Environment, Finland.

Commentary

The Arctic Council Produces a New Arctic Science Cooperation Agreement

Evan T. Bloom

After more than three years of work, on July 8, 2016 in Ottawa, a Task Force under the Arctic Council reached ad referendum agreement on a new legally-binding agreement among the eight Arctic States that will help reduce obstacles to scientific cooperation in the Arctic. This is an important milestone for the Council, in part because fostering science is one of the most important practical objectives of the Council and this agreement is a major step forward for the Arctic States in that respect. But it is also quite significant because it is the third legally-binding agreement achieved under Arctic Council auspices. The signing of the agreement by each of the foreign ministers of the Arctic States will be one of the key events associated with the next Arctic Council Ministerial meeting.

The Arctic Council is a high level forum established among Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States in 1996 to focus on environmental protection and sustainable development. As the importance of the Arctic in international policy and diplomacy has grown over the past twenty years, the Council has taken on new challenges. The prior legally-binding instruments negotiated under the Council were the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response in the Arctic (2011) and the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic (2009). The latest one, related to science cooperation, will take the Council another step in the direction of being more than a body that facilitates discussion and towards involvement in establishment of legal norms and activities of a regulatory character.

Evan Bloom is Director of the Office of Ocean and Polar Affairs at the U.S. Department of State in Washington. He was co-chair of the Arctic Council's Task Force on Scientific Cooperation in which the agreement discussed in this article that was negotiated from 2013-2016.

The ad referendum Agreement on Enhancing International Arctic Scientific Cooperation was reached based on discussions and negotiations at nine meetings of the Task Force on Scientific Cooperation (SCTF) involving the participation of the eight Arctic States and the indigenous groups known in the Council as Permanent Participants, as well as a number of States and organizations that are permanent observers to the Council.

The Arctic Council Ministers established the Task Force on Scientific Cooperation (SCTF) at the Kiruna Ministerial in 2013. They asked the Task Force to “work towards an arrangement on improved scientific research cooperation among the eight Arctic States.” The Ministers in 2015 in Iqaluit decided to extend the Task Force mandate, including to work towards a legally-binding agreement. The Task Force was co-chaired at the end by the United States and the Russian Federation, and earlier on Sweden was a co-chair as well. The first meeting was held in Stockholm, which was followed by meetings in Helsinki, Reykjavik, Tromsø, Oslo, Copenhagen, Reykjavik again, Arlington, Virginia, and finally Ottawa.

The aim of the agreement is to enhance cooperation in scientific activities in order to increase effectiveness and efficiency in the development of scientific knowledge about the Arctic. It will facilitate access by scientists of the eight States to Arctic areas that each State has identified for purposes of the agreement, including entry and exit of persons, equipment and materials; access to research infrastructure and facilities; and access to research areas. It covers terrestrial, coastal, atmospheric and marine areas, as well as Arctic Ocean areas beyond national jurisdiction. It calls specifically for facilitation of processing of marine scientific research applications under the Law of the Sea Convention, as well as scientific activities that require airborne scientific data collection and that are subject to implementing agreements pertaining to those activities.

The agreement calls for the Parties to promote education, career development and training opportunities for early career scientists to foster future generations of Arctic researchers. The agreement contains provisions regarding the use of traditional and local knowledge that were sought by indigenous groups that are Permanent Participants in the Arctic Council. The agreement supports enhancing and facilitating cooperation on Arctic science with non-Parties and assists the scientists of non-Parties (including Arctic Council Observer States) by providing benefits under the agreement when they work as partners with Arctic State scientists. The agreement also addresses intellectual property rights.

The agreement calls for designation of competent authorities within each Party to act as points of contact. The Depositary Government will be the Kingdom of Denmark.

At this time, the agreement is undergoing final domestic review within the eight Arctic States, with the goal of signature and entry into force at the U.S.-hosted Arctic Council Ministerial Meeting in May, 2017 in Fairbanks, Alaska.

Commentary

Building Partnership for a Sustainable Future

Erica M. Dingman

The Arctic Council has earned a noteworthy reputation as an institution that exemplifies the ideals of cooperation and inclusion. As a consensus-based forum, the motions adopted amongst Arctic states with the political participation of indigenous peoples is a testament to the Council's democratic practices. As an aspect of the present U.S. Arctic Council Chairmanship strategy (2015-2017), these ideals were recently extended to promote the development of domestic and cross-border public-private partnerships. Outlined in the Implementation Plan for the National Strategy for the Arctic Region (White House, 2014), the purpose is to leverage private investment into the Arctic region to address the shortage of maritime infrastructure, telecommunications, and for development of renewable energy projects. The U.S.-Canada Joint Statement on Climate, Energy and Arctic Leadership (White House, 2016a) emphasized the later, calling for the 'advancement of clean growth'. Shortly thereafter, U.S. and Nordic leaders announced in a Joint Statement (White House, 2016b) a shared commitment for 'shifting to low carbon economies' and acceleration of a 'transition to a clean energy future' acknowledging the impact of climate change specifically in the Arctic region. Leaders recognize that private sector partnerships are a fundamental requirement to achieve such lofty goals.

Building such public-private partnerships in the Arctic and with Arctic residents, however, will likely meet with a unique set of challenges. Those challenges will arise from a broad mix of issues. The diversity of participants alone – cross-sector, multicultural, different sets of expertise, and at times crossing national boundaries – working toward mutually beneficial outcomes will assuredly encounter impediments along the way. Southerners, a term used on occasion or implied by Arctic

residents to differentiate between those who live in the region and those who do not, likely live in different cultural worlds, and a diversity of languages and cognitive processes can implant hurdles in the pathway of a projects success.

Yet if implemented methodically the rewards of development far surpass pure economics. Financial goals, coupled with high environmental imperatives and substantive local stakeholder input that contributes to the livelihoods and wellbeing of those who live in the Arctic are far more likely to result in improved outcomes. Success in the Arctic now requires a depth of sub-national and indigenous participation not articulated with such vigor in decades past. Likewise, trust, relationship building, and willingness for active listening and learning are imperatives for reaching common goals.

The Pacific Northwest Economic Region (PNWER) represents one notable cross border consortium comprising representatives from ten U.S. and Canada state, provincial or territorial jurisdictions. Public sector representatives from the northern jurisdictions of Alaska, Yukon, and the Northwest Territories shape PNWERs Arctic Caucus (n/d, a) which provides a forum for information sharing and collaboration among northern peoples, inclusive of the private sector, to “communicate community interests and to influence policy.” PNWERs objectives do not preclude the extraction of natural resources, but the organizations Energy & Environment Working Group aims to develop net-zero energy building demonstration projects, which includes the Inuvik Northern Sustainable House completed in 2014. During the early planning stages community elders representing both the Gwich’in and the Inuvialuit, and community stakeholders from both the public and private sector were included in the design process to contribute local perspectives. Offered the option of a two-storey, one-and-a-half, or one storey duplex, for example, the latter option best met the cultural and lifestyle needs of community members, and the duplex design contributed to the objective of designing highly energy-efficient housing (Canada Mortgage and Housing Corporation, n/d).

In addition to this example of sustainable housing, Arctic economies are in need of investment: infrastructure is lacking and employment opportunities in short supply. With few deepwater ports along the Arctic coastlines of Canada and U.S. the current desire for additional facilities in both countries aims to accommodate not only commercial shipping but also auxiliary activities adding to the economic growth of surrounding communities. Vastly improved telecommunications systems would create connectivity, a necessity for economic growth in today’s society (Pacific Northwest Economic Region, n/d, b). Increased economic activity based on non-extractive production would support environmental protections, and long-term sustainable employment so needed to help alleviate the unacceptable level of social ills that plague so many Arctic communities today. For example, the rate of suicide among Canadian Inuit, particularly the youth, is eleven times that of other Canadians resulting from a number of factors including poverty and limited opportunities for employment (Inuit Tutturvingat, n/d). If Arctic residents are to build a healthy sustainable future, from both the economic and environmental perspective, investment into infrastructure is vital for a future aimed at depleting global dependency on extractive resource industry for economic growth.

How that future is determined is still a matter of speculation, although it is readily apparent that an increasing number of people are attempting to understand and shape what that future may be. In recognition of impending change, the Arctic Economic Council was founded during Canada’s most

recent chairmanship of the Arctic Council and met for the first time in September 2014. And in January 2016 Guggenheim Partners, a U.S.-Based global investment firm, were the first to endorse the World Economic Forum's Arctic Investment Protocol, which attempts to create a better framework for international investment based on the UN Sustainable Development Goals.

From a broader global perspective, indications suggest that a new approach toward development that incorporates economic growth with environmental protections may be on the horizon. Indeed, amongst a growing number of constituents from the investment and business communities it's a long-term strategy that indicates a global transition, which may mark a major turning point in world history. Yet for such a transition to take place, a wide-ranging group of communities from local indigenous groups to investment firms and governments will need to engage in substantive dialogue that thrives not on the status quo but rather emerges from a foundation of non-traditional thinking. As Scott MinerD (2013), global chief investment officer of Guggenheim Partners, stated: "it is easy to define the [Arctic's] future with the vocabulary of the past. But as we chart a course ahead, we must make sure that we learn from the past, rather than mindlessly repeating it." As with any meaningful transition, however, it will take time to see the fruits of change, if in fact the trend toward sustainable development remains on track.

References

- Canada Mortgage and Housing Corporation. (n/d). *Northern Housing Project Profile — The Inuvik Northern Sustainable House*. Retrieved from https://www.cmhc-schl.gc.ca/en/inpr/bude/noho/upload/68157_W_ACC.pdf.
- Inuit Tuttarvingat. (n/d). *Suicide Prevention*. Retrieved from <http://www.naho.ca/inuit/mental-wellness/suicide-prevention/wellness/suicide-prevention> .
- MinerD, S. (2013). *We Must Avoid Seeing The New Arctic Through an Old World Lens*. Retrieved from <https://www.guggenheimpartners.com/news/we-must-avoid-seeing-the-new-arctic-through-an-old>.
- Pacific Northwest Economic Region. (n/d, a). *Arctic Issues, Global Growth: A Unique Partnership between Alaska, Northwest Territories, and Yukon* [Brochure]. Retrieved from http://www.pnwer.org/uploads/2/3/2/9/23295822/pnwer_arcticcaucus_broch_withphotos.pdf.
- Pacific Northwest Economic Region (n/d, b). *United States Arctic Council Chairmanship Should Focus On Economic Development for the Benefit of Arctic Residents* [White Paper]. Retrieved from http://www.weebly.com/uploads/2/3/2/9/23295822/pnwer_white_paper_on_us_arctic_council_chairmanship.pdf
- White House. (2014). [United States]. *Implementation Plan for the National Strategy for the Arctic Region*. Retrieved from https://www.whitehouse.gov/sites/default/files/docs/implementation_plan_for_the_national_strategy_for_the_arctic_region_-_fi....pdf
- White House. (2016a). [United States]. *U.S.-Canada Joint Statement on Climate, Energy, and Arctic Leadership* [Press release]. Retrieved from <https://www.whitehouse.gov/the-press-office/2016/03/10/us-canada-joint-statement-climate-energy-and-arctic-leadership>.

White House. (2016b). [United States]. *U.S.-Nordic Leaders' Summit Joint Statement* [Press release]. Retrieved from <https://www.whitehouse.gov/the-press-office/2016/05/13/us-nordic-leaders-summit-joint-statement>

Section IV:

**Local & Indigenous Issues
in Arctic Governance**

Greenland & the Arctic Council: Subnational Regions in a Time of Arctic Westphalianisation

Inuuteq Holm Olsen & Jessica M. Shadian

In recent years renewed global interest in the Arctic and the Arctic Council, in particular, has led to what can be called a 'Westphalianisation' of Arctic politics. This Westphalianisation can be found in the increasing number of globally powerful states including China, Japan, and India as well as the European Union which have all sought a formal role in Arctic policymaking (specifically by seeking observer status on the Arctic Council – the most significant fully circumpolar intergovernmental regime). The Arctic Council itself has shifted from a high level forum to an intergovernmental regime which has begun to produce a number of binding agreements under its auspice. At the same, over the past thirty years subnational regions around the world have become powerful global actors. This is due in part to the strength of certain subnational economies, the inability for states and the intergovernmental system (e.g. UN) to meet the challenges facing subnational regions, as well as a broader reconceptualization of sovereignty; namely the decentralisation of traditional governance. Subnational regions, subsequently, are increasingly finding or seeking a greater voice in global politics.

In the Arctic, unlike earlier periods of history when global powers arrived and were met with little if any political resistance, in today's Arctic subnational entities from Greenland to Nunavut and Alaska have all attained the legitimacy and the agency to engage in global politics on their own accord. This chapter will focus on the future of the Arctic Council in light of this renewed global interest in the Arctic alongside the rise of globally situated subnational Arctic regions. In particular this chapter will focus on a global Greenland as a window into the incongruent forces between the Westphalianisation of the Arctic Council and the growing power of Arctic subnational regions. At the very time that Greenland is gaining its greatest strength on its path towards greater self-determination its role on the Arctic Council is being diminished. Borrowing from IR and political geography literatures this chapter will look at the implications of these tensions for the future of Arctic governance and within this the future efficacy of the Arctic Council.

Introduction

It happened over lunch. It was Tuesday the 15th of May 2012. The Senior Arctic Officials (SAOs) of the Arctic Council¹ were in Stockholm for a Deputy Minister's meeting when it was unveiled that Greenland and the Faroe Islands would no longer have a spot at the negotiating table alongside the Danish SAO (Denmark is an Arctic country by virtue of its political relations with Greenland and the Faroe Islands). In reality, the lunch was only one instance among a growing number of changes taking place within the Arctic Council. The origins of these changes reach back to the 2009

Inuuteq Holm Olsen is Minister Plenipotentiary and Head of Representation for Greenland at the Danish Embassy in Washington, D.C and Ottawa, Canada. Jessica Shadian is Nansen Professor at the University of Akureyri and Senior Fellow at the Bill Graham Centre for Contemporary International History, University of Toronto.

Arctic Council Ministerial meeting in Tromsø, Norway. Unlike the low brow nature of past meetings, the 2009 Arctic Council meeting included political leaders from former United States Vice President, Al Gore to the Chinese Minister to Norway and Michel Rocard (former Prime Minister of France under François Mitterrand and appointed French ambassador to the Arctic and Antarctic), among others.

Underlying the impetus behind the sudden increased global attention to the Arctic and subsequent attendance at the 2009 meeting was the fact that the Ministerial meeting was the first official meeting following Arthur Chilgarov (Russia's most famous Arctic explorer) – accompanied by a fellow parliamentarian, a Swedish businessman, and an Australian tour operator – voyaged to the North Pole where a tiny titanium Russian flag was planted on the seabed. Since that flag planting, global interest in the Arctic has grown exponentially. Powerful global states including China, Japan, South Korea, India and Singapore have set out – with great success – to become Observers on the Arctic Council (the EU has been less successful). In attempts to circumvent rather than overtly dismantling the privileged position of the six Indigenous Permanent Participants who also sit at the negotiating table alongside the Arctic states, the Arctic Council responded to growing interest through varying actions that resemble conventional intergovernmental politics (politics by and for states). This includes a growing number of binding agreements that have been negotiated by the eight Arctic states (with various levels – from some to none – of participation by the PPs) under the auspices of the Arctic Council (the Arctic Council does not have the authority to make legally binding agreements).

Parallel to those changes taking place in and around the Arctic Council, Arctic politics more broadly has been affected by emerging global political trends. Beginning in the 1970s, a number of subnational and transnational Arctic governments and institutions have been increasingly forging ahead with their own Arctic politics and collaborations, at times operating on a global scale. In certain instances, their efforts bypass national governments and often those collaborations fall outside of the scope of the Arctic Council altogether.

This article will focus on the future of the Arctic Council in light of this renewed international interest in the Arctic alongside the rise of globally situated subnational Arctic regions. In particular, this chapter will focus on a global Greenland as a window into the incongruent forces between the Westphalianisation of the Arctic Council and the increasing institutionalisation and assertion of subnational Arctic politics. This chapter will begin by laying out a brief narrative of what we refer to as the Westphalianisation of the Arctic Council before moving on to a theoretical discussion about regions and the politics underlying the borders that create them. The theoretical backdrop provides context for the following section which looks specifically at a changing Arctic through the eyes of Greenland before taking a closer look at the intersection between the forces of global sub-national regions and a Westphalianising Arctic Council.

Westphalianisation of the Arctic Council

The modern Westphalian political system has its roots in the 1648 Peace of Westphalia. The treaties of Munster and Osnabruck amounted, essentially, to the first international treaty. Under its provisions, the 'European powers asserted the principle of "right before might" thereby concluding the Thirty Years' War with negotiations instead of force' (pamphlet from Peace Hall in Osnabruck, Germany in Shadian 2014: 12). Under the Peace of Westphalia, sovereignty was reconceived so

that each nation was given the sovereign right to control and govern their own territory without interference from others. In effect, the notion of sovereignty was transferred from God to the King (Linklater, 1998: 131; Archibugi et al., 1998; Shadian, 2014: 12).

The eighteenth and nineteenth centuries then brought about the French and American revolutions which again transferred the notion of sovereignty, this time away from the monarchy to the people. As the French Declaration of Rights (1795) states: “Each people is independent and sovereign, whatever the number of individuals who compose it and the extent of the territory it occupies. This sovereignty is inalienable” (Hobsbawm, in Rudolph, 2005: 5). Through the idea of ‘popular sovereignty’, the people of the state became the narrative of the nation-state: “The state is the land, the people, organization of coercion and a majestic idea, each supporting and even defining one another, so they [become] indivisible” (Onuf, in Rudolph, 2005: 5). Sovereignty, thus, became the symbolic affirmation of the nation-state.

The founding of the United Nations in October 1945 reaffirmed the concept of state sovereignty through the creation of modern international law. Writing at the time of the UN’s founding, almost 300 years after the Peace of Westphalia, Leo Gross noted that while the political map had changed greatly since the treaty, its chief political idea had “undergone relatively little change” (1948: 21). In modern international law, sovereignty entailed a highly specific conception of ‘nation’ – one that was closely related to territory (i.e. to territorial integrity). Because of the long-standing premise that land was something that could be owned and exchanged, nationhood also became a legal aspiration, which was to attain territorial integrity (Rudolph, 2005: 127). In effect, territorial integrity became a precondition of international standing. According to Anghie,

sovereignty represents at the most basic level an assertion of power and authority, a means by which a people may preserve and assert their distinctive culture. . . . For the non-European society, personhood as recognized internationally was achieved precisely when the society ceased to have an independent existence, when it was absorbed into European colonial empires or when it profoundly altered its own cultural practices and political organizations (1999: 62).

Fast forwarding to the end of the Cold War and the era which followed, global politics had – by the end of the century – manifested into a global politics marked by the creation and resurgence of substate and non-state politics that very often physically and politically transcended the long entrenched idea of the Westphalian political system. The new political terrain became that which was not defined by a waning of nationalism and nationalist movements or the demise of the nation-state system, but rather by what Rosenau referred to as *fracturation* or “resistances to boundary-spanning activities” which also act simultaneously with the rise of new orders and institutions or integration (1997: 243).

In many parts of the world today, nationalist movements have become a combination of political entities that have acquired quasi-sovereignty arrangements with their respective nation-states and whom also work directly with international institutions and others that seek territorial acquisition by force and/or through global internet diaspora (from the Zapatista movement (Martinez-Torres, 2001) to ISIS (Hegghammer, Winter 2010/11). In effect, territorial integrity is no longer a guarantee of or a precondition for attaining a certain degree of political sovereignty.

In the midst of these changes the first iterations of the Arctic Council was conceived and eventually brought to fruition. When the Ottawa Declaration was finally signed in 1996, the Arctic Council established itself as a high level forum to: “provide a means for promoting cooperation,

coordination and interaction among the Arctic States, with the involvement of Arctic indigenous communities and other Arctic inhabitants on common Arctic issues” (Arctic Council, 19 September 1996). The new political collaboration established a platform for the eight Arctic states and three indigenous permanent participant organisations (PPs) (which are now six) to sit together at the negotiating table to discuss how the Arctic environment should be preserved, developed, and governed for the benefit of the Arctic states and those living there. Well beyond the exclusion of security matters, the Arctic Council was namely established as a means to discuss Arctic environmental protection and sustainable development. Given the impossibilities to create a political regime during Cold War, establishing full circumpolar cooperation of any nature in the early post-Cold War years was deemed as a great accomplishment.

One significant moment leading up to the creation of the Arctic Council was Mikhail Gorbachev’s 1987 address to the international community from the Arctic city of Murmansk. At that meeting he called on the Arctic to become an international ‘zone of peace’ (Gorbachev, 2011: 9). That meeting has now become symbolic for initiating a fundamental shift in the history of Arctic politics. Whereas up until that point the Arctic was long recognized by the international community as either a no man’s land (the final frontier); strategically, as the place where the East met the West during the Cold War; or considered significant for scientific purposes, Gorbachev’s speech initiated a new process of political region-building.

Two decades later, another prominent Russian remade the role and significance of the Arctic in global politics. Chilingarov’s Russian flag planting on the seabed at the North Pole once again instantaneously and irreversibly altered the Arctic’s geopolitical relevance. Despite the decades of established region-building going back to when Gorbachev first foresaw the Arctic as ‘a zone of peace’, much of the world viewed Chilingarov’s flag planting as an act of Russian aggression in a region without governance and still frozen in a Cold War politics (Canwest News Service, 2008; Doward et al., 2007; Live Leak, 2009; Borgerson, 2008).

Shortly following the flag planting, the eight Arctic states, six PPs, and a surge of non-Arctic politicians gathered in the Arctic Norwegian city of Tromsø to attend the 2009 Ministerial meeting of the Arctic Council. The newly attending non-Arctic states wanted to learn more about the Arctic Council and moreover how they can become involved in this ‘new’ global geopolitics of the Arctic. The Arctic states, taken by surprise at the numbers of newly interested non-Arctic states and organisations (e.g. the International Association of Oil and Gas Producers submitted an application to become an Observer) found themselves suddenly faced with a new reality that the Arctic Council had become a global political regime and that the time had come to revisit its mandate and its goals. Void of the ability to make international law, the main question for the Arctic states was to determine what role the Arctic Council should play in the governance of the region, who should be part of this governance, and moreover where the Arctic Council sits in the realm of global politics going into the future.

Since 2009, the direction that the Arctic Council has adopted is to start making its way down the path of conventional Westphalian politics, coming just short of fully realising the necessities that come along with that move. Due to new interest and “pressure” by non-Arctic countries to be more involved in Arctic governance, the Arctic Council member states have begun to re-align the way the Council has traditionally operated. For instance, a number of Arctic countries began meeting outside of the Arctic Council and therefore without the PPs. Likewise, some Arctic states

began to impose controls which would only recognize and allow the original member states to sit around the table and make decisions. The consequences of the latter action eliminated the practise whereby, until 2011, Greenland and the Faroe Islands sat at the table alongside Denmark. Despite not being full members of the Arctic Council, Greenland and the Faroe Islands are the principal Arctic actors in the Kingdom of Denmark's Arctic affairs.

Further, since its founding, the Arctic Council has transitioned from a "high level forum" (Ottawa Declaration) at its inception into a "high level *intergovernmental* forum" (Arctic Council Home Page)² "to provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic Indigenous communities and other Arctic inhabitants" (*ibid*). In international law *intergovernmental* specifically refers to an institution (forum or otherwise) comprised of sovereign states. It then becomes an intergovernmental *organisation* through the establishment of a Treaty. Without the existence of a treaty, however, the Arctic Council cannot make formal (hard law) international policies (Harvard Law School, n.d.).

Despite these shortcomings and recognising its inability to take legal action, since 2011 the Arctic states – under the auspices of, and not as a directive of, the Arctic Council – have produced a number of binding agreements. This is something historically unique for the Arctic Council member states. The binding agreements began with the 2011 'Agreement on Cooperation in Aeronautical and Maritime Search and Rescue in the Arctic' (SAR) which was followed by the 'Agreement on Cooperation on Marine Oil Pollution, Preparedness and Response in the Arctic' (Oil spill Agreement) in 2013. Then in October 2015 the Arctic Coast Guard Forum was established and several other binding agreements are currently under negotiation (including a science cooperation agreement).

The move towards binding agreements is significant in a number of ways. The first, is the obvious point that the agreements are indications of the fact that – despite that the Arctic Council does not have legal authority to make international law – the Arctic states have decided that they do want to be able to determine how Arctic governance should proceed (rather than leave policy to the UN or another international body). Secondly, because the agreements were made among the Arctic States and under the auspice of the Arctic Council rather than by the Arctic Council itself, they have largely excluded the six indigenous PPs (though they were part of the discussions leading up to the Oil Spill agreement). This includes the fact that the PPs did not sign the agreements. These two factors combined are, as such, bringing to the surface the broader question facing the future structure and mandate of the Arctic Council: Who does the Arctic Council serve and who gets to govern?

Though the Arctic Council includes six indigenous organisations (representing northern Indigenous peoples) the new binding agreements are made by the eight Arctic states and those States' capitals are situated in the southern regions of those states, capitals which are often physically located very far from the North and therefore have very different realities and priorities than their northern governments and peoples. Despite that the northern regions make the eight states *Arctic* States in the first place, it is often the Foreign Ministers and civil servants working in the southern capitals who serve as the SAOs and Arctic Council Ministers (Canada has a long standing exemption in this regard which includes Member of Parliament (MP) from Nunavut, Leona Aglukkaq, who served as Canada's Minister for the Arctic Council and its Chair from 2013-

2015 as well as Mary Simon and Jack Anawak who have both served as the Canadian Ambassador to the Arctic.)

Subnational northern regions, therefore, are increasingly finding that they need to go through southern capitals to be heard within the Arctic Council. In effect, the Arctic Council is increasingly speaking on behalf of and is making decisions about its northern regions without their representation. In return, those regions then have little choice but to implement what has been decided. As the Arctic Council continues to Westphalianise and proceed down the path of 'intergovernmental' forum the lingering legacies of colonial practice are coming to the surface. Alaska State House Representative from Bethel, Alaska Bob Herron poignantly remarked on the prevailing colonial mentalities when he had to 'fly South' to participate in an Arctic Encounter Symposium in Seattle in January 2016:

We're not someone's convenient snow globe so they can look inside the snow globe and see all these little fur-clothed, subsistence people living in a zoo, in a museum, in an environment where they must protect it... There's a couple times where I've felt that I've been patted on the head and they've said, 'Don't worry. We'll take care of you' (Miller, 2016: 15).

The questions that House Representative Herron's comment raises is whether or not, as the Arctic Council evolves, southern powers are once again becoming gatekeepers of the North. Who controls the political narrative of the Arctic? In a region of regions, where do the political and governing borders of the Arctic begin and end?

The Arctic: A Region of Regions

Conventionally thinking, regions are understood as a collection of certain borders – borders which, in contemporary international law are those which divide the world into states. The dominant thinking of regions from the end of the Second World War to the end of the Cold War, according to geographer John Agnew, was that of a world divided vertically and horizontally – there was the East versus the West and the Global North versus the Global South (Agnew, 2013). Likewise, during this time, sub-national regions were seen predominantly as sub-national entities nestled within singular national contexts and until the 1970s, the entire discourse of regional studies and the question of regions was part of a national question (Agnew, 2015) – a discussion among states.

However, in the Arctic (and as Agnew and others argue has perhaps always been the actual case around the globe), sub-national politics and sub-national regions cannot be understood from merely a national and thus state-centric framework. Rather, the making of subnational political histories need to be understood as contingent of, and not only subsumed under the national identities of the interstate system.

Historically, European (followed by Russian, U.S., and Canadian) exploration into the Arctic (and the discovery that thousands of indigenous peoples had already been living there for millennia) eventually gave way to permanent settlement which was followed by colonization of the region's indigenous peoples until the Arctic was finally remade into peripheral appendages of the states that had consumed the region. Whereas eventual decolonization in Africa and Asia led to the making of new states which then divided the world into the Global North and Global South, the internal colonization that took place in the Arctic had led to an inverse of these events. Southern capitals eventually controlled the political affairs of their northern territories and people until the 1970s

when the processes of re-establishing political autonomy began. Because “arguing with regions is always historically contingent” (Agnew, 2013: 7) the ways in which the Arctic has been understood and governed has depended on these larger historical processes of global politics and those who have written their accompanying political narratives.

Given the historical contingency of regions, borders then, can “only be theorised as part of a wider production and reproduction of territoriality/territory, state power and agency” (Johnson et al., 2011: 62) or as facets of global politics that are continuously undergoing change. In the Arctic, the Arctic Ocean and the 66th parallel have provided a pre-existing political border to help imagine the Arctic Council into existence; it is a bounded political region in and of itself. Soft politics, namely environmental concerns, was the original driving force underpinning political cooperation (and the end of the Cold War). Yet, below the eight state borders many of the northern sub-regions share cultural, historical and economic similarities and connections with each other which transcend state borders. This includes many shared experiences with the Arctic’s ice, land, seas, colonial histories, ancestry, and resources. Moreover, it is those facets combined which have come to underpin the contemporary narrative and understanding of the Arctic as a region in global politics.

The political geography of the Arctic, as such, is not only static borders themselves (which divide one state from another or distinguishes the Arctic from other regions) but the relationships between the structures (materiality of physical borders) and agency (the politics and relations that those borders create).³ In the case of the Arctic, beyond the obvious Arctic regional politics which includes a politics of the borders dividing each of the Arctic states and a politics of being a region relative to other regions around the world, the regional political narrative of the Arctic is equally based on historical domestic politics between southern capitals and their northern sub-regions which include colonial histories and later indigenous land claims agreements and other forms of sub-national governments. The Arctic as a political region, as such, is a contingent conglomeration of bounded territories (state sovereignty), local sites of politics and governance, transnational Arctic politics, international institutions, and global discourse. It is certainly a region of regions. According to Watts: The “local is never purely local but ... created in part by extralocal linkages and practices over time” (Watts, 1999 as quoted in Shadian, 2010). As Doreen Massey writes on the relations between internal regional understandings of self and global political change:

This is a notion of place where specificity (local uniqueness, a sense of place) derives not from some mythical internal roots nor from a history of isolation – now to be disrupted by globalization – but precisely from the absolute particularity of the mixture of influences found together there (Massey, 1999: 22).

Making Arctic Sub-Regions

Bringing theory to bear on the political realities on the ground, unlike Africa or Asia, the northern regions of North America and its Indigenous peoples had to wait until the 1970s to begin their own political processes of self-determination. Likewise, what was similar was that all aims for self-determination began with expectations to develop resources on Arctic Indigenous lands and the debates which followed eventually led to land claims agreements in Alaska and Canada, various forms of cultural autonomy and Indigenous rights in the European Arctic, as well as Greenland Home Rule which has now become Greenland Self-Rule.

Greenland Home Rule came into being in 1979. The impetus behind greater Greenlandic autonomy from Denmark stemmed from the reactions by Greenlanders against Danish policies regarding Greenland during the 1950's to the 1970's. Those policies radically transformed Greenlandic society and many Greenlanders suddenly found themselves as mere spectators to developments taking place there. Danish policies included closing down a number of Greenlandic communities and relocating those inhabitants to larger communities where they could concentrate people (and therefore workers) in a fewer number of places. The result was the onset of severe social malaise (Rosing Olsen, 2005: 49-54). At the same time, Danish language education was heavily promoted at the expense of Greenlandic including sending 10-12 year old children to Denmark for a year to attend school. The aim was for Greenlanders to adopt the Danish language, culture, and general way of life (Rosing Olsen, 2005: 49-54; 72-75).

The policies which were imposed on all Greenlanders created a growing dissatisfaction and awareness, especially among those Greenlanders studying in Denmark at the time (Rosing Olsen, 2005: 49-54; 126). The culmination of the political unrest was the formation of a political movement that eventuated with the adoption of the Home Rule Act in 1978 and which came into effect 1 May 1979. Other political events in the early 1970's in Denmark also prompted the movement towards Home Rule. In particular, it was the influence of a young Greenlandic politician, Moses Olsen, who was elected to the Danish Parliament in 1971. His election to Parliament created a Social Democratic government majority in Denmark. Once in office, one of Olsen's first demands was the creation of a Home Rule Commission. That demand was soon followed by a referendum in 1972 in Denmark and Greenland regarding Danish membership into the European Economic Community (now the EU). At that time, a majority in Greenland voted 'No' but those votes were casted into the total Danish tally (which were in favour of joining). When all was said and done Greenland joined the EU against the will of its population (Enoksen, 2008).

At the heart of the Greenlandic opposition to joining the European Economic Community (The European Union formally became the EU in 1993 under the Maastricht Treaty) was Greenland's desire to control and develop its own renewable and non-renewable resources. By joining the EU, Greenlandic fisheries – Greenland's most important industry at that time – fell under EU control. Subsequently, other EU nations gained preference due to historic rights in Greenlandic waters putting Greenland in a situation where it couldn't develop its most important industry for its own people as the allocation of quotas were controlled in Brussels.

Contestation against being part of the EU, however, helped finalise the Home Rule Act in 1979, and in 1982 Greenland held a referendum where a majority of its population voted against continued EU membership. Consequently, in 1985 Greenland became the first autonomous country (within the Kingdom of Denmark) to leave the EU (the UK is now in a process to be the second).

With the passage of the Home Rule Act, Greenland – unlike the land claims processes in Canada and Alaska – did not give up Inuit title. Likewise, whereas Alaska land claims are focused most strongly on Indigenous corporations and the Canadian land claims have been processes of decentralisation of power away from Ottawa to the local land claims settlement regions, Greenland since Home Rule has slowly gone through a process of transferring control from Denmark to Greenland. Home Rule, among an entire host of other inclusions, established a public government. Though it was an issue during the Home Rule Commission, Greenland was not granted the right

to control mineral resources. The compromise was the establishment of joint Danish-Greenland Council on Mineral Resources consisting of five members of Parliament from Denmark and Greenland. By doing so, Greenland was given veto power, preventing the Danish government from enacting any new legislation regarding Greenland without the consent of the Home Rule Authorities or vice versa (Christiansen, 2015: 72-73). Likewise, with Greenlandic secession from the EU Greenland took control of its fisheries; but at the same time it entered into a fisheries agreement with the EU. In that Agreement, the EU pays for fishing rights in Greenlandic waters.

Since 1979, Greenland has gone through two Commissions which have concluded with greater autonomy (the first was a pure Greenlandic commission and the second consisted of an equal number of representatives from Denmark and Greenland). Finally, in June 2009, Self-Rule came into effect giving Greenlanders total control over all surface and subsurface rights from 2010 onwards. As the legislation determined, all resource revenues will first go towards paying against the Danish block grant allocated to Greenland every year. While remaining under the Danish realm, Greenland under Self-Rule now owns outright all of its surface and subsurface resources and negotiates internationally on its own accord in those areas that both fall under Greenlandic jurisdiction and geographically deal with Greenland itself. Areas such as foreign affairs covering the whole of the Kingdom as well as security and defence, however, remain under the Danish authorities. Despite those rules, whenever Greenlandic interest or issues of relevance are involved Denmark has to include Greenland's interest in those deliberations or negotiations (Pram Gad, 2012; Ackren, 2015: 404-12; Skydsbjerg, 1999).

One example of these divided competences is the issue of uranium mining. Uranium is a well-regulated mineral that is covered by several UN conventions and aspects dealing with security and defence. After lengthy negotiations, Greenland and Denmark entered into four agreements on how to handle and proceed with the question of uranium. Having taken over the area of mineral resources, Greenland gives permission for exploration and exploitation licenses for minerals containing uranium while Denmark will have the responsibility of securing the compliance of several UN (especially IAEA) conventions including in areas of safeguard measures, export control, and non-proliferation. Uranium mining has become the first instance (since the 2009 Self-Rule Act) which has created a clear divide between the competences of the Government of Greenland and the responsibility of the international subject, herein the state of Denmark.

Overall, Greenland exemplifies a vastly changing Arctic political landscape. Moreover, as the connections between the Arctic and the global economy strengthen through possibilities of new shipping routes and increased ship traffic across the Arctic, coupled by renewed interest in Arctic resources and a growing tourism industry, subnational Arctic regions are becoming increasingly globalised alongside the domestic changes at home. Unlike earlier periods of history when explorers and entrepreneurs from around the world came to the Arctic and were met with little if any political resistance, in today's Arctic, sub-national entities from Greenland to Nunavut and Alaska have set up institutions of governance, hybrid cooperations, and corporations which collaborate directly with global industry and government as well as monitor and regulate activities.

Greenland alone has a direct and on-going relationship with the EU since its withdrawal in 1985. Over the years it has evolved such that Greenland now has a permanent representation in Brussels. In September 2014, Greenland opened a North American office in Washington DC. Both of those offices meet with policy makers, industry, and other associations to establish direct ties and

relations with the North American governments, sub-national governments, industry, and other entities on behalf of Greenland. Greenland's Brussels and North American representation also serves to disseminate outwards Greenlandic views and interests in the Arctic region and globally.

A Changing Arctic Council through the Eyes of Greenland

Another major aspect of Greenland's foreign diplomacy is its long standing participation in Arctic cooperation which dates back to the Arctic Environmental Protection Strategy (AEPS) – the precursor the Arctic Council – including the discussions leading up to its establishment on 14 June 1991. Greenland, subsequently, was a participant throughout the negotiations to establish the Arctic Council. As an Arctic nation, the Home Rule and now Self-Rule governments believe that it is imperative for Greenland to take part in and to contribute to regional policy discussions in a political forum like the Arctic Council, specifically when those decisions affect Greenland and its people.

Leading up to the formation of the Arctic Council, it was considered only logical that Greenlandic policy makers were part of the discussions and negotiations as well as the evolution of its work since its inception. Denmark has also historically recognised the critical role of Greenland during the negotiations and continues to recognise its role more generally on the Arctic Council through today. As an exemplar of this, at the inauguration of the Arctic Council, the then Premier of Greenland, Lars Emil Johansen, signed the Ottawa Declaration on behalf of the Kingdom of Denmark. Likewise, in the early years Ministers from Greenland were often the Head of Delegation for Denmark (e.g. the Barrow Declaration in 2000 and Reykjavik Declaration in 2004, Arctic Council website). Further, Greenland has been consistently active in many of the working groups including its role as the lead delegation as well as Chair of various working groups. For example, Greenland represents the Kingdom of Denmark in the Sustainable Development Working Group (SDWG) as well as the Protection of Arctic Marine Environment (PAME).

Throughout the 2000's, the Danish delegation to the Arctic Council consisted of the Faroe Islands, Greenland, and Denmark. All political entities participated on equal terms. There were three chairs at the table and all three parties participated in the executive meetings as well as ordinary meetings of the Senior Arctic Officials (SAOs). The country label was 'Denmark/Faroe Islands/Greenland' and all three flags were prominently displayed at the table. These



Photo Credit: Arctic Council Indigenous Peoples Secretariat

displays did not consist of a change of the membership status from the Ottawa Declaration but there was tacit agreement that this was how the Kingdom of Denmark represented itself.

For Denmark, it has been a longstanding practice to include Greenland and the Faroe Islands in all delegations where all three bodies have vested interests. Denmark's practice of conducting foreign policy was not always well understood by other countries' diplomats; its politics differed greatly from the other Arctic countries' own political structures at home and thus their conduct for diplomacy. Yet, when it came to the Arctic Council, the tripartite Danish delegation had become accepted practice.

During the 2011-2013 Swedish Chairmanship of the Arctic Council, however, the Westphalianisation of the Arctic began to manifest itself in the operations of the Arctic Council. This change from the status quo began when Greenland and the Faroe Islands suddenly found themselves excluded from the executive SAO meetings – the place where the most high-level political negotiations and decisions are made. The form of exclusion, interestingly enough, came in the form of *chairs* (not a formal letter or other official protocol). Suddenly, the designated spot for the Kingdom of Denmark at the negotiating table went from having three chairs to one chair. Greenland and the Faroe Islands were left to find chairs of their own away from the table (which sometimes included finding chairs located outside of the negotiation room altogether).

That was in 2011 and the exclusion of Greenland and the Faroe Islands continued for the following two years throughout the Swedish Chairmanship. The new seating arrangements did not, however, go unchallenged. The dissatisfaction came to a head when Greenland decided to boycott the Ministerial meeting in Kiruna on 15 May 2013. At that time, Greenland further announced that it was suspending all of its on-going activities with the Arctic Council until a resolution was found. Though a resolution was finally found, it was not until the new Canadian Chairmanship in 2013-2015 (Greenland Government, 2013a: 8).

The period leading up to Greenland's re-engagement with the Arctic Council was driven by a combination of four main factors: the international media attention that Greenland's boycott caused, internal Arctic Council reactions to the boycott, political deliberations by Denmark with the Arctic Council on behalf of Greenland, as well as the extensive debates at home in Greenland about its decision to boycott the Arctic Council and the subsequent ramifications that those actions caused. The Chair of Greenland Parliament's Permanent Committee on Foreign Policy and Security, Mr. Per Berthelsen, publicly argued that he seriously doubted that the Canadian chairmanship would be more open to the demands of Greenland. According to Berthlesen,

Inuit in Canada are a minority. If Greenland achieves direct participation in Arctic Council negotiations, Canada will suddenly be faced with a dilemma. Our [Canadian Inuit] kinsmen will probably demand the same role as Greenland if we are brought in from the cold (Mølgaard, 2013).

The opposition leader at that time, former Premier Kuupik Kleist criticised the absence of Greenland from the Ministerial meeting by noting that,

[t]he super powers have a whole different agenda. They avert giving indigenous peoples influence by keeping the power themselves. USA's access to the Arctic Council is because of Alaska's position and the northern [territories] in Canada have also given Canada its access to the Arctic Council. They will not let go of their seats at the table in the Arctic Council (Mølgaard, 2013).

With the start of the Canadian Chairmanship, Greenland together with the Faroe Islands and Denmark set out to negotiate with Canada to find a satisfactory solution to the issue of representation at the executive and ordinary SAO meetings (Greenland Government, 2013). The negotiations lasted several months and finally on 19 August 2013, the Government of Greenland published a press release which announced that an agreement with the Canadian Chairmanship had been concluded and that Greenland could resume its participation at the Arctic Council. The concluding arrangement was such that, going into the future, all three political bodies of the Danish Delegation would have full participation rights at the Arctic Council meetings. When the number of seats to each delegation is less than three, the person or persons who would sit at the table would be determined according to which representative in the Kingdom has competence on the matter being discussed.

That decision also falls in line with the Self-Rule Act of 2009, which states that Greenland can enter into and negotiate international agreements in matters where it has taken over competence from Denmark on issues that pertain to Greenland; and further that Greenland will gradually take over new areas of responsibility (Government of Greenland, 2013). In practical terms, and in the context of the Arctic Council, there is once again tacit consent that when the number of seats for the Kingdom of Denmark is less than three the delegation will rotate its seat at the negotiating table depending on the subject matter and which delegate has the greatest competence and legitimacy to take part in the discussions.

Despite the new arrangements, not everyone was content. Though Greenland and the Faroe Islands were allowed, once again, to participate at the table of the Arctic Council with transition of the Chairmanship from Sweden to Canada it did not come without a new form of exclusion. With



Photo credit: Arctic Council Secretariat

the change of Chairmanship the small flags that were conventionally placed at the table spot designated to each participant were taken away (thereby taking away the three flags in the Danish Kingdom) and replaced with large full-sized flags of only the member states and the PPs behind each chair.

The main opposition party in Greenland questioned whether or not the new situation restored the Greenlandic position to its

former capacity much less strengthened its position on the Arctic Council. In a similar critique, the leader of the main opposition party, Kuupik Kleist, remarked in the Greenlandic press that, at the end of the day, the Kingdom of Denmark only had one vote on the Arctic Council. Kleist went on to point out that

[Greenlanders] had preferred to see that the subject matter of the self-governing countries [of Greenland and the Faroe Islands] role in the Arctic Council be discussed as a separate agenda item during an Arctic Council meeting instead of Greenland going at it alone. The issue is not only about Greenland but encompasses many other Arctic areas (Mølgaard, 2013).

This then brings us to the present situation within the Arctic Council. Greenland has resumed its participation and work in the Arctic Council. It has a seat at the table at the SAO meetings as well as in the working groups (due to the internal recognition and flexibility within the delegation of the Kingdom of Denmark). The other Arctic states have attempted to dictate what the delegation of the Kingdom of Denmark should look like (despite that the situation is a domestic Danish issue which falls outside the mandate of the Arctic Council) yet Greenland has acquired the legal capacity at home to make decisions that directly affect Greenlanders. Greenland, as such, has the right to be involved in the work and decision-making processes of the work of the Arctic Council. Nonetheless, the reality is that, for Greenland, the Arctic Council looks increasingly like an intergovernmental regime while at the same time it is increasingly only one venue among a number of emerging platforms for Greenland to engage in Arctic and global politics.

Arctic Council: Not the Only Player in Town

Beyond the Arctic Council, increasingly so, new forms of Arctic cooperation are emerging or renewing themselves, which is leaving some commentators to question whether or not such entities are a complement or a possible competition to the Arctic Council (Conley & Melino, 2016). A number of examples include Arctic Frontiers, the Arctic Circle Assembly, the Arctic Economic Council (AEC), the Northern Forum and the World Economic Forum's Global Agenda Council on the Arctic, as will be discussed below.

Arctic Frontiers, for instance, has been held annually since 2008 in Tromsø, Norway. Similarly, the Arctic Circle Forum is an annual event held in Reykjavik since 2012. The Arctic Circle attracts close to one thousand participants but in October 2016 brought together over 2,000 attendees. Both forums are designed to bring together policy makers, academics, industry and the public to discuss all matters of the Arctic including the achievements, challenges, and efficacy of the Arctic Council itself and both were established due to a perceived need or at least a desire for a wider group of people to be able to come together and discuss Arctic matters. For this reason industry has played a large role, and increasingly non-Arctic interested states, as well as all sorts of interest groups from NGOs to the media. Essentially, Arctic Frontiers and the Arctic Circle Assembly open up a space for Arctic entities that fall outside of the conventional space of Arctic Council governance to have a voice. This sentiment can be spotted by keynotes from CEOs of Statoil and other oil and gas majors, Ministers of energy and mining, to François Hollande and Ban Ki-Moon, Secretary-General of the UN. Further, Arctic Frontiers and the Arctic Circle are seen as a place for entities who are part of the Arctic Council, yet are included in a limited capacity.

The last Arctic Frontiers, held in January 2016, took place in the year of the 20th anniversary of the Arctic Council and turned its focus to the role that the Arctic Council has played over those years. Norway's Foreign Minister, Børge Brende, stated that one of the biggest accomplishments of the Arctic Council has been to maintain peace in the Arctic despite many nations' interests in the region. Greenland's Minister for Industry, Labour, Trade and Foreign Affairs, Vittus Qujaukitsoq, also stressed the importance of the Arctic Council. At the same time, however, Qujaukitsoq equally

stressed that Greenland is more than a place that has to be protected and preserved. Rather, Qujaukitsoq argued that the Arctic should be developed for the people in the Arctic and those people should be the ones taking the necessary decisions. That notion was supported by the President of the Saami Parliament, Aili Keskitalo, who asserted in his speech that development decisions and policies dealing with the Arctic are currently being undertaken outside of the region (Sørensen, 2016).

Keskitalo and Qujaukitsoq both pointed to the importance of the Arctic Council yet they also highlighted the growing sense that, with a Westphalianisation of the Arctic Council, sub-national regions who now think and operate globally are lacking agency to influence the decisions being made there. To make up for this deficit, sub-national regions are placing increased attention on East-West political collaborations from the [Pacific NorthWest Economic Region](#) (PNWER) to the [Northern Forum](#).

The Northern Forum, for instance, brings together northern sub-regions to address common issues. The seeds of the Northern Forum began in 1974 and with the end of the Cold War it became a formal entity in 1991. At that time, it became a not for profit international organisation comprised of sub-national and regional governments from eight northern countries (Northern Forum Home Page). Over the years, its membership and activities have waxed and waned; its level of success over the years has depended on the personality that was leading the Forum at the time (personal communication with Nils Andreassen).

In the early years, the Northern Forum was driven by a leadership which strongly championed the idea of a greater role for sub-national regions in policy as well as the need for collaboration among northern sub-national regions (ibid). With the formation of the Arctic Council in 1996 the Northern Forum became an Observer. The Northern Forum, however, had a hard time finding projects of similar interest to the Arctic Council (ibid). It became confronted with the reality that, at the subnational level, there was a strong desire to create projects which made a local impact. The aims of those projects, however, were often difficult to employ at the circumpolar level (ibid) as it was hard to find local issues that resonated across the region. For those reasons, by 2012, Alaska opted to pull out of the Northern Forum. There was a growing concern about the value that it was delivering to Alaskans (ibid) and many projects were viewed as inconsistent with areas of Alaskan interest.

Increasingly so, however, Alaska is engaging in global economic and financial activities and is now asserting its own agenda for U.S. policy on the Arctic (e.g. <http://www.akarctic.com/>), an agenda that is distinct from the U.S. Federal government's Arctic agenda. Due to these reasons, coupled with the recent process towards the Westphalianisation of the Arctic Council, Alaska had begun to rethink its decision and in April 2016 Alaskan leaders decided to formally re-join the Northern Forum. At the same time, there is increasing desire among a number of additional northern regions beyond Alaska to reinvigorate the Northern Forum (ibid) (e.g. in October 2016, Lapland, Finland also re-joined). For Alaskans, there is a growing sense that the Arctic Council does not provide a voice for subnational regions and subnational regions are increasingly interested in promoting their interests at the Arctic and international policy levels. Recent changes underway in the Arctic are also creating a renewed desire for sub-national regions to collaborate with one another on development projects and other cross-border initiatives, for instance, Alaska and the Chukchi

region of Russia in the Bering Strait as well as collaboration among Alaska, Yukon and the Northwest Territories (ibid).

In light of Alaska's reinstatement, the *Institute of the North* based out of Anchorage, Alaska will hold the Northern American Associate Secretariat. The aim is to organise North American regional collaboration – from Russia on the Bering Strait to Alaska, through Canada, and on to Greenland. Issues and projects that Alaska has set out to focus on include: working to ensure that any project or issue regarding a subnational region or state includes community members, business, and local political leaders at the table (Walker, 2016); infrastructure gaps including access to resource development, navigational aids and maritime response (ibid) as well as housing and energy construction design (ibid); and responsible development (ibid). Some specific examples include Canadian and Alaskan collaboration on transportation, tourism and development projects (ibid). North American collaboration with Greenland could include expanding mining connections, workforce development, as well as strengthening the ties between Maine, Greenland, and Iceland as a maritime corridor region (personal communication with Nils Andreassen).

The Northern Forum remains an Observer to the Arctic Council and is relying, to an extent, on this facet as a means for sub-national Arctic regions to engage directly with the Arctic Council. The main challenge for the Northern Forum, according to the Executive Director of the *Institute of the North*, Nils Andreassen, is to find projects that are relevant for local communities and for the Arctic Council. Essentially, one aim for the Northern Forum is to serve as the bridge between local communities and the work of the Arctic Council – a similar role that the PPs play (if they have the resources) between local Indigenous communities and the Arctic Council.

If these aims are accomplished the question that remains is in what capacity the Northern Forum can engage with the Arctic Council? Is being an Observer sufficient, particularly as a not for profit entity when sub-national governments are not NGOs but are instead governments and moreover the governments which will be responsible for implementing the decisions made by the Arctic Council member states?

Another initiative that hopes to create collaboration with the Arctic Council is the newly established Arctic Economic Council. The Arctic Economic Council is a product born from the Canadian Chairmanship of the Arctic Council (2013-2015). Though it has no formal connection to the Arctic Council it states that its purpose is to “facilitate Arctic business-to-business activities, promote responsible economic development and provide a circumpolar business perspective to the work of the Arctic Council” (Arctic Economic Council Home Page). The Arctic Economic Council, through its institutional form, affords for the first time a formal role for the private sector in Arctic policymaking.

While it is too soon to speculate the future efficacy of the Northern Forum or the Arctic Economic Council, both of which seek to influence the Arctic Council's work through collaboration with it, other initiatives are underway which are entirely separate from the workings of the Arctic Council. The World Economic Forum's Global Agenda Council on the Arctic (GACA) and its partial connections to Guggenheim's efforts to invest 1 trillion USD into Arctic infrastructure are two examples. The GACA committee – which was comprised of a number of stakeholders from industry to policy makers, academics and an indigenous representative – was tasked to think through the economic facets of a changing Arctic and specifically in the context of global investment in the Arctic. The workings of that group included the completion of an Arctic

investment protocol in an effort to help pave the way for Public-Private investments for infrastructure development (Shadian, 2015). While the GACA group has come to an end, Guggenheim Partners (and former member of the group) has plans to carry on with completing an Arctic Infrastructure Inventory, and finally an Arctic Permanent Investment Vehicle (Chappo, 2016).

In the context of Greenland, successful self-determination is increasingly dependent on engaging with non-Arctic Council entities. The government of Greenland is currently experiencing substantial expectations and responsibilities at the domestic level which are directly tied to its engagements in regional and global political fora. Self-Rule has forced Greenland to take responsibility for its own economic development, finances, and essentially economic prosperity. Subsequently, Greenland spends an increasing amount of its energy entering into agreements with global entities including states and the private sector as it takes over the former competencies from Denmark. These realities are vastly transforming the political and economic institutions in Greenland and as a society, moreover.

One example of this evolution reaches back to 2014-2015, when the municipality of Qaasuitsup Kommunia (of Northwest Greenland), promoted an infrastructure development plan which called on the Government of Greenland (who owns and operates the airports) to enter into discussions with a group of international investors (Siemens among others) to create an airport runway in Ilulissat for transatlantic aircraft, as well as a new port and hotel capacity there. According to *Sermitsiaq* news, the group of interested investors had a number of conditions necessary for investment including turning the airport into a hub monopoly (all transatlantic flights would have to go in and out of that airport). They also demanded a return on investment of 8-10% at a time when the Self-Rule Administration was able to borrow funds at just under 2% in the international financial market. The Self-Rule Administration was also required to give a public guarantee to back the loans, essentially meaning that all debts would have to be paid with public funds (i.e. by Greenlandic taxpayers) while all surpluses would go to the investors. In the end, the Self-Rule Authority declined to enter into negotiations with the private investment group (Shadian, 2015).

Those early discussions, however, have recently been reinvigorated. The government in Nuuk with the approval of the Parliament of Greenland has now committed to a number of infrastructure projects dealing with enlargement of existing runways as well as construction of new airports around the country. While a number of technical studies were still underway as of October 2016, the looming question for the government is how the infrastructure projects will be financed.

Guggenheim Partner's expectations to invest in the types of Arctic infrastructure projects that Greenland is seeking to build could become a critical piece in its aims to connect Greenland to the outside world in terms of business opportunities, tourism, and therefore a better economy – where the long term goal is to become self-reliant economically, and to develop as a nation. At the same time new global partnerships such as those mentioned here speaks to a much broader question that reaches over to the realm of the Arctic Council and its effectiveness in governing the region. A circumpolar Protocol for how business should conduct themselves in the Arctic has been created and is being promoted by the former GACA group and particularly the Guggenheim Partners. Should the Arctic Council have taken the lead on this? How will the investment protocol sit in relation to the efforts of the Arctic Council to pass its own Declarations relating to the sustainable development of the Arctic or the efforts of the Arctic Economic Council? Who is setting the

investment agenda for the Arctic? If it is not the Arctic Council then where does that leave the political power and legitimacy of the Arctic Council? Can the rise of non-Arctic Council entities seeking to remake the Arctic landscape (e.g. Guggenheim) disregard the Arctic Council altogether? A one trillion USD investment into Arctic infrastructure has the potential to have far more influence on Arctic communities, governments and certainly the future of Greenland than any new Declaration possibly passed by the Arctic Council. Overall, the rise of the wide range of institutions which sit apart from the Arctic Council questions whether or not the Westphalianization of the Arctic Council is creating a structure that is too inflexible to meet the growing challenges in the Arctic. Could the Arctic Council find itself sitting on the sidelines of a changing Arctic?

Conclusion

The Arctic has never quite fit into the mould of conventional Westphalian political system. When the Arctic Council was created it was the first regional political organisation to include non-state actors and in many ways, therefore, it served as a harbinger for a world to come. With increasing global interest in the Arctic, the Arctic Council seems to be making efforts to go back in time and become a conventional intergovernmental political regime. Yet, these efforts also come at a time when some argue that the days of conventional formal international law and policy making on its own are numbered. Increasingly so, norms in global governance includes the participation of non-state actors, best practices, and other forms of soft law (Shaffer & Pollack, 2010).

If the Arctic Council continues to evolve such that it becomes an organization exclusively for and by states where Permanent Participant participation is contingent on the availability of them to possess the resources necessary to participate than some of the most critical issues and changes coming to the Arctic are going to fall outside of its mandate. With the growing power of sub-national Arctic regions and new non-Arctic Council entities engaging in Arctic activities, will the Arctic Council be able to keep pace with an increasingly global Arctic (Shadian, 2016; Dodds, 2016; Heininen, 2016)? Is there a space for sub-national regions on the Arctic Council? If not, what are the implications of sub-national governments doing global negotiations and policymaking concerning the Arctic (trade deals or otherwise) completely separate of the Arctic Council?

Global economic and other interests in the Arctic will continue to grow going into the future. Greenland's own political future being is dependent on its economic performance and development, namely assuming complete responsibility for its government (the ability to cover the costs of those sectors such as justice, law enforcement, immigration policy etc.) As a result, global entities apart from the Arctic Council will play an even greater role in Greenlandic politics.

Much like Greenland, the Arctic's sub-national governments will continue to work towards having a greater say in matters that are of interest and relevance to them. Though the Arctic Council states are turning to conventional state politics to strengthen Arctic governance one might question if those very actions might be undermining its power. Global politics is undergoing vast changes and the Arctic Council needs to decide what role it wants to play in the Arctic going into the future.

Notes

1. The Arctic Council is the only fully circumpolar political regime for the Arctic led by the 8 Arctic states (Russia, Canada, United States, Iceland, Denmark (Greenland and Faroe Islands), Sweden, Norway, and Finland) and 6 indigenous organisations (Inuit Circumpolar Council (ICC), the Sami Council, The Russian Association of Indigenous Peoples of the North RAIPON, the Aleut International Association (AIA), The Arctic Athabaskan Council (AAC), and the Gwich'in Council International (GCI). It is considered by many as the official body for conducting circumpolar Arctic governance (e.g. Shadian, 2014).
2. *Italics* added for emphasis.
3. Alison Mountz alternatively argues that the materiality of borders must be constantly interrogated (Johnson et al., 2011). Likewise, Salter focuses on borders in looking at the ways in which they are performed (ibid, 62). “Rather than fixed lines, borders are...processes, practices, discourses, symbols, institutions or networks through which power works” (ibid).

References

- Ackren, Maria and Uffe Jakobsen (2015). Greenland as a Self-Governing Sub-National Territory in International Relations – Past, Current and Future Perspectives. *Polar Record* (51)4: 404-412.
- Agnew, John (2013). Arguing with Regions. *Regional Studies*. 47(1): 6-17.
- Agnew, John (2015). Unbundled territoriality and regional politics. *Territory, Politics, Governance*. 3: 119-123.
- Anghie, Antony (1999). Finding the Peripheries: Sovereignty and Colonialism in Nineteenth-Century International Law. *Harvard International Law Journal*. 40(1): 1–80.
- Arctic Council (19 September 1996). Declaration on the Establishment of the Arctic Council: Joint Communiqué of The Governments of the Arctic Countries on the Establishment of the Arctic Council', Ottawa, Canada. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/85/00_ottawa_decl_1996_signed%20%284%29.pdf?sequence=1&isAllowed=y.
- Arctic Council home page. Retrieved from: <http://www.arctic-council.org/index.php/en/>.
- Arctic Council (2000). Barrow Declaration. *Arctic Council 2nd Ministerial Meeting*. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/87/02_barrow_declaration_2000_signed.pdf?sequence=1&isAllowed=y.
- Arctic Council (2004). Reykjavik Declaration. *Arctic Council 4th Ministerial Meeting*. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/89/04_reykjavik_declaration_2004_signed.pdf?sequence=1&isAllowed=y.
- Arctic Economic Council. Retrieved from: <http://arcticeconomiccouncil.com/aec-passes-historic-document>.
- Arctic Economic Council. Arctic Economic Council Home Page. Retrieved from: <http://arcticeconomiccouncil.com/aec-passes-historic-document/>.

- Arctic Slope Regional Corporation (ASRC) Home Page. Retrieved from:
<https://www.asrc.com/Pages/default.aspx>.
- Castree, Noel (2004). Differential Geographies: Place, Indigenous Rights and “Local” Resources. *Political Geography*. 23(2): 133–67.
- Borgerson, Scott (March/April 2008). Arctic Meltdown. *Foreign Affairs* 97(2). Retrieved from:
<https://www.foreignaffairs.com/articles/arctic-antarctic/2008-03-02/arctic-meltdown>.
- Canwest News Service (24 June 2008). Russian General Fires Arctic Warning. *Canada.com*. Retrieved from:
www.canada.com/topics/news/story.html?id=ac0d24dfdc10-43da-89f3-b3c3c0928ae7.
- Chappo, Ashley (5 May 2016). A ‘One Arctic’ Agenda. *World Policy Institute*. Retrieved from:
<http://www.worldpolicy.org/blog/2016/0505/one-arctic-agenda>.
- Christiansen, Susanne (2015, 72-73). Kajs Grønlandskronike. *Informations forlag*. Retrieved from:
https://www.saxo.com/dk/kajs-groenlandskroenike_susanne-christiansen_indbundet_9788775144792.
- Conley, Heather and Matthew Melino (14 March 2016). An Arctic Redesign: Recommendations to Rejuvenate the Arctic Council. *CSIS*. Retrieved from:
<https://www.csis.org/analysis/arctic-redesign>.
- Dodds, Klaus (18 February 2016). What Do We Mean When We Talk About the Global Arctic. *Arctic Deeply*. Retrieved from:
<https://www.newsdeeply.com/arctic/community/2016/02/18/what-we-mean-when-we-talk-about-the-global-arctic>.
- Doward, Jamie, Robin McKie, and Tom Parfitt (29 July 2007). Russia Leads Race for North Pole Oil. *The Guardian*. Retrieved from:
<http://www.theguardian.com/world/2007/jul/29/russia.oil>.
- Enoksen, Hans formand Siumut: “Mindeord om Moses Olsen”, www.yumpu.com. Article in the Danish newspaper Information: “Grønlands politiske pioner er død”, 26 September 2008.
- GACA Home Page. Retrieved from: <https://www.weforum.org/communities/global-agenda-council-on-arctic/>.
- Gorbachev, M. (1 October 1987). Speech Delivered at the Ceremonial Meeting on the Occasion of the Presentation of the Order of Lenin and the Gold Star Medal to the City of Murmansk. *Novosti Press Agency*.
- Greenland Government (2013a). Udenrigspolitisk Redegørelse 2013 side 8/Annual Foreign Policy Report to the Greenland Parliament.
- Greenland Government (2013b). Press release by the Greenland Government on May 21, 2013: Danmark, Grønland og Færøernes deltagelse i Arktisk Råd samarbejdet”
- Greenland of Government (2013c). Press release from the Government of Greenland, August 19, 2013: “Grønland genoptager sin deltagelse i Arktisk Råd”.
- Harvard Law School (n.a). Intergovernmental Organizations (IGOs). Retrieved from:
<http://hls.harvard.edu/dept/opia/what-is-public-interest-law/public-international-law/intergovernmental-organizations-igos/>.
- Hegghammer, Thomas (Winter 2010/11). The Rise of Muslim Foreign Fighters: Islam and the Globalization of Jihad. *International Security*. 35(3): 53-94.
- Heininen, Lassi (Ed.) (2016). Future Security of the Global Arctic: State Policy, Economic Security and Climate. Palgrave Macmillan: UK.

- Johnson, C., Jones, R., Paasi, A., Amoore, L., Mountz, A., Salter, M. and Rumford, C. (2011). Interventions on rethinking “the border” in border studies. *Political Geography*. 30: 61-69.
- Live Leak (1 March 2009). Military Tensions Heating Up on Canada’s Coldest Frontier. Retrieved from: http://www.liveleak.com/view?i=8c7_1235958275.
- Martinez-Torres and Maria Elena (2001). Civil Society, the Internet, and the Zapatistas. *Peace Review*. 13(3): 347-355.
- Massey, D (1999). Power-Geometries and the Politics of Space–Time (Hettner Lecture 1998). *Institute of Geography*, University of Heidelberg, Heidelberg.
- Miller, Matt (2016, January 15). Alaskans fly south for Arctic symposium. *Alaska Public Media*. Retrieved from: <http://www.alaskapublic.org/2016/01/15/alaskans-fly-south-for-arctic-symposium/>.
- Northern Forum Home Page. Retrieved from: <http://www.northernforum.org/en/the-northern-forum/about-the-northern-forum>.
- Pram Gad, Ulrik (2012). Greenland Projecting Sovereignty: Denmark Protecting Sovereignty Away (pp. 217-30). In R. Adler-Nissen & U. Pram Gad (eds.). *European Integration and Postcolonial Sovereignty Games: The EU Overseas Countries and Territories* London: Routledge, Taylor & Francis Group.
- Rosenau, James N. (1997). *Along the Domestic-Foreign Frontier: Exploring Governance in a Turbulent World*. Cambridge: Cambridge University Press.
- Rosing Olsen, Tupaarnaq (2005). I skyggen af kajakkerne – Grønlands politiske historie 1939-79. Forlaget Atuagkat (pp. 49 – 126).
- Roston, Eric (January 21, 2016). The World Has Discovered a \$1 Trillion Ocean. *Bloomberg Press*. Retrieved from: <http://www.bloomberg.com/news/articles/2016-01-21/the-world-has-discovered-a-1-trillion-ocean>.
- Rudolph, Christopher (2005). Sovereignty and Territorial Borders in a Global Age. *International Studies Review*. 7(1): 1–20.
- Salter, Marc (2011). Interventions on rethinking “the border” in border studies. *Political Geography*. 30: 61-69.
- Shaffer, Gregory C. and Mark A. Pollack (2010). Hard vs. Soft Law: Alternatives, ‘Complements, and Antagonists in International Governance.’ *Minnesota Law Review*. 94: 706-799.
- Shadian, Jessica. (2014). *The Politics of Arctic Sovereignty: Oil, Ice, and Inuit Governance*. London: Routledge Press.
- Shadian, Jessica (1 November 2015). Who owns the Arctic: An Introduction. *The Arctic Journal*. Retrieved from: <http://arcticjournal.com/opinion/1935/who-owns-arctic-introduction>.
- Shadian, Jessica (14 March 2016). Finding the Global Arctic. *The Arctic Journal*. Retrieved from: <http://arcticjournal.com/opinion/2216/finding-global-arctic>.
- Sermitsiaq/AG (May 14, 2013): “Kuupik: Uklogt af Aleqa”
- Sermitsiaq/AG (May 16, 2013): “Grønland er bombet flere år tilbage”
- Sermitsiaq/AG (August 20, 2013): “IA: Dårlig aftale med Arktisk Råd”
- Skydsbjerg, Henrik (1999). *Grønland - 20 år med hjemmestyre*, udgivelsesår. Nuuk: Atuagkat.
- Walker, Bill (22 April 2016) Letter from Governor of Alaska.

Watts, Michael (1999). Collective Wish Images: Geographical Imaginaries and the Crisis of Development. In J. Allen and D. Massey (eds.) *Human Geography Today* (pp. 85-107). Cambridge: Polity Press.

World Economic Forum: Global Agenda on the Arctic Home Page. Retrieved from:
<https://www.weforum.org/communities/global-agenda-council-on-arctic/>

Lessons from Dumpcano: Governance Issues in Solid Waste Management in Nunavut

Gloria Song

This article explores the difficulties of governing solid waste management practices in Nunavut, Canada's Arctic territory. The governing framework of solid waste management practices is compared with the actual state of landfills in Nunavut, by analyzing inspection reports of three communities in Nunavut (Baker Lake, Gjoa Haven, and Iqaluit) for ten years. This analysis confirms that communities consistently fail to meet waste management standards set by Nunavut's legal framework. These waste management issues are reflective of larger systemic issues of governance in Nunavut, relating to infrastructure and funding. With the settlement of a recent litigation over treaty implementation problems, and a renewed commitment to the Nunavut Land Claims Agreement, it is hoped that these challenges will be overcome. Various measures are suggested, including strengthening the legal framework, providing adequate personnel and training, and including the participation of the public. It is time to shift our conceptualization of the Arctic and its residents from merely viewing them as passive victims of environmental harm, to recognizing that northerners can also be actors with the agency to cause environmental harm. This conceptual shift is necessary in order to better prioritize the governance of solid waste management in the North.

Introduction

In May 2014, a giant fire raged in the landfill of the city of Iqaluit, the capital of Nunavut, Canada's Arctic territory. Firefighters struggled to put out the football field-sized fiery volcanic mountain of garbage, nicknamed "Dumpcano" by social media. However, Dumpcano continued to burn for four months, exposing its residents to smoke, odours, and pollutants, and forcing residents to stay indoors during a usually pleasant time of the year.

The Dumpcano incident brought to the world's attention Nunavut's solid waste management problems. In this article, I explore the challenges in governing municipal solid waste in Nunavut. I focus on municipal solid waste management practices such as landfills and therefore have not included sewage and wastewater systems. I argue that these governance issues are reflective of broader infrastructural difficulties in implementing the Nunavut Land Claims Agreement (NLCA),

which had been considered a hallmark of Indigenous self-governance when it was first signed (Fenge & Quassa, 2009: 86; Legare, 2008: 336).

I reviewed the relevant legislative framework as well as the regulations and guidelines that govern solid waste management standards in Nunavut. I then examined the inspection reports of landfills conducted by water resources officers for Indigenous and Northern Affairs Canada (INAC) from 2005 to 2015 in three communities in Nunavut: Baker Lake, Gjoa Haven, and Iqaluit. I chose these three communities of varying sizes to ensure all three regions of Nunavut were included. In analyzing the landfill inspection reports, supplemented with newspaper articles and three studies commissioned by the federal and territorial government on Nunavut's waste management practices, I compared the legal framework for solid waste management with the reality of what is actually practiced at solid waste facilities in order to identify potential challenges in governing waste management practices in Nunavut.

My interest in this subject stems from my personal experiences in dealing with the unique waste management issues in Nunavut. For the last few years, I practiced law in one of the northernmost law offices in Canada, in a remote community in Nunavut called Cambridge Bay. Ravens would attack the garbage bags that I left outside my building and, to my embarrassment, would scatter the contents of my trash across the Arctic tundra. Lacking a commercial shredding service in town, it was not uncommon practice to take boxes of paper that needed to be disposed and haul them to the municipal landfill, to spend afternoons burning paper at the dump. Rumour had it that offices used to dispose of junk by pushing them into the Arctic Ocean, including old vehicles. My experiences left me with a strong impression of both the beauty and the fragility of the Arctic.



The Iqaluit 'Dumpcano' smouldered for several months during the summer of 2014.
Credit: Aaron Watson

Background

Existing Literature

There is very little academic literature on the legal aspects of sustainable waste management in Nunavut. Much of the academic literature on environmental issues in Nunavut discuss the effects of climate change in the Arctic (Hohmann, 2009; Theriault 2008-2009) and frame residents of the Arctic as the passive recipients – or even victims – of environmental damage caused by unsustainable practices (Johansen, 2002; Tyrrell, 2006). Although the Canadian Arctic region is “one of the most intensively studied in the world” (Ford et al., 2012: 292) there is very limited research on the vulnerability of municipal infrastructure, including waste management (Ford et al., 2012: 293).

While studies on climate change and other environmental impacts continue to be important, I argue that we must move beyond this perception of the North as only a passive victim and instead recognize the agency of its residents. It is not enough to focus on how the actions of the rest of the world affect the Northern environment; we also must recognize that northerners also have the power to produce environmental harm. It is only in doing so that we can emphasize the importance of developing an effective way to govern environmental practices in Nunavut.

Some scholars have in fact looked at the Canadian North and its waste management situation as a potential pollutant issue, rather than merely as a victim of pollution. Glenda Samuelson examined waste management issues in Iqaluit in 1998 long before Dumpcano, predicting that Iqaluit’s expanding population would cause waste management issues to become increasingly complicated, and urging for improvements to existing waste management facilities (Samuelson, 1998: 328, 335). Weichenthal et al. studied the impact of Dumpcano on ambient air quality, one of the first studies to do so with quantitative data, recognizing the importance of this issue “as waste management practices often differ from southern locations owing to unique challenges faced in northern regions” (Weichenthal et al, 2015: 46). Daley et al. also conducted a case study on Coral Harbour’s water and wastewater sanitation system, a topic quite related to the topic of waste management as both are governed by the same bodies (Daley et al, 2011: 130). They looked at residents’ perceptions of the functionality of their current systems, and noted that infrastructural challenges included the remote geography of Nunavut, minimally-staffed government departments, incomplete monitoring and record-keeping, and shortages of qualified operators.

Context

Nunavut is Canada’s newest territory, created on April 1, 1999, through the Nunavut Act and the Nunavut Land Claims Agreement negotiated between the federal government and the Inuit of the Nunavut Settlement Area. It is the least densely populated of Canada’s provinces and territories, with the country’s smallest territorial population of 36,919 in the most expansive geographical region covering over 1.8 million square kilometres (Nunavut Bureau of Statistics, 2015; Statistics Canada, 2011).

Approximately 85% of the population of Nunavut are Inuit (Nunavut Tourism). Although Inuit traditionally lived semi-nomadic lifestyles moving in small family groups between camps (Daley et al., 2011: 125), as a result of federal government policies, Inuit families gradually began to shift their lifestyles to more permanent settlements, often near the Distant Early Warning Line of radar

stations scattered across the Arctic, and by the 1970s, this shift had happened all across the North (Eber, 1997: 4). Before this shift, the waste created by Inuit was comparatively minimal as it was typically scattered or buried (Daley et al., 2011: 125). This relatively recent transition to permanent settlements suggests that overfull or nearly full landfills are a fairly new phenomenon that communities are dealing with: it may not have been noticeable as a problem before, simply because there were not such high numbers of people staying in one place for so long.

Nunavut's location in the far North makes waste management problems more difficult and complicated to fix. The long distances between Nunavut's geographically isolated communities, which are not connected by roads, mean that operational costs are more expensive than in southern Canada (Daley et al, 2011: 125).

A study conducted in 2010 indicated that Nunavummiut generate more waste per capita than the other territories Yukon or the Northwest Territories, possibly as a result of the goods and materials brought to the community by barge requiring more packaging (Arktis Solutions, 2010). Furthermore, as noted by Daley et al. in their examination of wastewater infrastructures in Nunavut, there is a lack of a resident tax base in these communities due to limited economic opportunities in the territory, which means that municipalities must rely on the territorial and federal government to provide services (Daley et al., 2011: 125).

Despite these challenges, thanks to interests in areas such as the mining industry and Arctic shipping, Nunavut has experienced a boom of economic development activity in Nunavut, which means that the populations in each community will only continue to expand. This further highlights the importance of governing sustainable practices in carrying out these activities in the North. In advocating sustainability for Nunavut, former premier Eve Aariak commented that the recent wave of changes leaves the people of Nunavut with a dilemma:

On the one hand, there is the possibility of economic expansion for our communities currently struggling with unemployment and limited opportunities. On the other hand, increased traffic activity brings new risks to our fragile environment – the foundation of our culture, our diet and our wellbeing (Aariak, 2013: 1).

Legislative Framework

There is no one body governing solid waste management standards for Nunavut. Instead, various acts and regulations provide the regulatory framework for solid waste management practices in the territory. For example, several different pieces of legislation prohibit the disposal of waste into water without approval.¹ The Government of Nunavut has also developed guidelines for solid waste management.²

All three levels of government are involved with waste management in Nunavut. Generally, municipal governments are in charge of managing and operating solid waste management facilities, while receiving funding and support from the territorial Government of Nunavut's (GN) Department of Community and Government Services (CGS).

Municipalities must acquire water licenses for their waste management facilities from the Nunavut Water Board (*Nunavut Waters and Nunavut Surface Rights Tribunal Act*, ss.12(1) and 57(a)). The water licenses issued by the NWB themselves also include conditions about the maintenance and monitoring of solid waste facilities which municipalities must follow (*Nunavut Waters and Nunavut*

Surface Rights Tribunal Act, s.70(1)). These licenses eventually expire and require a renewal application process.

Enforcement of waste management standards are mainly conducted by Indigenous and Northern Affairs Canada (INAC) by water resources officers, whom I will refer to as “inspectors” for the purpose of this article (*Nunavut Waters and Nunavut Surface Rights Tribunal Act*, ss.85-87).

Table 1. Legislation, regulations & guidelines governing solid waste management in Nunavut*

Regulatory Source	Subjects include	Oversight/enforcement body
Nunavut Land Claims Agreement	Establishes Nunavut Water Board Use of water & disposal of waste into water in Nunavut	Government of Canada Inuit of Nunavut
<i>Nunavut Waters and Nunavut Surface Rights Tribunal Act</i> , S.C. 2002, c10	Use of water & disposal of waste in waters in Nunavut	Nunavut Water Board (issuing licenses)** Indigenous and Northern Affairs Canada (enforcing licenses)
<i>Arctic Water Pollution Prevention Act</i> , RSC, 1985, c A-12	Deposit of waste in Arctic waters	Transport Canada Fisheries and Oceans Canada
<i>Fisheries Act</i> , RSC, 1985, c F-14	Activities harmful to fish Disposal of prejudicial/deleterious substances in waters where fishing is carried on	Fisheries and Oceans Canada
<i>Environmental Protection Act</i> , RSNWT 1988, c E-7, s.5	Discharge of a contaminant into the environment	Department of Environment
<i>General Sanitation Regulations</i> , R.R.N.W.T. 1990,c.P-16 (Public Health Act)	Insanitary conditions Accumulation & deposit of garbage Municipality's responsibility to provide waste disposal grounds	Department of Health
Environmental guidelines (various)	Disposal of various types of waste	Department of Environment

*This is not an exhaustive list.

**The Nunavut Water Board is an institution of public government created under the Nunavut Land Claims Agreement, an agreement between Canada and the Inuit of Nunavut, as well as the federal legislation Nunavut Waters and Nunavut Surface Rights Tribunal Act

Results & Discussion

The results of the inspection reports have been summarized from Tables 1 to 3 in the Appendices. For ease of reference, I have contrasted some of the specific requirements set by the legal framework with some of the actual practices that were found in the reports, which demonstrate the difficulties that the three communities faced in complying with the requirements.

Waste management standards	Actual practice as found in inspection reports
Waste management sites must have a valid water licence (<i>Nunavut Waters and Nunavut Surface Rights Tribunal Act</i> , s.12(1)).	Expired water licences Baker Lake: 2005 & 2009 reports Gjoa Haven: 2009, 2011, 2012 Iqaluit: 2012, 2013, 2014
Access to waste management facility sites should be controlled and secure, especially for special storage sites (<i>Environmental Guideline for Waste Batteries</i> , 2002, p.9; <i>Environmental Guideline for Used Oil and Waste Fuel</i> , 2012, p. 10; <i>Environmental Guideline for the General Management of Hazardous Waste</i> , 2010, p. 14)	Inadequate or no fencing Gjoa Haven: 2007
Waste run-off must be controlled to prevent leaking into water (<i>Nunavut Waters and Nunavut Surface Rights Tribunal Act</i> , s.12(1))	Failure to control and prevent leaking of waste , resulting in uncontrolled pools or streams of spills and leakages

	<p>Baker Lake: 2009, 2010, 2011 Gjoa Haven: 2005, 2009, 2011, 2013 Iqaluit: 2009, 2010</p>
<p>Waste should be segregated, particularly hazardous waste and waste oil (<i>Environmental Guideline for Waste Batteries</i>, 2011, p. 9; <i>Environmental Guideline for Used Oil and Waste Fuel</i>, 2012, p. 10)</p>	<p>Uncontrolled to minimal waste separation Baker Lake: 2010, 2011 Gjoa Haven: 2006, 2007, 2009, 2010, 2012 Iqaluit: 2009</p>
<p>Hazardous waste</p> <ul style="list-style-type: none"> • Contaminants must not be discharged into the environment (<i>Environmental Protection Act</i>, RSNWT 1988, c E-7, s.5) • Incompatible hazardous waste must not be mixed • Storage of hazardous waste must be temporary until they are transported, treated or disposed. • Hazardous waste must be stored in proper sealed clearly labeled containers that are not damaged or leaking • Only trained personnel should have access to storage area (<i>Environmental Guideline for the General Management of Hazardous Waste</i>, 2010, pp.11-14) 	<p>Failure to segregate and properly store hazardous waste; failure to transfer/dispose of hazardous waste Baker Lake: 2009, 2010, 2011 Gjoa Haven: 2009, 2010, 2011, 2012, 2008 Iqaluit: 2009, 2010, 2013</p>
<p>Batteries</p> <ul style="list-style-type: none"> • Storage of waste batteries must be temporary until they are recycled, transported, or disposal • Large batteries should be placed on wood pallets off the ground or stored in sound and sealable labeled containers • Only trained personnel should have access to storage area (<i>Environmental Guideline for Waste Batteries</i>, 2002, p. 9) 	<p>Failure to segregate and properly store batteries: batteries are scattered throughout sites, and sometimes even broken open on the ground Baker Lake: 2009, 2010, 2011 Gjoa Haven: 2005, 2010, 2012 Iqaluit: 2009</p>
<p>Waste oil</p> <ul style="list-style-type: none"> • Storage of waste oil must be temporary until they are recycled, transported, or disposal. • Waste oil should be stored in special tightly sealed containers that are not leaking or damaged, clearly labeled • Only trained personnel should have access to storage area (<i>Environmental Guideline for Used Oil and Waste Fuel</i>, 2012, pp.10-11) 	<p>Improper storage of waste oil: drums do not have secondary containment, lack a lid, are leaking, or are stored haphazardly Baker Lake: 2005, 2009, 2010, 2011 Gjoa Haven: 2005, 2009, 2010, 2011, 2013</p>
<p>Due to the release of harmful pollutants to the air and potential uncontrolled tundra fires, open burning on the ground is actively discouraged (<i>Environmental Guideline for the Burning and Incineration of Solid Waste</i>, 2012, p.9)</p>	<p>Open burning of waste on the ground is a common practice in Nunavut Baker Lake: 2010 Gjoa Haven: 2011 At times, landfills have been on fire: Gjoa Haven: 2009 Iqaluit: 2014</p>

Besides Iqaluit's Dumpcano, some of the stories that emerge from the reports and newspapers illustrate the extent of the concerns about solid waste management in Nunavut. In the 2009 inspection report for Gjoa Haven, the inspector reported the solid waste area to be:

a complete catastrophe and conditions have deteriorated much further from issues observed last year. There is a severe lack of waste management by the Hamlet. Lack of proper compaction and fill combined with lack of segregation has resulted in a very dangerous situation: the dump was on fire in multiple locations at time of inspection. (Indian and Northern Affairs Canada, August 4 & 5, 2009).

Years later in 2013, the *Nunatsiaq News* reported that Gjoa Haven's landfill's location on a slope above water has resulted in a stream flowing from the waste management facility site to the ocean, bringing with it waste, some of it toxic. This caused concerns about the chemicals leaching into the local soil and water and possibly entering the food chain and affecting residents' health (Rogers, 2014).

In Baker Lake, the hazardous waste problems became significant enough in 2010 to be covered in the news that same year, when Arctic researcher Frank Tester described in a CBC interview his observations at the landfill of leaking containers of hazardous waste. The issue raised concerns about potential toxicity in the water supply, as runoff from the landfill might enter the drinking water supply ("Toxics in Baker Lake dump appall researcher", 2010).

Particularly concerning is the lack of progress reported during the inspections in addressing these issues, as is evidenced by the years-long pattern of non-compliance. In Baker Lake, the inspection report for the 2009 noted that "[n]o follow up or compliance actions have been undertaken by this office to seek correction of any of the deficiencies noted in inspections from 2002 to 2009" (Indian and Northern Affairs Canada, August 6, 2009). The following year, the inspector recorded that none of the recommendations from the 2009 inspection report had been addressed by the hamlet. The inspector concluded "[s]uch obvious disregard for authority and disrespect for the environment are of great concern to the Inspector" (Indian and Northern Affairs Canada, August 31, 2010). Similarly, in the 2011 inspection report for Gjoa Haven, the inspector concluded that it was "unclear what efforts if any the Licensee has undertaken over the past year to come into compliance with the Act or expired license" (Indian and Northern Affairs Canada, July 13, 2011).

But what are the underlying reasons for these difficulties? Many of the issues appear to relate to the unique conditions of the North, such as the relative remote and isolated location of the communities, which make waste management problems more difficult and complicated to solve. When special equipment is ordered to be brought up by sealift, which generally arrives only once a year, communities will have to wait up to a year, which means repairs may happen at a much slower pace than in southern Canada.³ In addition, garbage often never leaves the community or the territory once it enters (Varga, 2014a).

Indeed, the most daunting challenge appears to be cost. Despite one report's recommendation to adopt a modified landfill as the most feasible approach in providing environmental protection as well as safe and efficient waste management practices (Arktis Solutions, 2011), the Government of Nunavut decided that the recommendation was too expensive to implement (Rogers, 2014). It is clear that these difficulties in governing waste management are reflective of a deeper governance problem of insufficient infrastructure in Nunavut.⁴

But why is there not enough money to deal with such infrastructural problems in Nunavut? While there is a complexity of reasons that are beyond the scope of this article, one important clue may be found in the difficulties in implementing the Nunavut Land Claims Agreement. When the NLCA was first signed, it was seen as “a triumph of political stagecraft” and “the most advanced model of Aboriginal self-determination in Canada,” (Fenge & Quassa, 2009: 86; Legare, 2008: 336) as a realization of the Inuit of Nunavut’s desire to establish political, social, and economic autonomy through a self-sustaining territory of their own (Legare, 2008: 343; Campbell, Fenge & Hanson, 2011; *NTI v Canada (AG)*, 2008 NUCJ 11, para 20). In exchange for giving up their aboriginal claims and titles to the land to Canada, the Inuit of Nunavut were to receive certain rights and benefits, including the creation of the new territory of Nunavut with its own government (NLCA, articles 2.7.1, 4, and 25.1.1).

However, after the NLCA was signed, difficulties with implementing the treaty soon became painfully apparent. These difficulties were fueled in part by the parties’ differing interpretations of what was required to fulfill the requirements of the treaty. While Canada took the opinion that it had adequately met many of its obligations under the NLCA, the Inuit of Nunavut argued that it had not, and the Government of Canada has been accused of following only the letter of the NLCA, rather than the spirit of its original objectives (Vertes, Connelly & Knott, 1999: 5-6; Office of the Auditor General, 2003: 13-14; Berger, 2006: 19; PriceWaterhouseCoopers, 2006: 6; Nunavut Tunngavik Inc., 1999: 76). Although the Government of Nunavut is responsible for providing public services, it has been argued that because of these issues, the Government of Nunavut lacks the resources and power to do so, leaving it dependent on the Government of Canada to finance its operations (Mifflin, 2009: 92-93).

Attempts to resolve these disputes were unsuccessful (Office of the Auditor General, 2003: 9; Campbell et al, 2011: 38; Fenge & Quassa, 2009: 85), and as a result of the difficulties having the NLCA implemented, the Inuit of Nunavut filed a lawsuit against the Government of Canada, alleging breach of contract with respect to many provisions under the NLCA, including issues with respect to funding the implementation of the NLCA (Statement of Claim, 2006: para 12).

The case of Gjoa Haven provides useful insight on this intra-governmental tension. The 2011 inspection report noted that at a meeting with representatives from the three levels of government, there was some discussion on the noncompliance issues. There the hamlet expressed its belief that the territorial government had not provided them with sufficient support and resources to deal with its solid waste management issues (Indian and Northern Affairs Canada, July 13, 2011). In 2012, the federal government took further enforcement action against the territorial government, writing to the Minister of Community & Government Services about the “widespread and continuing non-compliance with municipal water licenses” for a number of municipalities, including Gjoa Haven (Aboriginal Affairs and Northern Development Canada, June 28, 2012). An Inspector’s Direction was issued, requiring CGS to bring the five identified communities, including Gjoa Haven, into compliance with the Act (Aboriginal Affairs and Northern Development Canada, June 28, 2012: 3).

The Minister of the Government of Nunavut’s Department of Community and Government Services expressed strong objections to the Minister of AANDC, arguing that the Government of Nunavut was not the proper party because water licenses are issued to municipalities and that there was already progress in dealing with noncompliance issues (Government of Nunavut, July 12,

2012). The Minister claimed that the funds contributed by the Government of Canada were not sufficient “to address all needs in one fiscal period to immediately meet all compliance requirements”, as the infrastructure requirement alone to bring all of Nunavut’s communities into compliance was estimated to exceed \$500 million. The Minister noted: “Within the GN’s limited capital program and in balance with all other competing Government priorities, CGS is helping municipalities address aging water and waste management infrastructure needs over time.” Finally, the Minister pointed out that \$100,000 fines accumulating at the rate of \$3 million per month would “only add to Nunavut’s fiscal and infrastructure challenges and would further restrict progress on compliance” (Government of Nunavut, July 12, 2012).

It is clear then, the difficulties in governing solid waste management are linked to the underlying financial issues that have plagued the municipalities and the Government of Nunavut. These issues in implementing the NLCA have served as a significant obstacle to successful self-governance in Nunavut.

Fortunately, after nearly a decade of litigation, the Government of Canada and the Inuit of Nunavut recently reached a settlement agreement in 2015, where the Government of Canada agreed to pay \$255.5 million to have the action dismissed on consent (Nunavut Tunngavik Incorporated, the Government of Canada & the Government of Nunavut, 2015, para 1). The Government of Canada also agreed to provide funding for the Government of Nunavut to implement the NLCA (Nunavut Tunngavik Incorporated, the Government of Canada & the Government of Nunavut, 2015: para 29). With increased funding and, hopefully, an improved relationship between the different governments, perhaps some of the infrastructural issues underlying Nunavut’s solid waste management issues will be addressed and improved in a meaningful manner.

With the new implementation phase of the NLCA, and hopefully more funding to the territorial and municipal governments for waste management, some practical steps that can be taken to improve the governance of solid waste management in Nunavut include the following.

A Clearer, Comprehensive, Coherent Legal Framework

The current governing structure is an often confusing patchwork of various federal, territorial, and municipal laws that assign separate licensing, oversight, and enforcement roles for different agencies to deal with different aspects of a municipal dumpsite. For example, while the Nunavut Water Board issues water licenses for solid waste management facilities, it is a different body (INAC) that is responsible for the enforcement of license conditions. The system as it currently stands is both confusing, in that multiple bodies deal with the same issue from sometimes different but often overlapping angles, while at the same time failing to be comprehensive in that not all aspects of environmental sustainability are considered in practice.

Despite the multitude of laws governing waste management standards in Nunavut, and the fact that various officers, both territorial and federal, have the power to inspect premises to enforce the relevant provisions under legislation,⁵ it appears that the only inspections that are regularly conducted to ensure the enforcement of these standards are by INAC under the Nunavut Waters and Nunavut Surface Rights Tribunal Act (Varga, 2014a). INAC water resource officers conducting such inspections are only mandated to look at compliance with the Act and the water license, and not necessarily other non-water-related aspects of municipal dumpsites (Arktis Solutions, 2010: 115).

Furthermore, even where the provisions of other acts are enforced, there are three separate legislative provisions that essentially govern the same action: the deposit of potentially harmful substances in water (*Arctic Water Pollution Prevention Act*, RSC, 1985 c A-12 s.4(1); *Fisheries Act*, RSC, 1985, c F-14, s.36(3); *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, SC 2002, c10, s.12(1); Nunavut Land Claims Agreement, article 13.7.1). These provisions deal solely with water, and not other aspects of the environment, such as land, air, and even non-marine animal welfare. As such, the enforcement of only water-related environmental degradation will not serve a comprehensive, integrated approach to governing solid waste management practices.

Prohibit the Acceptance of Waste Generated Outside the Community

One specific legal solution is to strengthen and clarify rules preventing waste produced outside of the community, especially industrial waste from mining camps or exploration camps, from being brought into the municipal waste management facilities, as facilities are not designed for those purposes and may affect the lifespan of the landfills (Arktis Solutions, 2010: 32). This issue has been repeatedly mentioned by inspection officers (for example, see Indian and Northern Affairs Canada, Report for Baker Lake, August 31, 2010).

Reports (Arktis Solutions, 2010: 32) have already highlighted how accepting such waste at the municipal dumpsites presents certain legal grey areas: if the municipality obtains a water license to accept waste from the community, would the acceptance of waste from outside the municipality be a violation of the water license as the practice would be outside of the initial environmental screening for the project? Could this serve as a loophole for companies running projects from outside municipal boundaries, allowing them to shift their responsibility over their industrial waste to the municipality, using territorial funds to fund industrial waste management?

Increase Personnel Support and Training

Staffing issues, often in form of staff vacancies due to the high turnover rates and shortage of qualified workers in Nunavut, are often cited in the inspection reports as a reason that municipalities have difficulty keeping up with compliance requirements for their water license.⁶ In order to ensure that municipal solid waste management facilities continue to run smoothly and in accordance with the legal framework and the water license, it is imperative that staffing issues be addressed at the municipal level.

Municipalities also require proper training. The Environmental Guidelines issued by Nunavut's Department of Environment stipulate that only workers with proper training should deal with hazardous waste (Environmental Guideline for the General Management of Hazardous Waste, 2010: 6). However, given that many municipal dumpsites do not even properly segregate hazardous waste from other forms of waste, it is questionable whether this guideline is followed. Levels of experience and technical expertise in waste management have been reported to be limited in the territories, and communities have been encouraged to complete training in areas of waste management (Arktis Solutions, 2010: 33).

Some municipalities have already implemented new training initiatives. After Dumpcano, Iqaluit's landfill staff began new training on how to properly segregate combustible waste from other materials when receiving garbage ("Iqaluit's long-smouldering 'dumpcano' garbage finally out", 2014). This initiative should be expanded to other communities as well.

Increase Public Awareness & Participation

Lack of awareness has also been identified as a barrier for waste management (Arktis Solutions, 2010: 25). It is essential that the public play a role in sustainable solid waste management. At the very minimum, residents must alert landfill staff to the type of waste brought to the site, including potentially dangerous wastes such as batteries or propane tanks (“Iqaluit’s long-smouldering ‘dumpcano’ garbage finally out”, 2014). Raising public awareness about solid waste management issues could help involve residents and private companies in developing solutions, such as reducing the amount of waste created in the first place, and encouraging the segregation of waste at the household level, especially hazardous materials such as batteries.

Research suggests that public support for sustainable waste management practices already exist: the report on recycling in Nunavut found that a territory-wide recycling program would likely be supported at the community level (Dillon Consulting Limited, 2010: 16). Similarly, the Arktis Solutions report on waste management in Nunavut found that most communities were not only interested in obtaining further information about alternative waste management approaches, but were willing to implement programs such as waste separation, waste backhauling, recycling, and hazardous waste management (Arktis Solutions, 2011: 12).

Conclusion

In examining the inspection reports of solid waste management facilities for three communities in the last ten years, it is clear that municipalities have constantly struggled to comply with the requirements imposed by water licenses and the legal framework governing waste management standards. These governance challenges are related to infrastructural problems stemming from the unique conditions of the north and difficulties in implementing the Nunavut Land Claims Agreement.

As the new implementation phase of the NLCA has begun with the settlement of the lawsuit over its implementation, I argue that a paradigm shift is required. The massive “Dumpcano” fire at Iqaluit’s landfill highlighted the need to prioritize addressing solid waste management issues for all of Nunavut’s communities. It is time to recognize that residents in the North can also have a harmful impact on the environment if the governance issues of solid waste management practices are not improved, and the importance and urgency of the situation must now be recognized. It is time to utilize the resilience, cooperation, and adaptability that has been historically demonstrated by residents of the North (Daley et al, 2014: 129-130) and to find creative solutions for the Canadian Arctic.

Acknowledgments

The author would like to acknowledge funding from the Social Sciences and Humanities Research Council and the Environment, Society and Policy Group.

Notes

1. Article 13.7.1 of the NLCA generally prohibits the use of water or disposal of waste into water without the approval of the NWB. This provision is echoed in the federal legislation Nunavut Waters and Nunavut Surface Rights Tribunal Act, which forbids the use of waters in Nunavut or the deposit of waste in waters in Nunavut or any other place in Nunavut under conditions where the waste may enter waters in Nunavut, except in accordance with a license: *Nunavut Waters and Nunavut Surface Rights Tribunal Act*, S.C. 2002, c10 at ss 11(1) and 12(1). The Arctic Water Pollution Prevention Act and the Fisheries Act also provide similar prohibitions against polluting the waters: *Arctic Water Pollution Prevention Act*, RSC, 1985, c A-12, s. 4(1); *Fisheries Act*, RSC, 1985, c F-14, ss.35(1) and 36(3).
2. A list of the Government of Nunavut's Department of Environment guidelines on waste management can be found here:
<http://gov.nu.ca/environment/information/documents/195/184>
3. Another story from Iqaluit illustrates this point. Last year, the City of Iqaluit experienced difficulty in dealing with wood and cardboard at the landfill because the cardboard baler was out of operation due to a lack of baling wire, and the burn box that the City of Iqaluit ordered would not arrive until autumn because it was being brought up by sealift: Iqaluit's new garbage separation plan hits snags. (2014, 15 August). *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/north/iqaluit-s-new-garbage-separation-plan-hits-snags-1.2737433>
4. Former premier Eva Aariak acknowledged the Nunavut's infrastructure issues in Aariak, E. (2013) Building Sustainability into a Changing Arctic. *McGill International Journal of Sustainable Development Law & Policy*, 9(2): 1-3.
5. Such as inspectors under the Chief Environmental Protection Officer (*Environmental Protection Act* RSNWT 1988, c E-7, s.3); health officers under the *Public Health Act (General Sanitation Regulations*, RRNWT (Nu) 1990 c P-16, s.6), and pollution prevention officers (*Arctic Waters Pollution Prevention Act*, R.S.C., 1985, c. A-12, s.14(1)).
6. For example, "The Senior Administrative Officer (SAO) suggested in the interview that the short falls in compliance stem from the loss of their Hamlet foreman, who handled all water license issues for the municipality and his recent departure from the hamlet." (Indian and Northern Affairs Canada. (2012, July 6) *Municipal Water Use Inspection Report Form*. Report of Rankin Inlet by Christine Wilson, Inspector).

Appendices

Table 1: Summary of some of the concerns outlined in INAC inspection reports for Baker Lake's solid waste management facility

	Baker Lake
2005	Expired license Waste oil storage issue
2006	No inspection reports found
2007	No inspection reports found
2008	No inspection reports found Inspector's Direction issued to arrange inspection
2009	Expired license Improper storage of hazardous waste Improper storage of waste oil Improper segregation of waste Lack of signage Failure to file annual reports Failure to control runoff from landfill site
2010	Improper storage of hazardous waste Improper storage of waste oil Uncontrolled leaks and spills Open burning on site
2011	Improper segregation of waste Improper storage of hazardous waste Improper storage of waste oil Improper storage of animal carcasses
2012	No inspection reports found
2013	No inspection reports found
2014	No inspection reports found
2015	No inspection reports found

Table 2: Summary of concerns outlined in INAC inspection reports for Gjoa Haven's solid waste management facility

	Gjoa Haven
2005	Improper storage of waste oil Improper storage of hazardous waste Uncontrolled leaks and spills Improper storage of animal carcasses Inspector's Direction issued.
2006	Lack of signage

	Incomplete segregation of waste No operation and maintenance plan
2007	Improper segregation of waste Inadequate fencing No operation and maintenance plan No annual reports
2008	No inspection report
2009	Expired license Improper segregation of waste Improper storage of hazardous waste Improper storage of waste oil Landfill fires and explosions Uncontrolled leaks and spills Landfill capacity problem Lack of signage No operation and maintenance plan
2010	Expired license Improper segregation of waste Improper storage of hazardous waste (batteries) Improper storage of waste oils
2011	Expired license Improper storage of hazardous waste Improper storage of waste oil Lack of signage No operation and maintenance plan Uncontrolled leaks and spills Open burning
2012	Expired water license Improper storage of hazardous waste Improper segregation of waste No operation and maintenance plan No annual reports Inspector's Direction issued
2013	Expired license Improper storage of hazardous waste Improper storage of waste oil Lack of signage Uncontrolled leaks and spills No operation and maintenance plan
2014	No annual reports

	Lack of signage
2015	No inspection reports found

Table 3: Summary of concerns outlined in INAC inspection reports for Iqaluit's solid waste management facility

	Iqaluit
2005	No inspection reports found
2006	Inspector's Direction issued regarding the collection of leachate
2007	No inspection reports found Inspector's Direction issued regarding sewage system
2008	Improper storage of hazardous waste No operation plan No annual report Lack of signage
2009	Improper storage of hazardous waste Uncontrolled leaks and spills No operation and maintenance plan No annual report Capacity concerns
2010	Capacity concerns Improper storage of hazardous waste Uncontrolled leaks and spills
2011	Capacity concerns
2012	Expired license Capacity concerns No annual report No operation and maintenance plan
2013	Expired license Capacity concerns Improper storage of hazardous waste No operation and maintenance plan Inspector's Direction issued for failure to file long-term solid waste management plan
2014	Expired license Landfill fires (Dumpcano) Capacity concerns
2015	No inspection report found

References

Legislation

Agreement between the Inuit of the Nunavut Settlement Area and Her Majesty the Queen in right of Canada as amended [Nunavut Land Claims Agreement].

Arctic Water Pollution Prevention Act, RSC, 1985, c A-12.

Environmental Protection Act, RSNWT 1988, c E-7.

Fisheries Act, RSC, 1985, c F-14.

General Sanitation Regulations, RRNWT (Nu) 1990 c P-16.

Nunavut Waters and Nunavut Surface Rights Tribunal Act, S.C. 2002, c10.

Public Health Act, RSNWT (Nu) 1988, c P-12.

Case Law

NTI v Canada (AG), 2008 NUCJ 11.

NTI v Canada (Attorney General). (5 December 2006). Iqaluit 0806713CVC (NUCJ) (Statement of Claim).

Nunavut Tunngavik Incorporated, the Government of Canada, & the Government of Nunavut, *Movement Forward in Nunavut: An Agreement Relating to Settlement of Litigation and Certain Implementation Matters*. (4 May, 2015). Retrieved from <http://www.tunngavik.com/files/2015/05/FINAL-SIGNED-SETTLEMENT-AGREEMENT.pdf>

Secondary Sources

Aariak, E. (2013) Building Sustainability into a Changing Arctic. *McGill International Journal of Sustainable Development Law & Policy*, 9(2): 1-3.

Arktis Solutions. (2010). *Final Report: Development of an Overview of the State of Waste Management in Canada's Territories*. Report submitted to Environment Canada, Waste Reduction and Management Division.

Arktis Solutions. (2011). *Report on Current State of Solid Waste Management and Facilities in Nunavut and Cost-Benefit Analysis of Selected Solid Waste Management Approaches*. Report submitted to the Government of Nunavut, Community and Government Services. Retrieved from <http://assembly.nu.ca/library/GNedocs/2011/000359-e.pdf>

Campbell, A., Fenge, T., & Hanson, U. (2011). Implementing the 1993 Nunavut Land Claims Agreement. *Arctic Review on Law and Politics*. 2(1): 25-50.

Daley, K., Castleden, H., Jamieson, R., Furgal, C., & Ell, L. (2015) Water systems, sanitation, and public health risks in remote communities: Inuit resident perspectives from the Canadian Arctic. *Social Science & Medicine*. 135: 124-132.

Dewar, B., 2009. Nunavut and the Nunavut Land Claims Agreement – An Unresolved Relationship. *Policy Options* 30(7): 74-79.

- Dillon Consulting Limited. (2010). *Evaluation of Recycling Pilot Projects: Final Report*. Report submitted to Government of Nunavut, Department of Environment, Environmental Protection Division, 2 March 2010. Retrieved from <http://www.gov.nu.ca/sites/default/files/Evaluation%20of%20Recycling%20Pilot%20Projects%20-%20Final%20Report%20-%20March%20202010.pdf>
- Eber, D. H. (1997). *Images of Justice*. Montreal and Kingston: McGill-Queen's University Press.
- Fenge, T. & Quassa, P. (2009). Negotiating and Implementing the Nunavut Land Claims Agreement. *Policy Options* 30(7): 80-86.
- Ford, J.D., Bolton, K.C., Shirley, J., Pearce, T., Tremblay, M., & Westlake, M. (2012). Research on the Human Dimensions of Climate Change in Nunavut, Nunavik, and Nunatsiavut: A Literature Review and Gap Analysis. *Arctic*. 65(3): 289-304.
- Hohmann, J. (2009) Igloo as Icon: A Human Rights Approach to Climate Change for the Inuit? *Transnational Law & Contemporary Problems*. 18: 295-316.
- Iqaluit dumpcano has been burning for 3 months. (2014, 20 August). *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/north/iqaluit-dumpcano-has-been-burning-for-3-months-1.2741513>
- Iqaluit's long-smouldering 'dumpcano' garbage finally out. (2014, 16 September). *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/national/iqaluits-long-smouldering-dumpcano-garbage-fire-finally-out/article20620273/>
- Iqaluit's new garbage separation plan hits snags. (2014, 15 August). *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/north/iqaluit-s-new-garbage-separation-plan-hits-snags-1.2737433>
- Johansen, B. E. (2002). The Inuit's Struggle with Dioxins and Other Organic Pollutants. *American Indian Quarterly*. 26(3): 479.
- Legare, A. (2008). Canada's Experiment with Aboriginal Self-Determination in Nunavut: From Vision to Illusion. *International Journal on Minority & Group Rights*. 15(2): 335-367.
- Mifflin, M. (2009). The prince and the pauper – Nunavut Tunngavik Incorporated and the Government of Nunavut. *Policy Options*. 30(7): 92-96.
- Nunavut landfills a health, environment risk says study. (2011, 8 November). *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/north/nunavut-landfills-a-health-environment-risk-says-study-1.977595>
- Nunavut Tourism. *People of Nunavut*. Retrieved from <http://nunavuttourism.com/about-nunavut/people-of-nunavut>.
- O'Connor, J. (2014, 26 May). Fiery 'dumpcano' filling Iqaluit with noxiously smelly fumes too big to extinguish, firefighters say. *National Post*. Retrieved from <http://news.nationalpost.com/news/canada/fiery-dumpcano-filling-iqaluit-with-noxiously-smelly-fumes-too-big-to-extinguish-firefighters-say>

- Rogers, Sarah. (2014, 12 May). From landfills to local environment – how to curb Nunavut’s toxic taste. *Nunatsiaq News*. Retrieved from http://www.nunatsiaqonline.ca/stories/article/65674from_landfills_to_local_environment_how_to_stop_the_flow_of_nunavuts_t/
- Samuelson, G.M. (1998). Water and Waste Management Issues in the Canadian Arctic: Iqaluit, Baffin Island. *Canadian Water Resources Journal*. 23(4): 327-338.
- Sophie Theriault. (2008-2009). Northern Frontier, Northern Homeland: Inuit People’s Food Security in the Age of Climate Change and Arctic Melting. *Southwestern Journal International Law*. 15: 223-249.
- Toxics in Baker Lake dump appall researcher. (2010, 22 September). *CBC News*. Retrieved from <http://www.cbc.ca/news/canada/north/toxics-in-baker-lake-dump-appall-researcher-1.870275>
- Tyrrell, M. (2006) Making Sense of Contaminants: A Case Study of Arviat, Nunavut. *Arctic*. 59(4): 370-380.
- Varga, P. (2014a, 10 March). Garbage piles up in communities as Nunavut awaits federal funding. *Nunatsiaq News*. Retrieved from http://www.nunatsiaqonline.ca/stories/article/65674garbage_piles_up_in_communities_as_nunavut_awaits_federal_funding/
- Varga, P. (2014b, October 23) Nunavut needs big waste management overhaul, MLA says. *Nunatsiaq News*. Retrieved from http://www.nunatsiaqonline.ca/stories/article/65674nunavut_needs_serious_waste_management_overhaul_mla_says/
- Weichenthal, S., Van Rijswijk, D., Kulka, R., You, H., Van Ryswyk, K., Willey, J., Dugandzic, R., Sutcliffe, R., Moulton, J., Baike, M., White, L., Charland, J., Jessiman, B. (2015) The impact of a landfill fire on ambient air quality in the north: A case study in Iqaluit, Canada. *Environmental Research*. 142: 46-50.

Government Documents

- Berger, T.R. (2006). *Nunavut Land Claims Agreement Implementation Contract Negotiations for the Second Planning Period 2003-2013: Conciliator’s Final Report*. Retrieved from http://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/nlc_1100100030983_eng.pdf
- Department of Environment. (2012). *Environmental Guideline for the Burning and Incineration of Solid Waste*. Iqaluit: Environmental Protection Division.
- Department of Environment. (2010). *Environmental Guideline for the General Management of Hazardous Waste*. Iqaluit: Environmental Protection Division.
- Department of Environment. (2012). *Environmental Guideline for Used Oil and Waste Fuel*. Iqaluit: Environmental Protection Division.
- Department of Environment. (2002). *Environmental Guideline for Waste Batteries*, Iqaluit: Environmental Protection Division.

- Nunavut Bureau of Statistics. (2015, July 1). *Nunavut Quick Facts*. Retrieved from:
<http://www.stats.gov.nu.ca/en/home.aspx>
- Nunavut Tunngavik Inc. (1999). *Taking Stock: A Review of the First Five Years of Implementing the Nunavut Land Claims Agreement*. Iqaluit: Nunavut Tunngavik. Retrieved from
<http://www.tunngavik.com/documents/publications/1999-12-00-Taking-Stock-A-Review-of-the-First-Five-Years-of-Implementing-the-NLCA-Eng.pdf>
- Office of the Auditor General of Canada. (2003). *Report of the Auditor General of Canada to the House of Commons: Chapter 8 Indian and Northern Affairs Canada – Transferring Federal Responsibilities to the North*. Ottawa: Office of the Auditor General of Canada. Retrieved from
<http://www.oag-bvg.gc.ca/internet/docs/20031108ce.pdf>
- PriceWaterhouseCoopers. (2006). *Second Independent Five Year Review of Implementation of the Nunavut Land Claims Agreement*. Retrieved from:
<http://www.gov.nu.ca/sites/default/files/files/016%20-%20Nunavut%20Land%20Claims%20Agreement%20Second%20Five-Year%20Review.pdf>
- Statistics Canada. (2011). *Focus on Geography Series, 2011 Census*. Retrieved from:
<http://www12.statcan.gc.ca/census-recensement/2011/as-sa/fogs-spg/Facts-pr-eng.cfm?Lang=eng&GC=62>
- Vertes, N.L, Connelly, D.M.H, Knott, B.A.S. (1999). *Implementation of the Nunavut Land Claims Agreement – An Independent 5 Year Review, 1993 to 1998*. Iqaluit: Innirvik Support Services., Retrieved from [http://www.gov.nu.ca/sites/default/files/files/015%20-%20Nunavut%20Land%20Claims%20Agreement%20Five-Year%20Review%20\(1993-98\)%20English.pdf](http://www.gov.nu.ca/sites/default/files/files/015%20-%20Nunavut%20Land%20Claims%20Agreement%20Five-Year%20Review%20(1993-98)%20English.pdf)

Inspection Reports

Baker Lake

- Indian and Northern Affairs Canada. (2005, August 23). *Municipal Water Use Inspection Form*. Report for Baker Lake by Scott Stewart.
- Indian and Northern Affairs Canada. (2008, August 12). *Inspector's Direction*. By Andrew Keim, Inspector, addressed to Dennis Zetler, Senior Administrative Officer of Baker Lake.
- Indian and Northern Affairs Canada. (2009, December 8). *August 6th, 2009 Municipal Water Licence Inspection 3BM-BAK9904 – Expired*. Iqaluit: Report for Baker Lake by A. Keim, Inspector, Nunavut District, addressed to Dennis Zetler, Senior Administrative Officer of Baker Lake.
- Indian and Northern Affairs Canada. (2009, August 6). *Water Use Inspection Report*. Report for Baker Lake by A Keim.
- Indian and Northern Affairs Canada. (2010, August 31). *Water Use Inspection Report Form CIDM #428916*. Report for Baker Lake by A Keim.
- Indian and Northern Affairs Canada. (2011 August 6). *Water Use Inspection Report*. Report for Baker Lake by Ian Rumbolt.

Gjoa Haven

- Indian and Northern Affairs Canada. (2005, July 27). *Municipal Water Use Inspection Form*. Report for Gjoa Haven by Scott Steward, Inspector.
- Indian and Northern Affairs Canada. (2005 August 8). *Written follow up to an Inspectors Direction issued to Raymond Kamootak in the Hamlet of Gjoa Haven on July 27, 2005*. Report by Scott Steward, Water Resource Officer of Field Operations, Nunavut District Office, addressed to Raymond Kamootak, Senior Administrative Officer for the Hamlet of Gjoa Haven.
- Indian and Northern Affairs Canada. (2006, September 20). *Municipal Water Use Inspection Form*. Report for Gjoa Haven by A. Keim, Inspector.
- Indian and Northern Affairs Canada. (2008, January 7). *September 11th 2007 Gjoa Haven Municipal Water Inspection*. Report by Ian Rumbolt, Water Resources Technician, Nunavut Region, addressed to Raymond Kamootak, Senior Administrative Officer for the Hamlet of Gjoa Haven.
- Indian and Northern Affairs Canada. (2009, August 4&5). *Water Use Inspection Report*. Report for Gjoa Haven by M. Joy, Inspector.
- Indian and Northern Affairs Canada. (2010, July 12). *Water Use Inspection Report Form*. Report for Gjoa Haven by A. Keim, Inspector.
- Indian and Northern Affairs Canada. (2011, July 13). *Municipal Water Use Inspection Form*. Report for Gjoa Haven by A. Keim, Inspector.
- Aboriginal Affairs and Northern Development Canada. (2012, June 28). *Use of Water and Deposit of Waste in a Manner Inconsistent and Non-compliant with the Authorizations Issued by the Nunavut Water Board under the Nunavut Water and Nunavut Surface Rights Tribunal Act*. Letter from Andrew Keim, A/Manager Field Operations, Nunavut Regional Office, addressed to the Honourable Lorne Kusugak, Minister of Community and Government Services, Government of Nunavut.
- Government of Nunavut, Department of Community and Government Services. (2012, July 12). Letter from Lorne Kusugak, Minister of Community and Government Services addressed to the Honourable John Duncan, Minister of Aboriginal Affairs and Northern Development Canada.
- Government of Nunavut, Department of Community and Government Services. (2012, July 23). Letter from Roy Green, A/Deputy Minister of Community and Government Services addressed to Robin Aitken, Regional Director General of the Nunavut Regional Office of Aboriginal Affairs and Northern Development Canada.
- Aboriginal Affairs and Northern Development Canada. (2013 January 4). *Inspection Report*. Report of Gjoa Haven from Andrew Keim, Water Resources Officer, addressed to Eruk Pauloosie, Senior Administrative Officer for the Hamlet of Gjoa Haven.
- Aboriginal Affairs and Northern Development Canada. (2013 July 17). *Municipal Water Use Inspection Form*. Report for Gjoa Haven by Andrew Keim, Water Resources Officer.
- Aboriginal Affairs and Northern Development Canada. (2014 August 20). *Water Licence Inspection Form*. Report for Gjoa Haven by A. Keim, Inspector.

Iqaluit

- Indian and Northern Affairs Canada. (2006, October 6). Deposit of Waste Water from Solid Waste Management Area – Inspector’s Direction. Issued by Andrew Keim, Water Resources Officer, addressed to Crystal Jones, Project Officer for the Department of Engineering, City of Iqaluit.
- Indian and Northern Affairs Canada. (2006, October 11). *Municipal Water Use Inspection Report*. Report for Iqaluit by A. Keim, Inspector.
- Indian and Northern Affairs Canada. (2007, March 6). *Deposit of Waste Water from Solid Waste Management Area – Inspector’s Direction*. Issued by Andrew Keim, Water Resources Officer, addressed to Geoff Baker, Manager of Engineering Services, City of Iqaluit.
- Indian and Northern Affairs Canada. (2009, May 24). *July 19 2008 Iqaluit Municipal Water Licence Inspection*. Report for Iqaluit by A. Keim, Inspector addressed to Steven Iyago, Operations Superintendent for the City of Iqaluit.
- Indian and Northern Affairs Canada. (2009, July 30). *Water Use Inspection Report*. Report for Iqaluit by A. Keim.
- Indian and Northern Affairs Canada. (2009, November 5). *Iqaluit Municipal Water License Inspections conducted July 30th and October 13th 2009*. Report for Iqaluit by A. Keim, Inspector addressed to Chris Callahan, A/ Director of Public Works for the City of Iqaluit.
- Indian and Northern Affairs Canada. (2010, July 1). *Water Use Inspection Report Form*. Report for Iqaluit by A. Keim.
- Indian and Northern Affairs Canada. (2011, July 7). *Municipal Water Use Inspection Form*. Report for Iqaluit by A. Keim.
- Indian and Northern Affairs Canada. (2012, October 1). *Municipal Water Use Inspection Form*. report for Iqaluit by A. Keim.
- Aboriginal Affairs and Northern Development Canada. (2013, March 5). *Inspector’s Direction*. Issued by Andrew Keim, Inspector, addressed to John Hussey, Chief Administrative Officer for the City of Iqaluit.
- Aboriginal Affairs and Northern Development Canada. (2013, July 4). *Municipal Water Use Inspection Form*. report of Iqaluit by Andrew Keim, Inspector.
- Aboriginal Affairs and Northern Development Canada. (2013, October 23). *Municipal Water Use Inspection Form*. Report of Iqaluit by Justin Hack.
- Aboriginal Affairs and Northern Development Canada. (2014, January 13). *Failure to Comply with Inspector’s Direction*. Letter from Justin Hack, Acting Water Resources Officer, addressed to John Hussey, Senior Administrative Officer for the City of Iqaluit.
- Aboriginal Affairs and Northern Development Canada. (2014, June 30). *Municipal Water Use Inspection Form*. Report of Iqaluit by Andrew Keim, Inspector.
- Aboriginal Affairs and Northern Development Canada. (2014, October 8). *Water Licence Inspection Form*. Report of Iqaluit by Robert Savard, Inspector.

Rankin Inlet

Indian and Northern Affairs Canada. (2012, July 6) *Municipal Water Use Inspection Report Form*.
Report of Rankin Inlet by Christine Wilson, Inspector.

Barents Region: The Arctic Council as a Stabilizing Magnet

Florian Vidal

The Arctic Council (AC) is a stabilized and consolidated intergovernmental regional body created in 1996. It has deployed a consistent work on environment issues and produced key documents such as the Agreement on Search and Rescue (SAR) reached in 2011. In the context of the Barents region, the Arctic Council is not the core of the regional dynamics as other regional institutions emerged earlier in the 1990s. Meanwhile, the establishment of the Barents Euro-Arctic Council (BEAC) in 1993, and then the Barents Regional Council (BRC), has underlined the willingness to encourage the neighboring cooperation and coordination, it marks the openness process between the Russian Federation and Western countries, and particularly the Northern European countries. Far from being competing, these organizations according to their nature and functioning are complementing each other in some way. The lack of legal framework in the area for over two decades is substantially moving forward as concrete steps on both environmental issues and social and economic projects are further interlocked than ever. Adding that the Barents region is unique in the Arctic context for its evolving neighboring policy between Nordic countries and the Russian Federation. Despite the tumult of the geopolitical tensions, the Barents institutions followed by the support of the Arctic Council has demonstrated its ability to be resilient and bargain for further development. As a result, the Barents region converts itself as a major core for shaping Arctic governance.

Introduction

The establishment of the Arctic Council has been a notable step but not decisive for the cooperation of the Barents area. Its perspective goes beyond the premise of the regional governance attempt. Indeed, the Arctic Council brings forward a new sphere of cooperation on security issues such as Arctic search and rescue (SAR). In that perspective, the Arctic Council symbolizes a dramatic shift from a tense political and military confrontation to a peaceful and constructive intergovernmental arena. Although the Arctic held the status of sensitive theatre for military deployment including during the Cold War, the region became a focal point for political initiatives to set out transnational cooperation (Young, 2005:9).

For over two decades, the Barents region has experienced significant progress in neighboring cooperation. The case of the Norwegian-Russian cooperation in the area has been illustrated through various facts of an enhancing dialogue. In the light of the establishment of the Arctic Council, the regional organization has made the case to improve cooperation in the area.

Nevertheless, it is worth noting that other regional organizations such the Barents Euro-Arctic Council¹ have also been created to catalyze cooperation in the post-Cold war era.

Emphasizing the conceptual support in order to understand the institutional mechanism at stake in the Barents region, Cécile Pelaudeix properly identified the involvedness for the characterization of governance:

“Since there is no official or dominant definition of governance, scientists refer either to processes, activities, set of rules or the very framing of governance issues. The analytical logic used by scientists and the different ontological assumptions or theories within disciplines that they refer to, determine the criteria of evaluation used in the analysis” (Pelaudeix, 2015: 401).

As a result, the parallel evolution of both Arctic Council and Barents regional institutions identifies a new path for local governance and illustrates the empirical building of a sophisticated mechanism and vast governance network in the area. For this purpose, the Barents region may be seen as a significant core for applying this empirical model. To this point, it can be assumed as a substantial success for over two decades.

20 Years of Strengthening Cooperation in the Barents Region

As Norway and Russia pledge to expand business and institutional cooperation in the Barents region, we can trace the institutionalization process in the Barents region to the end of the Cold war, starting in 1993 with the Kirkenes Declaration. Signed on 11 January 1993 by ministers of foreign affairs and other delegates from Denmark, Finland, Iceland, Norway, Russia, Sweden and the Commission of the European Communities (EC), the Declaration aimed to enhance cooperation in the Barents Euro-Arctic Region: the signatories agreed to contribute substantially both to stability and progress. As a result, this institutionalization process in the area is a component of the European construction in order to overcome confrontation and division that characterized the 20th century. In that perspective, the Barents cooperation is studied as a part of the process of evolving European cooperation and integration (Declaration on the 20th Anniversary of the Barents Euro-Arctic Cooperation, 2013).

For over 20 years, Barents cooperation has played a constructive role in economic and social development. The region has been the center for promoting people-to-people contacts including creation of positive conditions for interregional exchange in a significant number of fields (e.g. culture, indigenous peoples, youth, education, IT, trade, environment, transportation and so on). As a remarkable example, the project “Finnish-Russian Arctic Mining Initiative” was carried out by Spinverse Ltd. in recent years. It aimed to create sub-clusters of companies, research organizations and other actors to offer a better service to the customer. As the project was funded by the Finnish Ministry of Foreign Affairs, it sought to spot key needs for research and innovation activities concerning mining in North-Western Russia.

The BEAC was established as a forum in order to materialize the idea of northern cooperation as it was previously promoted by the Nordic Council of Ministers (Denmark, Finland, Iceland, Norway and Sweden), during the 1960s. Four key documents articulate Barents regional governance since 1993:

1. The Kirkenes Declaration (January 11, 1993)
2. Regional agreement signed by regional authorities and a representative of Sami people (1993)
3. The Barents Euro-Arctic 10th Anniversary Declaration 2003 (January, 2003)
4. The Barents Euro-Arctic 20th Anniversary Declaration 2013 (June 3-4, 2013)

Along with the establishment of a Barents governance mechanism, the wider grouping of Arctic States began to structure themselves as a region. Since 1996, the Arctic Council has emerged as a legitimate regional body. Since then, several aspects such as environment, health, and maritime safety issues have been under the auspices of the Arctic Council.² The Arctic organization enhances multilateral relations through a legal and supportive framework. Established by the Ottawa Declaration, the Arctic Council seeks to promote “cooperation, coordination and interaction among the Arctic States” (Ottawa Declaration, 1996).

In addition, a bilateral agreement between the Russian Federation and the Kingdom of Norway regarding the Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean was signed on 15 September 2010, an illustration of “the decisive role that trust can play in settling disputes and creating new opportunities for cooperation” (Declaration on the 20th Anniversary of the Barents Euro-Arctic Cooperation, 2010). As the agreement between the two countries was welcomed, it has a significant value regarding Barents cooperation. On one hand, this signed agreement solved a complex and long-term issue. On the other hand, it exemplified a successful cooperation between equal parties in the Arctic region, and represented momentum in Barents cooperation.

Since then, constant convergence has emerged as a key evolution of the regional governance in the Barents area. Tangible steps are taken particularly at a working group level to enhance coherence and synergy of regional and cross-border cooperation between different forums, such as the Arctic Council, the Council of the Baltic Sea States, the Nordic Council of Ministers and the Northern Dimension (BEAC 15th Ministerial Session, 2013). Indeed, regarding the different working groups in action within the framework of the BEAC, many issues are similarly tackled at the Arctic Council. For instance, the working group on rescue cooperation from the BEAC found a striking echo with the “Agreement Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic” reached by the Arctic Council members in 2009. Other similar issues such as environmental protection and water issues are dealt by both regional organizations. This increasing synergy is a fundamental factor in avoiding redundancy and loss of efficiency in a regional cooperation mechanism.

It is important to underline that after decades of isolationism, the Russian Northwest progressively opened up to Western Europe. As a consequence, this geopolitical change partially opened a unique atmosphere of cooperation and shared ideas of mutual prosperity in the region (Plouffe, 2013). Following two decades of positive development in the Barents region, however, there have been over the past two years serious challenges as relationships between the Russian Federation and the West have sharply deteriorated since the 2014 Ukrainian crisis. New questions have arisen regarding the nature and density of cooperation with the Russian political regime, questions that involve Nordic countries and their commitment to maintain constant and fruitful relation with their Arctic neighbor.

The Perception of the Russian Federation

At this juncture, it is relevant to hold a comprehensive approach of the geopolitical dynamics in the Barents region by focusing on Russian policy and strategy. According to the Russian vision, the Barents Euro-Arctic Council has become an effective and relevant regional cooperation mechanism. Described as a success story, BEAC's activities managed, according to their point of view, to create a neighborhood of confidence and stability in Northern Europe. Based on the principles of indivisible and comprehensive security, this council would not be affected by fluctuations of political environment (Lavrov, 2015). To this point, Russian public authorities openly praise the work of the Barents institutions. In that unique regional governance scheme, the conduct of the Russian Federation as a key player for maintaining stability and peaceful development in the Barents region toward these regional organizations is critical.

During the presidency of Dmitry Medvedev (2008-2012), further improvements in Barents cooperation were reached between the relevant parties. According to the Foreign Policy Concept (2013), it stressed its positive appreciation for practical cooperation with Northern Europe. The nature of this cooperation includes the completion of joint projects through various multilateral structures both in the Barents and Arctic region. During that time, the Russian government expressed its support for the BEAC, and viewed both the latter and the Arctic Council as valuable structures by which to organize regional governance (Oldberg, 2014: 45).

Within regional organizations in the High North, Russia limits itself to tackling 'soft' security issues in multilateral fora. Indeed, Russia rules out resolving most existential concerns throughout these regional institutions (Oldberg, 2014: 62). The Russian Federation defines its policy in accordance to the role it aims to offer to various international intergovernmental organizations. Both the Arctic Council and subregional Barents organizations have therefore been conceived as limited but workable institutions. In that respect, the Russian Federation continuously praises the councils for their constructive and fruitful in the cooperation sphere in the region.

According to the 2008 Russian doctrine, the Arctic policy until 2020 defines its national interests in the area in the following terms (Basic Principles of the State Policy of the Russian Federation in the Arctic up to 2020, 2008; Oldberg, 2011):

- To use and expand the resource base for Russia's socio-economic development
- To maintain peace and cooperation in the Arctic, including military security
- To safeguard the unique ecological systems
- To use and develop the Northern Sea Route

The main objective of this defined political orientation aims to maintain the Russian Federation as a 'leading Arctic power'. Undeniably, this position has been upheld for over two decades. Consequently, the Arctic Council in the context of the Barents region represented a helpful instrument for the Russian government in order to resolve peripheral issues. With respect to environmental security issues, the Arctic Council brought to Russia an enhancement of neighboring cooperation on a long-ignored matter.

Arctic Council vs. Barents Institutions: Neither Superposition, Nor Competing, but Complementing Regional Governance

As the vision of the Barents cooperation is to improve living conditions in northernmost Europe,

the Arctic Council is committed to protect the Arctic ecosystem and safeguard human well-being in the area. However, the Barents regional governance bodies also underline their commitment both to support sustainable economic and social development and to contribute to stability, progress and peaceful development. In this specific context, the Arctic Council appears as a supportive governance tool for this Arctic subregion. As a result of this duality in the intergovernmental institutions in the area, the Barents region is a consistent example of the post-Cold War governance enhancement that paves the way for fruitful cooperation between neighboring States.

The Arctic Council aims to cope with national interests in the High North as they have no clear boundaries. Therefore, the Ilulissat Declaration (2008) encompasses the need for an institutional framework to resolve boundaries' issues in the Arctic region. As a result, the five member-States of the Arctic Council pledge that "questions of jurisdiction and territorial claims should be solved by negotiations within the existing international legal framework" (Hønneland & Østerud, 2014: 165).

According to Hønneland and Østerud, the Arctic Council remains a forum for coordinating Arctic environmental monitoring and science. In order to do so, the council organizes itself by producing and exchanging information, through several working groups. And one of the manifestations of the efficiency of this framework has been demonstrated by the treaty coordinating international SAR coverage and response in the Arctic.

It is worth mentioning that the Arctic Council strongly welcomes in its framework a strong participation from the region's indigenous peoples. At the same time, the Barents Euro-Arctic Region collaboration – as well as the EU Northern Dimension – were struggling to meet the initial expectations of thriving East-West cooperation on trade and industry. Despite all the benefits made by the regional organization, it is described as lacking a legal framework in key issues related to sustainable development and environmental protection (Lamers, Pristupa, Amelung & Knol, 2015: 50). To date, the 1982 United Nations Convention on the Law of the Sea (UNCLOS) provides a roughly accepted legal mechanism to promote the interests of the Arctic states that signed the convention. However, the United States did not sign the convention, and consequently are not bound by this international legal framework.

The Arctic Council is the most prominent intergovernmental body that generates and exchanges information about Arctic (marine) ecosystems, and the economic activities that affect these ecosystems (Lamers et al., 2015: 51). By doing so, the AC exemplifies itself as a model of regional governance to resolve complicated issues such as marine governance despite no legal framework specific to the Arctic having yet been implemented and entered into force. Furthermore, the consistent role played by the AC in this domain has positively attracted non-State stakeholders (i.e. NGO, private companies, civil society and so on). For the Barents region, the purpose of its core activities implies a range of issues compatible to its regional political framework. Indeed, SAR operations encompass the current economic and social development in the area alongside transportation and oil and gas exploration in the Barents Sea.

In that view, the Arctic Council gives an impression of complementarity towards the Barents institutions. As these latter are devoted to support and maintain essentially economic and social cooperation between the neighboring states, decisions adopted by the AC enhance the feasibility of promoting sustainable development in the Barents region through an environmental framework.

The Future of the Arctic Council: Challenges and Opportunities

Before delving into the Barents context, it is worth stating that the Ukrainian crisis has shaped new dynamics in the relationship between the West and Russia. The imposition of financial and economic sanctions, mainly by the European Union and the United States, and counter-sanctions led by the Russian Federation, threaten to undermine relations. Indeed, a primary consequence of the sanction and counter-sanction regimes has been a negative impact on the local economy in the Barents region. The fishery industries, for example, have been severely affected by the embargo on food products initiated by the Russian Federation against the Scandinavian countries – and beyond to include other Western countries. Accordingly, in the long term the stability and cooperation relations in various spots could be shaken wherever Russian and Western interests confront one another.

To date, the Russian Federation has expressed its support for Arctic regional bodies to increase international cooperation in order to solve numerous problems in the area and ensure the sustainable development of the region overall (Heininen, 2013). But as a balance to these regular and acclaimed political statements, the current geopolitical landscape in the Barents region demonstrates that an increase in challenges needs to be coped with. Both climate change and a resulting, potential, economic boom are interlocked as accelerated ice-melting may open new spaces for further economic opportunities (e.g. maritime transportation, O&G exploitation, fishing industry).

The Arctic Council remains the central organization to maintain cooperation and substantial coordination on various issues at stake in the scope of its activities. According to speeches delivered by the Arctic States Ministers and representatives in April 2015, it is imperative to preserve regional stability far from the strained international situation:

“It is in no-one’s interest to let problems elsewhere to impact negatively on Arctic cooperation and the Arctic environment” (Tuomioja, 2015).

“There is no room for confrontation or aggravation of tension in the Arctic region – especially from outside sources – and there is a strong public demand for joint responses to common challenges and for joint use of shared opportunities in the Arctic” (Donskoy, 2015).

From these statements, respectively from Finland and Russia, public positions in the Barents region are presumably positive, though somewhat surprising considering the political and military tensions in the Barents-Baltic axis.³ Regarded as a conflictual position, parties on both sides appear to prioritize economic and social goals in the Barents region.

In the light of this impending outlook, Tromsø – the largest Norwegian city above the Arctic Circle (~70,000 inhabitants) – has since 2013 permanently hosted the Arctic Council Secretariat (ACS), designed to “strengthen the capacity of the Arctic Council to respond to the challenges and opportunities facing the Arctic” (Nuuk Declaration, 2011). Indeed, the installation of the ACS in the Barents region is rather more a symbolic than a strategic decision in terms of regional governance. The function of the Arctic Council Secretary is first of all an operational one. As it is stated, the ACS is an administrative and organizational unit for coordinating all involved processes of the Arctic Council (e.g. arranging and servicing meeting, assisting the Chair, transmitting reports, and so on).

Economic Cooperation: A Core Pillar for the Barents Region

More recently, on September 8, 2015, the Arctic Economic Council Secretariat was officially opened in Tromsø. It is worth mentioning that this organization is not formally connected to the Arctic Council. As an independent organization, it aims to facilitate Arctic business-to-business activities. But again, the establishment of this regional organization within the so-called Norwegian Arctic capital underlines the ongoing build-up of the municipality as a hub for Arctic governance.

As economic cooperation is one of the pillars of the BEAC, this establishment may emphasize once again the regional stakeholders' will to implement a lasting peaceful cooperation. The regional governance through Barents institutions has involved economic and social development in the premise of its objectives for over 20 years. Indeed, the Declaration on the 20th Anniversary of the Barents Euro-Arctic Cooperation reminds us that the Barents intergovernmental platform expresses its support for a sustainable development of the region's natural resources.

Within this context, the Arctic Council Indigenous Peoples' Secretariat (IPS), established in 1994 as a support body for the international indigenous peoples' organizations with Permanent Participant status in the Arctic Council, moved its office to Tromsø in January 2016. The IPS' office is located within the premise of the ACS. For this purpose, Ethel Blake (2015) underlined that this move aims to benefit both the ACS and IPS by working closely. Finally, the Barents region has emerged as a formidable magnet for combining the Barents governance with the support of the Arctic Council framework.

Conclusion

The extent to which the Barents region has evolved can be explained only through a condition of tremendous circumstance. Emerging from the Cold War years, stakeholders experienced a glum picture of how extreme geopolitical differences could wreak havoc on a region locked in a posture of heavy militarization. Similarly, nowadays the region faces the prospect of a melting cryosphere, bringing amplified awareness to the High North as a region where human beings have once more spoiled the environment. Indeed, it is the outcome of industrialization processes over the past two centuries (Dingman, 2015: 96). The Barents region has witnessed the establishment of complex intergovernmental and interregional institutions for over 20 years. Alongside the AC, the Barents institutions such as BEAC and BRC are known for their main value and strength: consensus. Consequently, the capacity for effectiveness relies on the desire of nations to provide the strategy and structure capable of promoting and supporting cooperation.

If this example can inform the global European policy both on border dialogues and sustainable development, the Arctic Council for its part can play a key role in stabilizing critical issues that have emerged in the post-Cold War transition timeframe. Besides, Heather Exner-Pirot stresses the critical move decided by the eight Arctic states for establishing a Permanent Secretariat in Tromsø. It has afterward enlightened "the idea that the Arctic states are newly accepting of a level of authority from the Arctic Council that has previously been unknown" (Exner-Pirot, 2012: 235).

Since the Arctic Council is a consensus-based body, the endorsement of its actions by all Arctic states is essential to its continued functioning. As a result, the conditions of animosity may significantly reduce the scope of action for the chair and limit its potential to deliver practical resolutions (Smieszek & Kankaanpää, 2015: 12). In the same way, Barents institutions also

established on the basis of consensus are exposed to the turbulent breeze of the geopolitical tensions between Russia and the West. Nonetheless, regional governance in the area somehow demonstrates its ability to resist, and thus provides acknowledgement of the resilience of Barents cooperation.

To sum up, the Arctic Council strengthens the function of the BEAC and legitimizes it as a key stakeholder by providing a framework and emphasizing this lasting cooperation. In the meantime, the Arctic Council accompanies the state of the development in the Barents region in the context of specific geopolitical dynamics. Indeed, it openly exposes the fragility of the established cooperation with the Russian Federation in the Arctic for over two decades.

Notes

1. The Barents Euro-Arctic Council holds two secretarial bodies: The International Barents Secretariat and the Norwegian Barents Secretariat. On the one hand, the International Barents Secretariat aims to provide technical support for the multilaterally coordinated activities within the framework of the Barents Euro-Arctic Council and the Barents Regional Council. On the other hand, the Norwegian Barents Secretariat aims to make it as easy as possible to initiate Norwegian-Russian cooperation projects.
2. The Arctic Council is articulated by six Working Groups tackling environmental and safety issues in the Arctic region. The structure of these groups are as follows: Arctic Monitoring and Assessment Programme (AMAP); Conservation of Arctic Flora & Fauna (CAFF); Emergency Prevention, Preparedness & Response (EPPR); Protection of the Arctic Marine Environment (PAME); Sustainable Development Working Group (SDWG); Arctic Contaminants Action Program (ACAP).
3. Currently under my investigation, the concept of Barents-Baltic axis is based on a spatial insight for a geopolitical purpose. By interlocking two seas, this verticality axis proposes another analysis of the existing dynamics (e.g. military, policy, economics and so on) between the Northern European countries and the Russian Federation.

References

- Amelung, B., M. Knol, M. Lamers & A. Pristupa (2015). The changing role of environmental information in Arctic marine governance. *Current Opinion in Environmental Sustainability*. 18:49-55.
- Arctic Council (1996). Ottawa Declaration. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/85/00_ottawa_decl_1996_signed%20%284%29.pdf?sequence=1&isAllowed=y
- Arctic Council (2008). Ilulissat Declaration. Retrieved from: https://www.regjeringen.no/globalassets/upload/ud/080525_arctic_ocean_conference_outcome.pdf
- Arctic Council (2011). Nuuk Declaration. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/92/07_nuuk_declaration_2011_signed.pdf?sequence=1&isAllowed=y

- Arctic Council (2011). Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/531/Arctic_SAR_Agreement_EN_FINAL_for_signature_21-Apr-2011%20%281%29.pdf?sequence=1&isAllowed=y
- Barents Euro-Arctic Cooperation (1993). Kirkenes Declaration. Cooperation in the Barents Euro-Arctic Region. Conference of Foreign Ministers. Retrieved from: http://www.barentsinfo.fi/beac/docs/459_doc_KirkenesDeclaration.pdf
- Barents Euro-Arctic Cooperation (2013). Declaration on the 20th Anniversary of the Barents Euro-Arctic Cooperation. Retrieved from: http://www.barentsinfo.fi/beac/docs/Barents_Summit_Declaration_2013.pdf
- Barents Euro-Arctic Cooperation (2013). BEAC 15th Ministerial Session. Oulu (Finland). Retrieved from: http://www.barentsinfo.fi/beac/docs/BEAC_15th_Ministerial_Session_Oulu_9-10_October_2015_Joint_Communique.pdf
- BEAC Working Group on Economic Cooperation (WGEC) (2015). 2015 Annual Report of activities. Retrieved from: <http://www.barentsinfo.fi/beac/docs/WGECannualreport2015.pdf>
- Blake, E. (2015). Statement from Ethel Blake. Arctic Council (retrieved from Twitter official account). Retrieved from: <https://twitter.com/arcticcouncil/status/691621442623029251>
- Dingman, E. (2015). Arctic Council Environmental Initiatives: Can the United States Promote Implementation?. In L. Heininen, H. Exner-Pirot & J. Plouffe (Eds.). *Arctic Yearbook 2014* (pp. 86-101), Akureyri, Iceland: Northern Research Forum.
- Donskoy, S.E. (2015). Statement by Minister S.E. Donskoy at the Arctic Council Ministerial Meeting. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/11374/909/acmmca09_igaluit_2015_russia_statement_final.pdf?sequence=1&isAllowed=y
- Exner-Pirot, H. (2012). New Directions for Governance in the Arctic Region. In L. Heininen, H. Exner-Pirot & J. Plouffe (Eds.). *Arctic Yearbook 2012* (pp. 224–246), Akureyri, Iceland: Northern Research Forum.
- Government of the Russian Federation (2008). [Basic Principles of the State Policy of the Russian Federation in the Arctic up to 2020]. Retrieved from: <http://government.ru/media/files/A4qP6brLNJ175I40U0K46x4SsKRHGfUO.pdf>
- Government of the Russian Federation (2013). [The Strategy for the Development of the Arctic Zone of the Russian Federation and National Security up to 2020]. Retrieved from: <http://government.ru/media/files/2RpSA3sctElhAGn4RN9dHrtzk0A3wZm8.pdf>
- Heininen, L. (2013). “New Russian Arctic Doctrine: From Idealism to Realism?”. Valdai Discussion Club. Retrieved from: http://valdaiclub.com/opinion/highlights/new_russian_arctic_doctrine_from_idealism_to_realism/
- Hønneland, G., Ø. Østerud (2014). Geopolitics and International Governance in the Arctic. *Arctic Review on Law and Politics*, 5(2): 156-176
- Kankaanpää, P. & M. Smieszek (2015). Role of the Arctic Council Chairmanship. In L. Heininen, H. Exner-Pirot & J. Plouffe (Eds.). *Arctic Yearbook 2014* (pp. 247–262), Akureyri, Iceland: Northern Research Forum.

- Lavrov, S. (2015). Statement by Sergey Lavrov at the Fifteenth Ministerial Session of the Barents Euro-Arctic Council. Oulu. Retrieved from: <http://en.beac-russia.com/statement-by-minister-of-foreign-affairs-of-the-russian-federation-sergey-lavrov-at-the-fifteenth-ministerial-session-of-the-barents-euro-arctic-council>
- Ministry of Foreign Affairs of the Russian Federation (2013). Concept of the Foreign Policy of the Russian Federation. Retrieved from: <http://archive.mid.ru//bdomp/ns-osndoc.nsf/1e5f0de28fe77fdcc32575d900298676/869c9d2b87ad8014c32575d9002b1c38!OpenDocument>
- Pelaudeix, C. (2015). What is “Arctic governance”? A Critical Assessment of the Diverse Meanings of ‘Arctic governance’. *The Yearbook of Polar Law*, 6: 398–426.
- Plouffe, J. (2013). Two Decades of Barents Dialogue: An Inspiration for the North American Arctic. Retrieved from: https://www.institutnorth.org/assets/images/uploads/articles/Two_Decades_of_Barents_Dialogue-An_Inspiration_for_the_North_American_Arctic_By_Jo%C3%ABl_Plouffe.pdf
- Sirén, A. (2012). Review of the Achievements of the Barents Cooperation. Retrieved from: <http://www.barentsinfo.org/Barents-region/Cooperation/Review-of-the-Achievements-of-the-Barents-Cooperation>
- Tuomioja, E. (2015). Statement by Mr. Erkki Tuomioja, Minister for Foreign Affairs of Finland. Arctic Council 9th Ministerial meeting. Retrieved from: https://oaarchive.arctic-council.org/bitstream/handle/1374/904/ACMMCA09_Iqaluit_2015_Finland_Statement.pdf?sequence=1&isAllowed=y
- Young, O.R. (2005). Governing the Arctic: From Cold War Theater to Mosaic of Cooperation. *Global Governance: A Review of Multilateralism and International Organizations*, 11(1): 9–15.

Briefing Note

Revisiting the Northern Forum: Lessons from Alaska's Involvement

Emily Tsui

At the 2015 General Assembly of the Northern Forum (NF or Forum) in Yakutia, Craig Fleener, on behalf of Governor Bill Walker, declared Alaska's intention to rejoin the Forum. Four years before at the Gangwon General Assembly, Alaska withdrew from the NF, despite having been one of the principal architects of the organization in 1991. What were the motivations behind Alaska's initial commitment, withdrawal, and now move to rejoin?

As the Northern Forum celebrates its 25th anniversary this year and is undertaking a renewal of its activities, understanding why one of its key members has had a fickle relationship with the organization sheds light on why the NF has not risen in prominence in comparison with other Arctic governing bodies, such as for example, the Arctic Council. Over the years, the NF has seen its membership rise to a height of 25 subnational governments from 10 countries between 2001 and 2003, and fall to a low of 7 governments across 5 countries between 2013 and 2014.¹ This decline is especially problematic given recent findings by the 2015 Gordon Foundation public opinion survey, which found that the plurality of Northern respondents in Canada and the United States indicated they feel that governments closer to them best represents them, whether at the territorial/state level or municipal/local level (EKOS, 2015: 20). Since the NF's goal is to facilitate relations between subnational governments, what does its decline in membership say about the need for inter-subnational co-operation in the Arctic region?

Emily Tsui completed her Honours Bachelor of Arts from the University of Toronto in international relations (2016).

This briefing note presents an overview of Alaska's involvement with the Forum and assesses the broader implications of this for inter-subnational co-operation in the Arctic. It suggests that inherent structural deficiencies of the Forum harmed its ability to attract sustained interest from Northern regions, including and especially Alaska. While Alaska's move to rejoin suggests that there is still a role for the Forum to play in promoting inter-subnational co-operation as it exists globally throughout the entire Arctic, reforms to the organization should be made to promote greater membership and to increase its effectiveness.

1991-2011: Alaskan Involvement in the Forum

The creation of the NF was in recognition of the fact that grand challenges facing the Arctic and its inhabitants, growing starker with every year, require more than any one government to properly develop solutions to address it. The founders believed that sustained meetings between its membership (defined simply as Northern regions self-identifying as sharing the majority of similar traits of "climatic conditions, demographic attributes, resource-based economies, environmental vulnerability, subsistence-reliant populations, political vulnerability, and infrastructure, transportation, communications limitations") (Northern Forum, 1991) would "offer opportunities to exchange ideas, solve common problems, and plan cooperative initiatives regarding issues that are unique to the North or take on special significance for the northern regions" (Third Northern Regions Conference Staff, 1990: 10).

Building off three international conferences on Northern Regions (1974, 1979, and 1990), the Northern Forum Agreement was signed in 1991 that laid out in greater detail the basic principles of the Forum's mission and how it might operate.² It is significant to note that its charter and bylaws were written in accordance to American corporate law for non-profits since the secretariat was to be incorporated in Alaska. In doing so, the NF gained access to American grants from organizations such as United States Agency for International Development (USAID), but this also meant that some of these groups like USAID stipulated that funding could only be administered by Americans.³ Governor Steve Cowper, chair of the Third Conference, offered the resources of the Office of the Governor of the State of Alaska to begin work on this new "permanent organization." As such from the beginning, there was a strong connection between the Forum and the State of Alaska, specifically in the Governor's office (Third Northern Regions Conference Staff, 1990).

Following Governor Cowper's leadership, Governor Walter Hickel (1991-1994) was similarly, or perhaps even more, an enthusiastic supporter of the Forum. Both strongly believed in the importance of Alaska's engagement in international relations, further demonstrated by Governor Hickel's establishment of the Institute of the North, which he hoped would serve as the educational arm of the NF.⁴ He also personally attended meetings of the Forum, and worked with former executive director John Doyle (1998-2001) to secure a 500,000 USD grant from Senator Ted Stevens for the Forum's operations.⁵ After leaving office, Governor Hickel continued his participation by serving as "Secretary-General for life" of the NF, thereby continuing to influence the organization's activities until his death in 2010.

Contrary to Governor Hickel's hands-on involvement, Governor Tony Knowles (1994-2002) was not as engaged with the NF and the origins of Alaskan disinterest in the Forum can be seen here. For example, instead of directly attending meetings of the Forum, Knowles sent his assistant David

Ramseur to participate in its meetings. Despite some being held in Alaska, he only stopped by one of the meetings for a few hours.⁶ Knowles belonged to an opposing political party (Democrat) and was not particularly interested in fostering Governor Hickel's legacy vis-à-vis the NF. Instead, he was more closely tied with the Democratic President Bill Clinton and was supportive of the creation of the Arctic Council in 1996. The Northern Forum, instead of receiving a status similar to Permanent Participants as was designed in one of the early proposals of the AC, was relegated to observer status instead of accepted as a full member following disputes between the indigenous groups and the Forum (Tsui & Deagle, 2015: 10).

Governor Frank Murkowski (2002-2006) expressed greater interest in state involvement in international relations than his predecessor, but this attention was directed mostly towards Pacific Rim economic activities and not necessarily the NF. The NF's projects at the time were mostly cultural and therefore did not necessarily align with his priorities. Furthermore, a crash in oil prices during his tenure removed some of the discretionary spending available in the Governor's office. This reduced the amount of subsidies that the government provided to the Forum.⁷ At the same time, there was a significant exodus of members from the Forum, especially from the Nordic members, who sought more cohesion in activities through the Barents-Euro Arctic Council and were not impressed by the minimal leadership that Alaska was displaying.

The greatest decline in support to the Forum occurred under Governor Sarah Palin (2006-2009). Displaying only the faintest of interest in international relations and using the 2008 economic crash as justification, Governor Palin cut funding to the Forum without consultation with its staff from 75,000 USD to 15,000 USD (Hertzberg, 2008). This caused the secretariat's office to go without pay for two months, and relations between the Forum and the Governor's office was substantially impacted. At the same time, the recession reduced the amount of private funding and federal grants available that the NF could apply to, and financial uncertainty lingered over the NF's operating activities for the next few years.

Governor Sean Parnell (2009-2014) was Palin's Lieutenant Governor and a year after Hickel passed away, he instructed his chief of staff, Michael Nizich, to send a letter to the NF secretariat informing them of Alaska's withdrawal.⁹ The 2011 General Assembly was the last one that Alaska would attend for the next few years.

2011: Alaska Withdraws

In Sarah Pralle's work on "venue selection," or why organizations choose membership in one forum over another, she suggests that actors select venues that would best fit their "larger strategic plan for achieving substantive policy change" (Pralle, 2003: 233). The perception by successive governors that the NF was not a worthwhile return on investment contributed to the decision to withdraw in 2011. This belief largely had to do not only with varying interpretations by the governors of Alaska's role in international relations, but also of the role of the Northern Forum.

However, what are the other factors that encouraged Governor Parnell to officially sever relations with the Forum? Interviews with key individuals involved in Alaska's withdrawal suggests that flaws in organizational design, including a lack of clearly defined objectives, lack of cohesive identity generated from the vague membership criteria of "Northern," lack of consistent funding, and an inability to separate personal and professional relationships, contributed to a perception of the Forum's ineffectiveness. In particular, the dependence on the Governor's office for Alaskan

participation also meant that a lack of interest from the governor significantly impacted the ability of the NF secretariat to dedicate resources into fixing these organizational issues.

The lack of clearly defined objectives caused confusion between the demands of what members wanted the NF's outputs to be and the actual projects that the NF undertook. In particular, the 1999 Lapland Declaration stated the NF's mandate as: "To improve the quality of life of Northern peoples by providing Northern regional leaders a means to share their knowledge and experience in addressing common challenges; and To support sustainable development and the implementation of cooperative socioeconomic initiatives among Northern regions and through international fora" (Northern Forum Board of Directors, 1999). Combined with the broadly defined criteria for membership, it is unclear what exactly the terms "Northern peoples" and "common challenges" that the NF are referring to. Projects were therefore undertaken in an ad-hoc basis, with members bringing projects to the table on issues that concern them specifically, not necessarily of the entire Forum as a whole.

Additionally, a lack of cohesive identity that emerged from such as broad definition of "Northern" meant that there was less of an incentive for members to stay in the organization. Differences in time zones, languages and geography across the regions meant that there would be "special and unique challenges" in co-ordinating projects, which called into question just how simply how "common" challenges facing regions across the circumpolar world are (Dubreuil, 2011: 923-924). It was hard to identify project areas that would be relevant to every member that would be worth the investment and feasibly co-ordinated by all members, especially during the peak of the Forum's membership of 25. The introduction of associate secretariats aimed to alleviate these issues, but also increased the likelihood of fragmentation in developing a cohesive identity.

Problems in developing a sustainable financial model meant that projects were conducted sporadically, based on the interest of members who were willing to invest the money. Funding for the Forum comes from membership fees of regional governments, subsidies provided by the state of Alaska and Hokkaido, grants from normally U.S. government or corporations, and after 1999, fees paid by business partners. However, during when some members experienced financial hardship, membership fees were waived. Subsidies from the state of Alaska were continuously cut as successive governors showed less interest in the Forum. The 2008 recession meant that less funding was available to be applied for. Uncertainty as to what role business partners should play in the Forum led to a high turnover rate among this membership category. As a result, the funding model for the Forum was highly unstable, making it difficult to devise long term strategies for projects and other plans.¹¹

However, it was perhaps the inability of personal politics to be separated from the Forum's activities that made progress to overcoming structural deficiencies difficult. As Drue Pearce reflected, Alaska is small enough so that things get very personal, very quickly, and this held true for the NF.¹² Secretariat personnel, especially in the case of Priscilla Wohl, the former executive director of the Forum for about ten years leading up to Alaska's withdrawal, had previous relations with the executive office of the governor. In her case, she worked alongside Mead Treadwell, then Deputy Commissioner of Alaska's Department of Environmental Conservation, who would become the state's Lieutenant Governor under Sean Parnell.¹³ Differences between how Wohl saw she should steer the organization and Governor Hickel's vision, the secretary-general for life who still held considerable informal influence in Alaskan politics, created tensions between the NF and

the Governor's office. Poor relations were especially deepened once Governor Palin unexpectedly cut the subsidies to the Forum. Without good relations, it became difficult for the secretariat to work together with the Governor's office to set the agenda, solicit further funding and to gain access to the network of the Governor's office.

These four principle issues point to fundamental problems in the Forum's institutional design. However, while interviewees questioned the Forum's effectiveness, all except one believed in the importance of having a Northern Forum to facilitate relations between subnational governments. This suggests that there is still value in a NF.

2015: Alaska Declares Intention to Rejoin

Despite these grievances that led to Alaska's withdrawal, Governor Walker has expressed a renewed interest in the NF. This was spurred on by diverging perspectives between Juneau and Washington on Arctic policy, the creation of the Alaska Arctic Policy Commission (AAPC), current restructuring efforts of the NF, and personal motivations in the Governor's office.

Public opinion surveys conducted by the Gordon Foundation in Canada and the Institute of the North reveal that Alaskans see the world differently, and this has perhaps emphasized the need for subnational governments in the Arctic to organize under a collective organization to advocate on their behalf. Geographically so far removed from the lower 48, only 15% of Alaskans believe that the federal government best represents them (EKOS, 2015: 20). Alaskans are more likely to prioritize disaster response, improving education, healthcare and infrastructure, and preservation of traditional culture as opposed to the federal government's heavy emphasis on environmental protection and conservation as seen in its AC Chairmanship. The NF, in focusing on acting upon the voices of the locals, is directly in line with the sentiments of the majority of Alaskans.

The establishment of the AAPC in April 2012 led by the efforts of state senator Lesil McGuire paved the way for Alaska's re-entry. Created in anticipation of diverging viewpoints between Juneau and Washington as noted above in advance of the U.S. Chairmanship of the AC in 2015, the AAPC helped Alaska to assert its own Arctic priorities and including the perspectives of the local people. In the Implementation Plan for the AAPC released in January 2015, Recommendation 2H asked for consideration for Alaska to join the NF to expand the state's role in international relations. However, the extent to which this support for the NF will be serious is still yet to be seen, since 2H considers "potentially some additional travel funding" to be the only expense, emphasizing that "basic communications are fairly cost-neutral" (Alaska Arctic Policy Commission, 2015: 27). Alaska has since officially re-joined the Forum in July 2016, paying the 20,000 USD membership fee required. Further investment into the organization as seen before with greater investment from the Governor's office has not been committed.

Additionally, since the Sakha Republic has assumed the responsibilities of hosting the secretariat, there has been a significant move under the new and younger executive director, Mikhail Pogodaev, to correct for the previous mishaps of the NF. Efforts to restructure the organization have been underway since he assumed his position in November 2015, and Alaska has taken a significant role in identifying areas for reform. These changes include changing the fee structure and better defining the role of the NF. By working with Alaska, the NF poises to have greater success in retaining the state's membership.¹⁴

Since the capacity of the state to conduct international relations is indeed heavily based within the competences of the executive office, Governor Walker's personal interest has been influential in bringing Alaska back to the table. His appointment of Craig Fleener as his Arctic Policy Advisor can be seen as a rapprochement, as his internationalist outlook can be seen from the early days of him serving as the chair of Gwich'in Council International. Fleener's dedication in promoting a "unified voice on Arctic issues" is telling for how Alaska may engage with the NF.¹⁵

Broader Implications for Inter-Subnational Co-operation

The history of Alaskan involvement in the NF reveals that there is still a fundamental need to work with other Northern regions to advocate for its priorities on the Arctic agenda. Results from interviews suggest that the current structure of the NF in terms of its ambiguous priorities, poorly designed funding structure, and tense personal relations is more of a cause to blame for the NF's declining membership instead of a lack of a need of inter-subnational co-operation in the Arctic. This can be seen through the rise of other more "regionalized" organizations, such as the Barents Regional Council (BRC), and the Pacific Northwest Economic Region's (PNWER) Arctic Caucus. Both organizations represent a smaller geographic area and have a more clearly defined mandate. The NF could learn from its historical relations with Alaska and these other regional organizations in its restructuring efforts, such as bringing back the regional secretariats to create more specific goals and to collaborate with existing Washington-led efforts to reduce costs.

At the same time, the NF should capitalize on its niche policy space that it currently occupies. As seen in its history, finding common ground on projects for members across the circumpolar world is difficult. Focusing on localized projects as conducted through the regional secretariats or through existing organizations such as the BRC or PNWER should be instead the priority of subnational governments. However, the NF is unique from BRC or PNWER in that it has observer status on the AC, and can work to advocate for more integration of Northerner perspective when crafting federal Arctic strategies. Much like the AAPC is designed to lobby the US government to work with Alaskans on its policies, the NF could lobby the federal governments of the AC to actively include Northerners when designing international agreements.

The Arctic is changing rapidly, and a robust NF that could advocate for the needs of its circumpolar inhabitants is becoming increasingly important. While it would be prudent for the NF to correct its structural deficiencies as identified in this note when moving forward, it is also necessary for Alaska to assess the degree to which it is serious about its re-engagement. A quick examination of its previous relations with the Forum suggest that formalizing some of the state's commitment with the NF would benefit both the Forum and the state by stabilizing funding, building expertise in international relations, and improving relations among Northern residents. These would all contribute to better policy solutions by harmonizing existing activities and better addressing the needs of the Northerners, which facilitate an improvement of life in the North.

Notes

1. N. Novik, personal communication, February 21, 2016.
2. For more information about the history and the structure of the NF, please see Waliul Hasanat's 2012 and 2014 articles in *Polar Record* and *McGill International Journal of Sustainable Development Law and Policy* respectively.
3. N. Novik, personal communication, February 17, 2016.
4. B. Ellis, personal communication, February 18, 2016.
5. J. Doyle, personal communication, February 15, 2016.
6. M. Treadwell, personal communication, February 22, 2016.
7. D. Pearce, personal communication, February 4, 2016.
8. N. Novik, personal communication, February 17, 2016.
9. N. Novik, personal communication, February 17, 2016.
10. N. Novik, personal communication, February 17, 2016.
11. P. Wohl, personal communication, February 16, 2016.
12. D. Pearce, personal communication, February 4, 2016.
13. M. Treadwell, personal communication, February 22, 2016.
14. M. Pogodaev, personal communication, February 3, 2016.
15. C. Fleener, personal communication, February 15, 2016

References

- Alaska Arctic Policy Commission (AAPC). (2015). *Implementation Plan for Alaska's Arctic Policy*. Juneau: Alaska Arctic Policy Commission.
- Dubreuil, A. (2011). "The Arctic of the Regions." *International Journal*. 66(4): 923-938.
- EKOS Research Associates. (2015). *Rethinking the Top of the World: Arctic Public Opinion Survey*, Vol. 2. Toronto: The Gordon Foundation.
- Hertzberg, H. (2008). "Foreign Countries." *The New Yorker*.
- Northern Forum. (1991). *Articles of Incorporation*. Anchorage: NF Inc.
- Northern Forum Board of Directors. (1999). *Lapland Declaration of the Fourth General Assembly*. Rovaniemi: NF Inc.
- Pralle, S. (2003). "Venue Shopping, Political Strategy, and Policy Change: The Internationalization of Canadian Foreign Advocacy." *Journal of Public Policy*. 23(3): 233-260.
- Third Northern Regions Conference Staff. (1990). Proceedings from *Third Northern Regions Conference: Cooperation in a Changing World*. Anchorage: State of Alaska Office of International Trade.
- Tsui, E. & Deagle, K. (Eds.). (2015). Proceedings from *Regional Governments in International Affairs: Lessons from the Arctic*. Toronto: Munk School of Global Affairs.

Commentary

The Arctic Council Permanent Participants: A Giant Step Forward in Capacity & Support

Jim Gamble

One year ago, for the Arctic Yearbook 2015, I wrote a commentary entitled “The Arctic Council Permanent Participants: Capacity & Support – Past, Present, & Future.” In that piece I looked at the history of the Permanent Participants (PPs) and the discussion that has taken place since the founding of the Arctic Council (AC) in the Ottawa Declaration on how best to support the work of the PPs. That every Ministerial Declaration since Ottawa has mentioned PP capacity and support is testimony to the value that the PPs bring to the work of the AC and to the problem of how best to support these small organizations that are faced with an ever increasing workload as the AC grows in responsibility and importance.

One year ago I also wrote about a process that the PPs have initiated to address how to increase capacity and contribute to more of the work of the AC. This process, to establish a PP funding mechanism, has achieved considerable progress in both vision and technical detail, and the remainder of this piece will summarize what has transpired in the last year.

To date efforts to establish the fund have included a variety of activities. There has been the development of a body of literature both from the PPs themselves and from independent bodies, to better understand the needs of the PPs and the value they bring to the AC. This work has been ongoing throughout the history of the AC, and some of it was documented in my earlier commentary. More recently a business plan which identified mechanisms and a path forward for both the short and long term has been developed, and funding from the Arctic Funders Collaborative and other non-governmental funding sources has been secured to develop and

implement a marketing, fundraising, and fund governance development process. The development of the business plan has led to the establishment of the following elements for the fund:

- Sweden has been identified as the best domicile for the funding mechanism because of favorable trade and tax arrangements which will allow contributions to be received from funders and distributed to the PPs;
- The fund will be established as an endowment with a fundraising goal of 30,000,000 USD to insure that the PPs will receive annual distributions that are meaningful, consistent, and sustainable; and
- Bylaws, rules of procedure, and policies that will provide a necessary buffer between the funding and the AC, while at the same time ensuring transparency, accountability, and the use of established best practices for fund management.

The establishment of an endowment will allow funds to be distributed so that the principle remains untouched and endowment earnings can be distributed equally to the six PPs, less inflation proofing and administration. Administration of the Fund will follow best practice and insure legal acceptance, management, and distribution of funds while making sure that local and international laws are recognized and obeyed.

The goals and objectives of the PPs for their participation in the AC are varied, and include things like protecting the interests of their communities, facilitating the robust inclusion of Indigenous knowledge in the work of the AC, actively partnering in projects so that communities are involved in work that is intended to serve them, promoting cross-border cooperation among Indigenous Peoples, and supporting local initiatives so that they can receive attention within the AC.

Accomplishing these goals means traveling to meetings and being physically present in the AC, and also doing outreach about AC work to their constituencies, but more and more it also requires access to specialized expertise in a variety of areas as well as administrative and operational support. In order to make PP contributions reflect the needs of the communities, the PPs must be able to attract local experts and coordinate between Indigenous organizations within their regions, and also with the other PPs. In addition, the long term viability of PP organizations requires that they be able to attract the next generation of Indigenous leaders. In working toward these objectives, the PPs bring a very high level of value to the AC, improving the outputs and deliverables, and making the AC unique among intergovernmental fora. Now more than ever, with ever increasing attention turning towards the Arctic and the work of the AC growing, the PPs need a sustainable, predictable, and consistent funding mechanism to support their work.

In the Saami language *Álgu* means “beginning”, and so with the recently named *Álgu* Fund the Permanent Participants hope to foster a new beginning in which they can more fully benefit from and contribute to the work of the Arctic Council.

With the planned inauguration of the fund in the fall of 2016, what better opportunity than the 20th anniversary of the Arctic Council to take a giant step towards overcoming the hurdle of support and capacity for the Permanent Participants so that the next twenty years are marked by an even more robust collaboration with the Indigenous Peoples of the Arctic.

Commentary

The Arctic Council: A Tool for Regional Development & Policy-Shaping

Vladimir Vasiliev

The establishment of the Arctic Council in 1996 allowed not only the 8 Arctic countries but also many countries situated southward, as well as international organizations, to combine efforts in the coordination of international and external economic relations in the Arctic region, which is of exceptional significance in shaping the global climate and has huge reserves of natural resources, primarily hydrocarbons.

Over the course of twenty years, the Arctic Council has provided a quite clear platform for discussing the issues related to the countries' interests. New areas of testing cooperation, approaches and methods of joint work has appeared, and working groups on specific themes, interesting to all stakeholders, have been formed.

At the same time, the Arctic Council still doesn't have a clear-cut answer to the possibility of engaging sub-regional partners to their full potential; all its activity has been aimed at the development and enhancement of inter-state cooperation. This article discusses the importance of involving sub-regional governments in global international cooperation in the Arctic.

Establishing the Arctic Council

The 1990s were marked by a rapid development of international cooperation across the globe, but it was the Arctic region where the burst of a movement to each other was witnessed the most. Within a short amount of time there appeared a whole range of international organizations with different priorities and aims, and it was obvious that the establishment of an inter-state agency, coordinating the activities of all countries interested in dealing with the issues of development and use of the Arctic resources, was on the horizon. Generally, that was what happened.

Vladimir Vasiliev is Minister at the Ministry on Federative and External Relations, Sakha Republic (Yakutia), Russian Federation.

In 1996, the eight countries with territory in the Arctic Circle announced the establishment of the Arctic Council, being a forum for discussing all issues requiring cooperative decision making, in order to avoid a chaotic and spontaneous approach, primarily with regards to the use of the Arctic's rich natural resources. The Agreement on Protection of the Arctic Environment in Rovaniemi (Finland) in 1991 laid the foundation for the Arctic countries' unity.

From the very beginning the Arctic Council set up states' meaningful joint work on solving global issues; at present, the working groups are implementing a significant number of projects; and the Arctic Economic Council has been established. All decisions made by the Arctic Council have direct relevance to the life of all people living beyond the Arctic Circle. Yet, the heads of the sub-national governments barely have access to the work of the Arctic Council, which results in a certain gap in the decision-making system, taking into account all trends in the global Arctic. Some regional leaders are joined within the framework of the Northern Forum (NF), that has an Observer status at the Arctic Council; they have an opportunity for indirect participation in the work of the inter-state agency in the Arctic, without a right to a direct involvement in the decision-making process, which is a major deficiency, taking into account that all of the Arctic Council's projects are implemented in the territories governed by regional administrations.

We must give credit where it is due to the far-sightedness of some regional leaders who foresaw a significant thaw in relations between the USA and USSR, and prepared a foundation for a quick interaction of the regions in the new conditions. Almost straight after the collapse of the Soviet Union, in 1991, 11 regions of Russia, USA, Canada, Japan, China, Mongolia and Finland established the NF under the initiative of the Governor of Alaska (USA) Walter Hickel. The International Arctic Science Committee appeared a year earlier. Later on, other international organizations were appearing in sequence, the most significant of them being the Barents Euro-Arctic Council, the University of the Arctic, and the Conference of Parliamentarians of the Arctic Region.

The NF obtained an Observer status at the Arctic Council right from the very start and took active part in its events (Ministerial Meetings, Senior Arctic Officials Meetings (SAOs), working group meetings) and some projects. Interestingly, the Barents Euro-Arctic Council has not formalized its presence in the Arctic Council. Probably, the Council decided to focus on cooperation within North Europe, participating in the activity of the Arctic Council within national delegations.

Therefore, the question is raised: is active participation of regional governments and administrations in the work of the Arctic Council possible, and if so, what are the available forms and mechanisms for that, and which ones can be developed?

Regional Governments in Arctic Politics

Basically, the NF can ensure the presence of regional leaders at the meetings of the Senior Arctic Officials, but the current Observer participants quota doesn't allow all members of the NF to be simultaneously involved in these events. At that, even when present at the meetings, regional leaders cannot give their point of view or make a proposal, as long as the Arctic Council's bylaws do not provide for the Observers' right to speak at the forum's meetings. The same was true for the Working Groups' meetings, but since 2014, under the proposal of the NF, brief comments from Observers have been allowed at the Sustainable Development Working Group meetings.

At the same time, in 2013, while holding its extended session in Yakutsk (Sakha Republic, Russia), the Working Group on Conservation of Arctic Flora and Fauna (CAFF) agreed to not only include in the agenda the presentations of the hosting region's local experts, but also to arrange extra meetings with young specialists and speak on local television, which allowed the Sakha Republic (Yakutia) to be fully and actively involved in the meeting and make efficient proposals. I am confident that such an event was beneficial to all stakeholders. Should this practice continue, the involvement of regional potential in the activity of the Arctic Council's working groups would become tangible.

Generally, the participation of regional experts in the Arctic Council's project activity is not restricted. Provided they can speak English and have relevant qualifications, the experts can be included in different project groups through national delegations, Permanent Participants or international Observer organizations. This is quite a constructive means of cooperation with the Arctic Council, securing the involvement of the regions with a sound scientific and technical potential, but almost inaccessible for the Arctic regions where the number of such experts is limited.

Whereas the regions can participate at the expert level by some means, the participation of leaders and regional governments in the decision-making process in the global Arctic cooperation remains doubtful. Obviously, the participants of the NF can make certain joint decisions, taken into account at elaborating the plans and programs of the regions' socio-economic development. The regions are actively involved in the development of the Arctic territories in the law-making environment of their countries, and their opinion can be taken into account at developing the countries' positions when constructing the dialogue within the Arctic Council. At the same time, it would be much more useful and effective to ensure direct participation of regional leaders in the work of the Arctic Council.

Together with the indigenous peoples of the North, the Arctic Council qualifies settlers, hunters and reindeer herders, rural populations and citizens as the Arctic population. Thus, many Arctic governors sometimes wonder why Arctic indigenous organizations have a Permanent Participant status at the Arctic Council, whereas regional governments/administrations do not have those, although the leaders and governments/administrations are the ones who are more responsible for the development of the Arctic territories, and, therefore, it seems logic enough for their voice to be always present at the Arctic Council.

In my opinion, the best form of regional involvement in the decision-making processes within the Arctic Council is the involvement through an international organization joining most of the world's Arctic regions.

The NF is the only interregional organization of the Arctic and the North aimed at such unification; the organization has survived through a period of decline and is now on rise, gradually increasing the number of its members. Four Russian regions joined the NF in 2015: Krasnoyarsk Krai, Primorsky Krai, Magadan Oblast and Nenets Autonomous Okrug. Two key regions – Alaska (USA) and Lapland (Finland) have returned to the NF in 2016. In the foreseeable future there is certain confidence in the inclusion of Scandinavian and a number of Russian regions. There is certain difficulty with Canadian territories' making a decision on joining the NF, but the organization's strengthening both in terms of its quantity and quality may tilt in favor of the NF.

Although Canadian regions have begun to form their Northern regional council, without other regions of the Circumpolar Arctic it may not claim to voice their interests.

Thus, the NF may become a true partner of the Arctic Council, being a regional wing of the Arctic's major inter-state agency. Most probably, for the NF, there is no point in seeking a Permanent Participant status at the Arctic Council. It would make the most sense to give it a partner status based on either an agreement between the Arctic Council and the NF or introduction of a new concept of "partner" in the Arctic Council's structure, and giving this status to the NF on the basis of the Ministerial Meeting's resolution. Certainly, this issue requires discussion and is given in this article as an idea.

In any case, considering the issue of enlarging the quota for the NF's participants in the SAO and Ministerial Meetings will allow the regions to gradually enhance their input in the Arctic Council's activity, bring its decisions to a wider range of the population, and effectively use all available resources. Organizing the meetings of the NF Governors within the Arctic Council events, where their recommendations will be presented to the inter-state forum, can become one of the compelling forms of cooperation.

The introduction of regional input to the Arctic Council or signing of an agreement between the interstate and interregional organizations will allow us to streamline the structure and hierarchy in Arctic cooperation and take into account the interests of all stakeholders.

Commentary

The Role of Regions & Cities in Arctic Cooperation

Esko Lotvonen

Interest in Arctic issues, development activities and climate change has been growing in the past few years. This has been easy to notice also at the regional and local level in different agendas. The work of the Arctic Council has been active between Arctic countries, having also a strong emphasis on indigenous people's affairs.

You might ask the question why the role of regions and cities has been so weak, even though operational implementation of programs and strategies always is made on these levels in practice. Regions and cities have a lot to offer for Arctic cooperation. I have my own experiences from working in the State Office of Lapland, Regional Council of Lapland and City of Rovaniemi in Finland.

The city of Rovaniemi is crossed by the Arctic Circle, so that most of its surface area is above it. Today it is a dynamic, growing city by population and business. The number of inhabitants is about 62,000. Rovaniemi is the fifth largest Arctic city. The science and applied science universities of Lapland are major educational institutes with almost 10,000 students. The city is also home to units of the main national research institutes of natural resources. These form a strong base for research and development activities in many issues related to know-how of Arctic conditions. So it is not only the location on the Arctic Circle that gives it the status of Finland's Arctic Capital City.

Rovaniemi is most probably best known globally from the trademark of the Official Hometown of Santa Claus. Nowadays Rovaniemi is often highly ranked as one of the top winter tourism destinations worldwide. We have been steadily growing to become an attractive international tourism destination with large scale of services throughout the year. Most of the tourist overnights come from abroad (57%).

During the last quarter of the century, the agenda of the city has been strongly focused on Arctic development and the ongoing work to enhance it. The city of Rovaniemi feels an obligation to be an active partner in Arctic development. Today's existing Arctic cooperation under the Arctic Council started in Rovaniemi in 1991 with the signing of the Arctic Environment Protection Strategy.

The commencement of the cooperation - the Rovaniemi Process - led to the establishment of Arctic Council in 1996 in Ottawa. To continue the tradition, we arrange every second year an Arctic conference in the *Spirit of Rovaniemi Process*. The next one will take place in November 2017, when Finland will be chairing the Arctic Council and celebrating 100 years of independence.

The Arctic Center research institute was opened in Rovaniemi in 1992. It plays a major role in Arctic through a global network of researchers. There have been projects to develop the Arctic Center as one of the leading hubs of the European Union's (EU) Arctic information centers. Different faculties of the University of Lapland are also working strongly in the field of Arctic know-how. The University also hosts the Secretariat of the University of the Arctic (UArctic) which covers a wide network of educational and research units worldwide.

Through its location, Rovaniemi is a good natural laboratory for the development of cold climate know-how and products. Mainly for tourism purposes, winter ice and snow hotel/bar constructions are attractive and practical service solutions for visitors.

In Rovaniemi, we also have four sites serving different types of commercial products testing. The majority of clients are car manufacturers or tire, snow scooter and all-terrain vehicle producers.

With the cleanest and freshest air quality, the area offers good and aromatic wild natural products such as berries, herbs, mushrooms, fish and reindeer meat. Arctic business is a growing and, with the goal of supporting this development, the Lapland Chamber of Commerce arranges the annual Arctic Business Forum in Rovaniemi.

The other official trademark of Rovaniemi is Arctic Design Capital. Since 2009 the city of Rovaniemi and University of Lapland have organized an annual Arctic Design Week. The week has grown to an important international event with participants from 32 countries. Arctic Design is a natural step for Rovaniemi due to the presence of the faculty of Art and Design in the university. It is not just about industrial design but also service design and city planning. Arctic Design is a new and exciting concept that can play an important international role in the future among Arctic cities.

Rovaniemi is a member of the World Winter Cities Association of Mayors (WWCAM) and through this network shares experiences between winter cities in order to create better living conditions for residents. In WWCAM, Rovaniemi is leading the sub-committee of Arctic Design. Winter cities have made reports lately how they have been taking into account the goals to reduce emissions and energy consumption. Also there are processes going on to enhance the circular economy and resilience of the cities.

Finland will chair the Arctic Council in less than two years' time starting from spring 2017. During that period there will be many important meetings in Rovaniemi and other municipalities of Lapland. Following the example of Alaska we have established the Lapland Arctic Council Host Committee to promote and inform about different kinds of competencies and services available in

our region and city. Hopefully these activities around different meetings will also be a stimulus for practical cooperation between cities.

The Arctic Council has many important Observer states both from Europe and Asia. The City of Rovaniemi and Regional Council of Lapland have good operative cooperation with sister organizations in some of these countries. These structures could be used partly in issues important for the Arctic Council. The role of the EU is important for Arctic cooperation and it should be strengthened. In Northern Europe we have had good practices for cooperation between regions and cities during the past 20 years. Mostly this has been implemented within the structures of the EU's Interreg- and Tacis- programs. Numerous projects have corresponded nicely with priorities of the Arctic Council. Strong emphasis has been put on environmentally and socially sustainable projects. One good example is the international North Calotte Academy which has been running for 25 years as a tradition to gather together students, researches and decision makers to discuss common interests in the European North.

Arctic regions are vulnerable, vast and rich in natural resources. Climate change will have many impacts on nature, culture, business and logistics. It is in the utmost interest for regions and cities on how all of this will be realized in their territory. In Lapland, for decades we have planned multiple, sustainable uses of land between different interests of business. In our case, the challenge has been to fit together interests of nature preservation, Sami culture, tourism, forestry, reindeer husbandry, agriculture, mining and logistics. In this planning we have lots of competence to share with other regions.

The northernmost area of Lapland forms also the home area for Sami people and culture. This area is inhabited by about 4000 indigenous peoples. Indigenous issues are governed by the Finnish Sami Parliament and the municipalities in question. We do have of course Sami people also outside of this area. For example in Rovaniemi we have about 500 of them and the city provides services in Sami language.

I have described possibilities to enhance Arctic cooperation on regional and local levels from the point of view of the Lapland region and city of Rovaniemi. I know that other Arctic regions and cities have similar kinds of competencies that could be shared through Arctic cooperation.

Cities have developed great products, functional solutions and sustainable processes in relation to different business sectors, public and private services, energy production and consumption. All this know-how should be better shared among Arctic societies.

Why has this competence and know-how on Arctic issues of regions and cities not been used more seriously? There are no suitable structures in the Arctic Council where this need could be realized. Also national delegations or working groups have not included enough sub-national actors.

Somehow we should change this situation.

It might also be useful to consider the establishment of a working group of Arctic Cities to the structures of the Arctic Council. This would bind together national level common strategies with regional and local operative programs and actions.

Let's keep in touch!

Commentary

Overlooking a Regional Cruc of Vulnerability: Missing Women in the Arctic

Rachel Kohut & Tahnee Prior

Changes to the Arctic's physical environment—driven by climate change, technological innovation, demographic shifts, and the increased presence of extractive industries—are significantly impacting the region's social environment. In conjunction, as extractive industries and their associated challenges permeate remote and rural communities in the circumpolar North, the role of women in community adaptation and in shaping change is weakened. Across the Arctic, pressure points arise at a faster rate than regional policies are drafted, and women living in this region often fall between the cracks of a stretched and weakened social safety net. It is this cruc of vulnerability in which women get caught.

The Arctic Council recognized the importance of women in developing Arctic communities in its Inari Declaration (2002: 2) by encouraging “the integration of gender equality and women...perspectives in all efforts to enhance human living conditions in the Arctic.” A conference that same year, titled “Taking Wing: Gender Equality and Women in the Arctic” (2002), included a focus on economic policy, health, women's rights, violence against women and the trafficking of women. Twelve years later, in her statement at the conference “Gender Equality in the Arctic: Current Realities, Future Challenges,” (2014: 80) former Finnish president Tarja Halonen further highlighted that climate change can hinder the productivity and use of land, which can adversely impact women's land ownership, inheritance, control and management over natural resources. Conversations relating to “climate change, gender equality, ownership and control rights, and environmental protection” she argued, “must be closely interlinked” (Gender Equality in the Arctic, 2014: 80).

Yet integrating a gender dimension into domestic and foreign policy on climate change can be contentious. When Canada's Minister of Environment and Climate Change Catherine McKenna drew attention to the gendered dimension of climate change at a 2016 G7 meeting of environment

Rachel Kohut is a B.C.L./LL.B. Candidate at McGill University. Previously, she completed her Master of Public Health at Memorial University of Newfoundland. Tahnee Prior is a 2015 Trudeau Scholar, Vanier Canada Graduate Scholar, and PhD Candidate at the Balsillie School of International Affairs, University of Waterloo. Together, they jumpstarted [Plan A](#), a digital platform that seeks to weave together stories to better inform gender-oriented policy-making across the Arctic.

ministers, she witnessed a backlash (Vanderklippe, 2016). The Minister's comments flagged women's social and economic vulnerability in both natural resource discussions and climate disasters, and yielded a "swift, and angry" response (Vanderklippe, 2016). In turn, McKenna's comments noted that the support of women's rights by the Canadian government must be part and parcel of its federal policies, highlighting that the (gendered) dimension is often lost in climate talks (Vanderklippe, 2016).

Pulling out of the Canadian context, a 2013 Arctic Centre report commissioned by the Finnish Ministry for Foreign Affairs sought to understand how international processes and standards, such as Free, Prior and Informed Consent (FPIC), interact with self-determination and the rights of indigenous women in the context of climate change. In line with Halonen and McKenna's statement, the report found that indigenous women globally, including the Arctic, continue to face systemic violations at the intersection of gender, indigeneity, and climate change (Prior et al., 2013).

As an example of how these dimensions intersect, and the delayed government response, we need not look further than the recent *Family Homes on Reserves and Matrimonial Interests or Rights Act* (2013) in Canada. Until 2013, matrimonial real property (MRP) for Canadian Aboriginal women living on-reserve fell into what *Aboriginal Affairs and Northern Development Canada* heralded as a "long-standing and unacceptable legislative gap" (2015), as neither the *Indian Act*, nor provincial or territorial law, provided redress.¹ This new legislation is an example of how law can be used by Canadian Aboriginal women to uphold their property rights, which ripples into their ability to participate in natural resource development and climate change discussions.²

Yet, when looking at the intersection of gender, climate change and extractive industries, we should not only approach the geography of the Arctic as fixed. And few subjects so strikingly pull into light this transcendence of borders as does the flux of women moving across Arctic borders for the purpose of sex, particularly to remote resource extraction sites. It may not always grab the attention of the *United Nations Office on Drug and Crime* or other leading agencies and authorities, but it should. Research by Victoria Sweet (2014: 1) highlights how an increasing interest in resource extraction, as a result of climate change, and its associated demographic shifts might heighten the risk of trafficking in the region.³ To mitigate such risks, she argues that, communities must "remember the historical stories, officials need to understand the risk factors that come with extractive developments in rural areas, and preparations must be made for the next wave of outsiders entering the region" to protect indigenous and non-indigenous women (Sweet, 2014: 10).

This begs the question probed in many other spheres: could these issues be resolved if women were more involved in Arctic policy-shaping and decision-making? Studies focusing on Canada show that women only comprise 16 per cent of northern management boards in its three northern territories (Natcher, 2013: 219). With such a small percentage, women are often subjected to marginalization, and rendered invisible in decision-making processes (Natcher, 2013: 218; Westerman et al., 2005). In Alaska, some view the impact of low oil prices on its economy as an opportunity to tackle the gender wage gap, which is significantly higher relative to the rest of the US (Alaska Economic Trends, 2016: 3). Employment is declining in traditionally male-dominated fields, like the extractive industries, while labour market data shows a growth in female-dominated industries, including healthcare and tourism (Alaska Economic Trends, 2016: 3). As recommended by the Alaska Department of Labor and Workforce Development, a focus on expanding training

opportunities and increasing wages for these industries will make the state a better place for women to work and live, all while injecting more money into the local economy.⁴

But is it possible to tie all of this together? Nina Larsson and her work is a great example of the interplay between local narratives, domestic law-making and international standards, and how although domestic efforts have started to scratch the surface of such issues and intersections, much is left to be done on a regional scale to foster transnational responses. In November 2014, she spearheaded the first ever Indigenous Circumpolar Women's gathering in Yellowknife, where over 80 Indigenous women shared their knowledge and approaches to programs and/or ongoing projects in different corners of the Arctic. In a report on the subject titled "Mind the Gender Gap", Larsson (2015) further examined how Arctic states approach the inclusion of indigenous women in decision-making roles. Larsson (2015: 35) concluded that "Scandinavia's approach to gender equality translate[s] into the appreciation of different management styles and a gender diverse workforce," something the Northwest Territories could learn from.

Even though some Arctic states are often heralded as utopia for gender equality, *all Arctic states*, and policy arenas like the Arctic Council, must ensure that gender is included across Arctic policy and law (Conway, 2016). But where to begin with already marginalized issues in a remote area? How can we connect the Nina Larsson's, who strive to connect local narratives with transnational research and policy to ignite domestic change?

Join us in helping connect these narratives, won't you, so we can ensure that the next 20 years of Arctic cooperation and policy-making take into better account half of the Arctic's population?

Notes

1. Cornet and Lendor provide more historical contextualization of this issue. See Cornet, W. and Lendor, A. (2002). *Matrimonial Real Property on Reserve* (Discussion Paper). Ottawa: Indian and Northern Affairs Canada.
2. See the *Centre for Excellence for Matrimonial Real Property* which seeks to provide information on the protections and rights available to individuals and families living on reserves, on provisional federal rules, once in force, and an understanding of alternative dispute resolution mechanisms. Access at: <http://www.coemrp.ca/resources/>. See also the toolkit drafted by the Native Women's Association of Canada: <http://www.nwac.ca/wp-content/uploads/2015/05/2014-Matrimonial-Real-Property-Toolkit-Version-1.3.pdf>.
3. The trafficking of women across Arctic borders has surfaced in academic research and policy reports alike. Yttergren examines how Sweden's gender equality objectives are confronted with the trafficking of women, including Russian women, to Sweden. See: Yttergren, Åsa. (2012). *Swedish Gender Equality for Trafficked Women? : Radical Official Remedies and Ethnic Otherness*. Umeå universitet, Juridiskt forum. Victoria Sweet points to the potential risks associated with the trafficking of indigenous women in the circumpolar United States and Canada. See: Sweet, V. (2015). *Rising Waters, Rising Threats: The Human Trafficking of Indigenous Women in the Circumpolar Region of the United States and Canada*. *Yearbook of Polar Law*, 6, 162-188. *Pauktuutit: Inuit Women of Canada*, an organization representing Inuit women across Canada, has made the trafficking

of Inuit women in the Canadian North, and in urban centers like Ottawa (through which over 40 Inuit women were trafficked in 2012 alone) a priority. See: <http://pauktuutit.ca/abuse-prevention/inuit-and-human-trafficking/>.

4. As of May 2016, the wage gap in Alaska was 67 cents on the dollar for women compared to men, representing a \$1 billion missed opportunity for the state. See Gender and Nontraditional Work. (May 2016). *Alaska Economic Trends*, 35, 5. Juneau: Department of Labour and Workforce Development, 3.
5. Together, Rachel Kohut and Tahnee Prior jumpstarted **Plan A** (www.genderisnotplanb.com), a conversation turned digital platform that seeks to weave together stories to better inform gender-oriented policy-making across the Arctic. Today, Tahnee leads the project. Both are members of the Tromsø-Umeå-Arkhangelsk-Rovaniemi-Kingston (TUARK) Network on Gender in the Arctic.

References

- Arctic Council. Arctic Council Ministerial Meeting. (2002). *Inari declaration on the occasion of the Third Ministerial Meeting of the Arctic Council*. Ottawa: Foreign Affairs and International Trade Canada, Aboriginal and Circumpolar Affairs Division.
- Conway, Rebecca. (2016). Gender Equality is Plan A. *Reykjavik Grapevine*. Retrieved from: www.grapevine.is.
- Cornet, W. and Lendor, A. (2002). Matrimonial Real Property on Reserve (Discussion Paper). Ottawa: Indian and Northern Affairs Canada.
- Family Homes on Reserves and Matrimonial Interests or Rights Act (S.C., 2013, c. 20).
- Gender and Nontraditional Work. (May 2016). Juneau: Department of Labour and Workforce Development *Alaska Economic Trends* 35(5): 1-19.
- Iceland, Ministry for Foreign Affairs. (2015). Gender Equality in the Arctic: Current realities future challenges (2014 Conference Report), Akureyri, Iceland.
- Indian Act (R.S.C., 1985, c. I-5).
- Larsson, Nina. (May 2015). Mind the Gender Gap. Toronto: The Gordon Foundation, 1-35.
- Matrimonial Real Property on Reserves. (2015). Ottawa: Indigenous and Northern Affairs Canada. Retrieved from: www.aadnc-aandc.gc.ca.
- Ministry of Social Affairs and Health, Finland. (2002). Taking Wing: Conference on Gender Equality and Women in the Arctic (August 2002 Conference Report). Inari, Finland.
- Natcher, D. C. (2013). Gender and resource co-management in northern Canada. *Arctic*. 66(2): 218-221.
- Prior, Tahnee Lisa, Sébastien Duyck, Leena Heinämäki, Timo Koivurova and Adam Stepien. (2013) Addressing Climate Vulnerability: Promoting the Participatory Rights of Indigenous Peoples and Women through Finnish Foreign Policy. Rovaniemi, Finland: University of Lapland Press.
- Sweet, Victoria (2015). Rising Waters, Rising Threats: the Human Trafficking of Indigenous Women in the Circumpolar Region of the United States and Canada. *Yearbook of Polar Law*, 6: 162-188.

- Vanderklippe, Nathan. (2016). Minister 'surprised' at backlash over tweets stating climate change hurts women most. *The Globe and Mail*. Retrieved from www.theglobeandmail.com.
- Westermann, O., Ashby, J., and Pretty, J. (2005). Gender and social capital: The importance of gender differences for the maturity and effectiveness of natural resource management groups. *World Development*. 33(11): 1783 – 1799.
- Yttergren, Åsa. (2012). Swedish Gender Equality for Trafficked Women? : Radical Official Remedies and Ethnic Otherness. Umeå universitet, Juridiskt forum.

Commentary

Tour of Canadian North Highlights Richness, Diversity & Challenges

Bruce A. Heyman

When Prime Minister Trudeau and President Obama met at the White House on March 10 and in Ottawa on June 29, they emphasized our two countries' shared commitment to leadership in the Arctic. An important aspect of my role as U.S. Ambassador is to understand the realities and aspirations of people across Canada. I was honored to accept the invitation of Global Affairs Canada to take part in the department's 2016 Northern Tour. For nine days, across 12,000 kilometers, our group of 20 ambassadors gained a deeper understanding of this region, an experience that will in turn help us shape our governments' approaches to Arctic cooperation. For me, it was indeed the opportunity of a lifetime and a highlight of my time in Canada!

The theme of the 2015-2017 U.S. Chairmanship of the Arctic Council is "One Arctic: Shared Opportunities, Challenges, and Responsibilities." The Northern Tour broadened our knowledge of the social, economic, and governance issues that confront the people of the North: infrastructure, economy, climate change, education, social factors, and more. Community leaders spoke candidly about their greatest concerns. They told us that the suicide rate among Arctic communities is 110 per 100,000, almost eight times the national average. High school dropout rates top 84 percent in some communities. As the outside world encroaches, social structures are feeling the strain. In Kuujuaq, Quebec, community leaders said just two generations ago, people traveled by dogsled and kayak, but now "kids are on snowmobiles and electronic devices." In essence, Inuit find themselves between two worlds.

We saw and heard clear evidence that the Arctic is on the front line of climate change. On Baffin Island, Inuit leaders shared first-hand local knowledge supporting scientific reports that populations of caribou, a staple of the local diet, have plummeted. Researchers cite multiple factors leading to the decline, such as rising temperatures that affect foraging and availability of food. Some

communities, like Inuvik, report that temperatures have increased two degrees Celsius in the past 50 years, leading to flooding and the resultant displacement of families in coastal communities. The widespread and constant use of polluting diesel power generators highlighted the importance of Arctic Council partners' commitment to finding energy innovations that will meet residents' needs and protect health and ecosystems.

Despite the challenges, community members expressed hope for the future and a spirit of resilience. In Cambridge Bay, we learned that the local government provides a small business assistance program, helping with resume writing and interviewing skills. In Inuvik, residents transformed a defunct hockey rink into a community greenhouse where the community can grow vegetables. In Rankin Inlet, local business loans made three Tim Hortons franchises possible. As Yukon College in Whitehorse pursues its goal to become a university – the first in any Canadian territory – it will be a welcome partner in the circle of universities that offer access and insights to indigenous communities in North America.

President Obama and Prime Minister Trudeau said in their March 10, 2016, [joint statement](#) that “Canada and the U.S. will continue to respect and promote the rights of Indigenous peoples in all climate change decision making . . . We commit to defining new approaches and exchanging best practices to strengthen the resilience of Arctic communities and continuing to support the well-being of Arctic residents, in particular respecting the rights and territory of Indigenous peoples.” The statement adds: “With partners, we will develop and share a plan and timeline for deploying innovative renewable energy and efficiency alternatives to diesel and advance community climate change adaptation . . . We also commit to greater action to address the serious challenges of mental wellness, education, Indigenous language, and skill development, particularly among Indigenous youth.”

My travel in the North underscored the contribution the Arctic Council can make to bring together nations and peoples in a spirit of common purpose. We are working toward goals that will have real and positive impacts on life in the North and will support healthy, prosperous, and sustainable Arctic communities. The Arctic is full of promise and hope, and as an Arctic nation, the United States will continue to work with our neighbors and partners to support those aspirations.

Section V:

**Arctic Geopolitics &
Security**

Russian Air Patrols in the Arctic: Are Long-Range Bomber Patrols a Challenge to Canadian Security and Sovereignty?

Frédéric Lasserre & Pierre-Louis Têtu

Western, and especially Canadian media reported, especially during the period 2007-2011, a significant number of Russian air patrols in the Arctic. These patrols were often described as potential threats for the Canadian security and sovereignty. However, a comparative analysis of the frequency of Russian air patrols in the Arctic and in other areas of operation attest to the rather low level of activity of the Russian air force. This suggests the narrative about the would-be Russian air threat reflects either misinformation or an oriented political discourse.

The Canadian media reported, especially during the period 2007-2011, a large number of Russian air patrols in the Arctic. The narrative of these reports, as well as of the Canadian government at the time, depicted these patrols as threats to Canadian security and to Canadian sovereignty in the Arctic. How did the level of activity of Russian bombers in the Canadian Arctic compare with other regions, and to what extent did these patrols represent a threat to Canadian sovereignty?

In 2007, Russia resumed bomber patrols in the Arctic after several years of absence following the dissolution of the Soviet Union in 1991. This resumption came around the same time as the flag episode in 2007, when a Russian submarine planted a Russian flag right at the North Pole on the sea floor, thus triggering a storm of outraged comments from Canadian officials. The Russian government readily admitted to the apparent sharp increase in its air patrol activity, explaining that its air force needed training just like any other country. These patrols, it argued, are routine exercises that maintain the readiness of its air force in the area.

Indeed, the resumption of Russian bomber patrols in the Arctic was paralleled by an increase of activity in other areas, notably in the North Atlantic, the Western Pacific, the Black Sea and the Baltic. Activity increased again in 2014, with the advent of the Ukrainian conflict. Yet there remained a certain degree of uncertainty as to what this Russian aggressiveness or assertiveness meant. British Foreign Secretary Philip Hammond said in December 2014 that he was concerned with “the extremely aggressive” probing of Britain’s airspace by Russian military aircraft, after a series of interceptions off the Scottish coast. Hammond had previously said that the sharp increase

in such activity in recent years was because of a Kremlin military overhaul that “had been overlooked by many” (Euronews, 2015).

However, analysis of the Canadian government’s discourse demonstrates that the rhetoric of a threat to Canadian security and sovereignty may not have been justified. The analysis of Russian air patrol patterns close to the Canadian Arctic hints at a low air activity in the Arctic, in contrast to other regions where the Russian air force activity is much more sustained.

Are these Russian air patrols in the Arctic a real threat to Canadian security and sovereignty in the region? Or is it a media fantasy, one which hastily conflated rhetoric triggered by the Russian flag episode with a resumption of Russian military activity, so as to forge an image of a threatening and posturing Russia? In other words, was the discourse about the threat from Russian bomber patrols warranted by the actual levels of air activity, and was this activity comparable or higher than in other regions? An analysis of Russian patrol patterns and comparisons of Russian air patrol activity levels serve as the basis for this analysis.

Russian Air Patrols in the Arctic

In August of 2007, Russia resumed long-range bomber patrols over the Arctic, and on July 14, 2008, the country announced that it would resume surface patrols of Arctic waters with Northern Fleet units (Huebert, 2009; Blank, 2011; Sergunin & Konyshev, 2015). Both of these patrolling activities had been suspended following the conclusion of the Cold War. The bomber patrols were deemed controversial by some Western experts, after patrols approached Canada, Alaska, and the United Kingdom (UK) as well as Norway’s central command at Bodø (Kefferpütz, 2010). Most of these patrols were intercepted, but they often made headlines in Canada and the UK (for instance CNN, 2008; National Post, 2009, Scotsman, 2010; see Lasserre et al., 2013; Landriault, 2013).

Foreign governments, analysts and the media, have, ever since the planting of a Russian flag at the bottom of the Arctic Ocean at the North Pole in 2007, often described Russian maneuvers, discourse, and defense programs as jingoistic, if not as bluntly belligerent (Lasserre et al., 2013). In the frame of this reportedly tension-ridden Arctic region, Russia published a new Arctic Strategy (2008).¹ Several analysts were prompt to underline reportedly bellicose assertions found within this document. James Kraska reported that “in a language reminiscent of the hand-wringing over bipolar measurements concerning the U.S.-Soviet ‘coalition of forces’ in the 1970s, Moscow’s new strategy states that Arctic resources will become the ‘critical point for the world military balance’” (Kraska 2009: 1117). Kimberly Gordy established a link between the Russian planting of a flag at the North Pole in 2007, the sending of bomber patrols towards the Canadian Arctic (“over the Canadian Arctic”, 565, (sic)), and the publication of the Russian Arctic Policy, as proof of Russia’s aggressive posturing and “disregard for Canadian security and environmental interests” (Gordy 2010: 564). In February 2015, Admiral Bill Gortney, Commander of U.S. Northern Command (USNORTHCOM), and North American Aerospace Defense Command (NORAD), said Russian military aircraft have been spotted more frequently, close to U.S. and Canadian territory in the Arctic. “They’ve been very aggressive”, he said, “aggressive in the amount of flights, not aggressive in how they fly” without giving figures (USNI News, 2015) (see Fig. 1, 2).

In this vein, interceptions of Russian long-range bomber patrols in the Arctic have fueled comments from academics (Tayloe, 2015; Lackenbauer & Lajeunesse, 2016) and Canadian officials from 2008 onwards, especially up to 2010 (Genest & Lasserre, 2015). Prime Minister Harper

specified in 2008: “We’re concerned about Russia’s testing of Canadian airspace and other indications, and certainly Russian actions in other parts of the world, which may indicate some desire to work outside of the international framework. And that’s obviously why we’re taking a range of measures including military measures to strengthen our sovereignty in the North” (Akin, 2008). Then, in 2009, Harper remarked that “I have expressed [...] the deep concern our government has with increasingly aggressive Russian actions around the globe and Russian intrusions into our airspace.” (CBC News, 2009).

Figure 1: An F-15 Eagle fighter intercepting a Tu-95 bomber near Alaska.



Photo courtesy of NORAD Public Affairs:

www.norad.mil/Newsroom/tabid/3170/Article/578117/norad-intercepts-russian-aircraft.aspx

Figure 2: A CF-18 Hornet fighter intercepting a Tu-95 bomber near the Canadian Arctic coastline.



Source: Canadian Department of National Defense, with permission.

Former Canadian Minister of Defense, Peter MacKay, hinted in 2008 that Russian bomber patrols could infringe on Canadian airspace: “When we see a Russian bear approaching Canadian air space, we meet them with an F-18,” said MacKay, referring to Arctic patrol flights by Russian bombers ‘we remind them that this is Canadian air space, that this is Canadian sovereign air space, and they

turn back.’” (Vancouver Sun, 2008). In February 2009, the media reported that “two Russian military bombers came close to breaching northern Canadian airspace on the eve of U.S. President Barack Obama’s visit here last week, Defence Minister Peter MacKay revealed” (Chase, 2009).

Peter Mackay again talked in 2010 about Canadian fighter jets that “scrambled” to intercept and “repel” Russian bombers before they would enter Canadian airspace (Pugliese, 2010). In 2010, after another Russian bomber patrol was intercepted by Canadian fighters, Prime Minister Harper underlined that “Thanks to the rapid response of the Canadian Forces, at no time did the Russian aircraft enter Canadian sovereign airspace”, implying that had Canadian CF-18s not intervened quickly, the Russian bombers would have violated Canadian airspace (Ibbitson, 2010). Later, Defense Minister MacKay admitted that Russian bombers did not enter Canadian airspace: “‘They were in the buffer zone’, said MacKay, stressing that although the planes did not enter Canada’s sovereign airspace, the bombers did come inside the 300 nautical mile zone that Canada claims”² (sic) (Lilley, 2010).

Foreign Affairs Minister Lawrence Cannon underlined that “when an issue of national importance is raised at the Arctic Council, our government does, and always will, stand up for our interests and ownership over the Arctic. This is why we react so strongly when other nations, like Russia, engage in exercises and other activities that appear to challenge our security in the North” (Cannon, 2009).

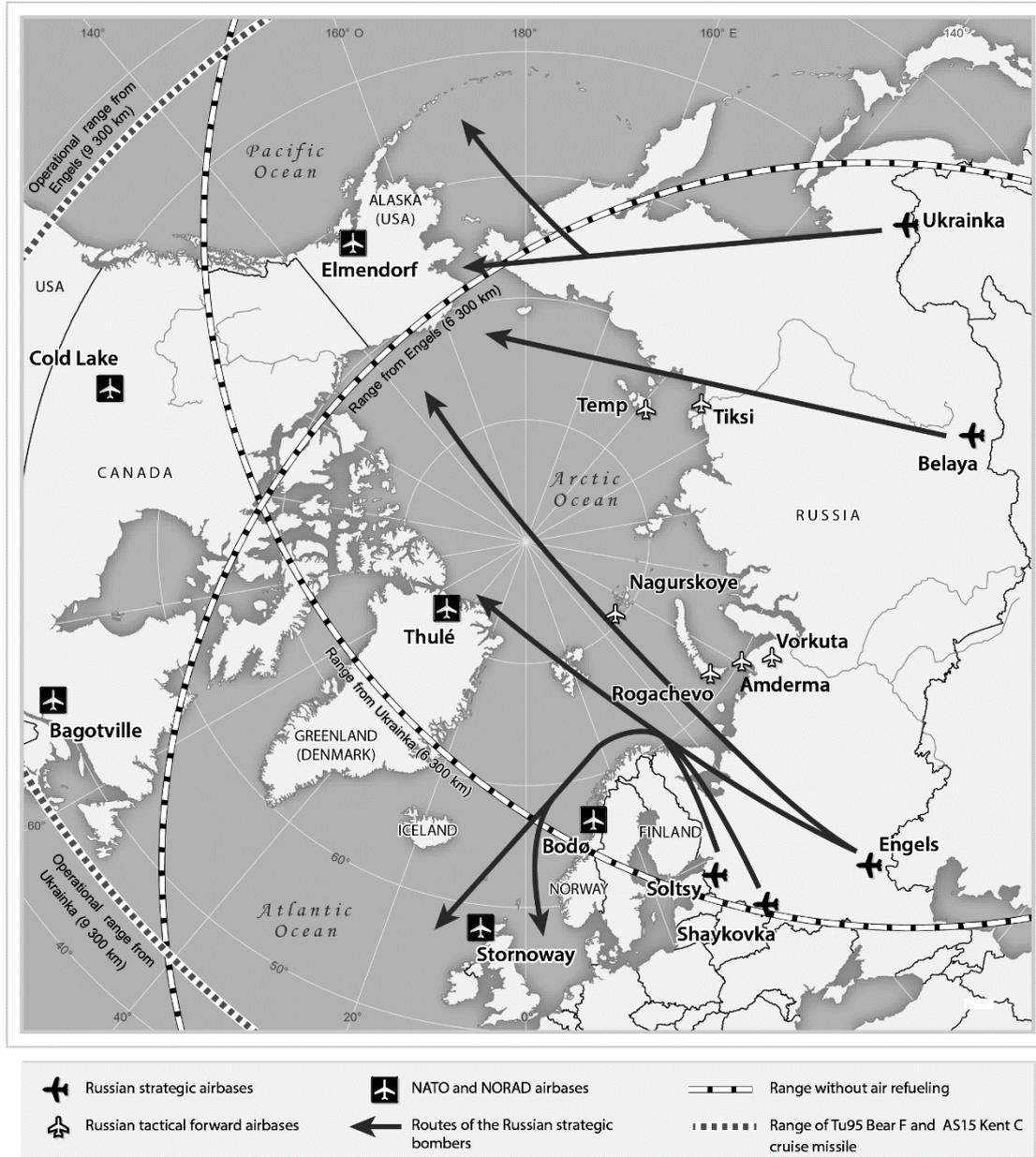
Did the Russian Patrols Represent Real Threats?

Mostly Tu-95 Bear bombers, and at times Tu-160’s from Russian strategic airbases (Fig. 3), came close to the Canadian Arctic, according to media articles and defense reports (U.S. Northern Command, 2015; Stadnyk, 2015). Russian bomber patrols were depicted by media reports and government declarations as challenges to Canadian sovereignty and security (Genest & Lasserre, 2015).³ Was their behavior typical of a challenging would-be foe?

This willingness to publicize the Russian patrols in the Arctic contrasts with the Canadian government’s historical practice of managing communications regarding the risk of intrusion into the Arctic area (Teeple, 2010). These incidents, true or fantasied, were typically wrapped in secrecy and a desire to not address them publicly. The identification of the nationality of the actor at the source of these actions was also to be avoided (Landriault, 2013). The contrast between the high-profile communications about Russian bomber patrols in recent years, and the secrecy surrounding the other reported cases of intrusion, suggests that there may be a specific communications strategy with respect to these declarations regarding the Russian air threat.

First, most pictures reportedly taken during the interceptions of Russian Tu-95 or Tu-160 bombers by American or Canadian fighter planes show that the Russian planes flew at high altitude (Hickley & Williams, 2007; Baev, 2009; Lasserre et al., 2013) and were thus not trying to evade detection nor interception. Besides, they may have borne no weapons, as all of the pictures depicting interceptions by NORAD planes show the Tu-95 or Tu-160 bearing no missiles on the wing pods. However, nothing can be said about the bomb bays for both the Tu-95s and the Tu-160s as they were kept closed.

Figure 3: Location of Russian strategic airbases and routes of bomber patrols.



Source: adapted from Le Roy, 2010.

Second, although the increased Russian air and naval activity since 2007 is impressive when compared to the long period of decay in the Russian armed forces following the collapse of the Soviet Union, it is far below the average Cold War levels (Zysk, 2011; Lasserre et al., 2013). The resumption of Arctic patrols may therefore be interpreted more in terms of the desire not to lose operational capacity and, above all, as a political tool designed to display capability, rather than the sign of a renewed aggressiveness in the Arctic (Henrotin, 2011; Zysk, 2011; Konyshev & Sergunin, 2014; Wilson, Rowe & Blakkisrud, 2014; Roberts, 2010; 2015). NORAD spokesman Lt. Desmond James explained in 2010 that “both Russia and NORAD routinely exercise their capability to operate in the North. These exercises are important to both NORAD and Russia and are not cause for alarm” (CBC News, 2010b).

Third, except for a few occasions, Russian bombers fly unescorted by fighter planes, thus being easy targets for intercepting fighter jets from American or Canadian bases. Exceptions may occur, but rarely, as happened on September 18, 2014 (thus after the onset of the Ukrainian crisis), when American F-22s intercepted two Russian Tu-95 bombers, two refueling tankers and two MiG-31 interceptors above the Beaufort Sea. The same day Canadian CF-18 intercepted Tu-95 Bears 75 km off Canada's Arctic coast (CBC News, 2014).

Finally, Defense Minister MacKay's assertions in 2008 and 2009 about Russian bombers coming close to violating Canadian airspace were questioned by U.S. General Gene Renuart, Commander of U.S. NORTHCOM/North American Aerospace Defence Command (NORAD) from 2007-2010, when he declared in February 2009 that "the Russians have conducted themselves professionally; they have maintained compliance with the international rules of airspace sovereignty and have not entered the internal airspace of either of the countries" (Chase, 2009). It appears that the Canadian jets intercepted the Russian Tu-95 bombers 190 kilometers northeast of Tuktoyaktuk, NWT on Feb. 18th, 2009. They had not entered Canadian airspace but did stray into a zone of international airspace under Canada's monitoring and control (Chase, 2009). Other media reports and government declarations also underline that the Russian bombers never entered Canadian nor American airspace (Lilley, 2010; CBC News, 2010 quoting Defense Minister MacKay himself; Stadnyk, 2015; U.S. Northern Command, 2015).

The buffer zone is an airspace where traffic is monitored; sometimes called the ADIZ (Air Defense Identification Zone), where air traffic is monitored for security objectives but not controlled (Fig. 4). It seems the media often confuse this buffer zone or the ADIZ with the actual sovereign airspace (U.S. Northern Command, 2015), which extends only 12 miles beyond the coast. Russian bombers have been known to enter the Canadian or the American ADIZ, as they extend much farther offshore, or, in Europe, into the "Flight Information Region" (RAF, 2015) or the "area of interest" (Sky News, 2015). "State aircraft of sovereign nations are not required to file flight plans into the ADIZ" (Stadnyk, 2015), thus Russian bomber patrols do not breach any international law. Russia declared they often filed flight plans and thus warned ahead of their coming into the vicinity of Alaska and Arctic Canada. This was however denied by the Canadian government (CBC News, 2009).

The 1944 Chicago Convention posits that "the contracting States recognize that every State has complete and exclusive sovereignty over the air-space above its territory" (art. 1); art. 2 adds "For the purposes of this Convention, the territory of a State shall be deemed to be the land areas and territorial waters adjacent thereto under the sovereignty, suzerainty, protection or mandate of such State" (ICAO, 1944; Pépin, 1956) – thus customarily defined as within 12 nautical miles (nm). Despite the fact Art. 3 specifies the Convention is applicable to civil aircraft only, no State challenged the interpretation as to what constitutes the sovereign airspace (Kish & Turns, 1995). Violating the actual airspace with military planes is a serious international offense (actually, an act of war) and it is likely that if the Russian bombers had actually done so, diplomatic language would have been much coarser.

Whereas the Russians seem to have been cautious not to violate sovereign airspace, the very fact of not filing flight plans in advance, a practice now apparently commonplace, is heavily disruptive of civilian air traffic, probably more so in dense European areas than in the Canadian Arctic. Along with scrambling interceptors, controllers neutralise a large portion of airspace to avoid collisions

(National Post, 2015; RT News, 2015). When such an operation takes place in the North Sea, or even worse in the English Channel, the delays to civilian flights were numerous.

A Different Pattern in Eastern Europe Since 2014

This behavior near the Canadian and American Arctic, or the North Atlantic, is in sharp contrast to the Russian air forces' behavior close to Japan, or in the Black Sea, or the Baltic Sea, especially since the onset of the political crisis in Ukraine in March 2014. The number of intercepts in the airspace close to Japan are much more numerous (see Table 2), as they are for the European theatres of operation. In Europe, Russian patrols display a larger variety of planes, such as tactical bombers like Su-24 Fencers or Su-25 Frogfoots, along with the strategic long-range bombers witnessed in the Arctic, but also fighter planes like Su-27 Flankers and Su-35 Flankers E or the MiG-29 Fulcrum, either escorting the bombers or flying alone in patrols and obviously carrying weapons, and occasionally briefly violating the actual airspace of Finland or Latvia or Sweden (Aviationist, 2013; Défens-Aéro, 2013; Deutsche Welle, 2014; Libération, 2014), or flying along the limit of a neighbor's airspace in a provocative way (Le Monde, 2015). Similarly, reports hint at the fact that since 2014, Russian bombers have been known to carry ordnance (BarentsObserver, 2015); and that Russian planes often fly with their transponders off or without flight plans (NATO, 2014; Financial Times, 2015; Huberdeau, 2015), something that was never reported about Russian bomber patrols near the North American Arctic. Besides, the different nature of the planes involved is also a clue to the different behavior: a Su-27 fighter jet is a more effective tool to probe reactions and adopt an aggressive behavior than a slow and defenseless Tu-95 bomber.

However, media or research reports are not always clear as to whether they are talking about sovereign airspace violations, or incursions of Russian warplanes into monitored airspace. In Conley and Rohloff (2015), a long paragraph mixes reports of sovereign airspace violations, scrambles to intercept Russian warplanes, and tracking of Russian planes flying into NATO-surveyed airspace, which are three different concepts. For instance, British media accounts mention that Russian warplanes were intercepted in 2010 within the British sovereign airspace: "Eventually the Russians *left* UK airspace and, after four hours, the Tornado crews stood down and returned to Leuchars [airbase]" (STV News, 2010). The webpage also mentions that interceptions "over British airspace" occurred 20 times in 2009; whereas in another account, a spokesperson from the British Ministry of Defense rather mentions that the "Russian military flights have never entered UK sovereign airspace without authorization" (Sky News, 2014).

The crowded airspace, and the common borders of NATO countries with Russia in Eastern Europe, provides for more opportunities for aggressive behavior and airspace violations. For example, military traffic between mainland Russia and the Kaliningrad enclave is authorized and is common practice. It usually uses an authorized corridor in the Lithuanian airspace. Deviations from this corridor, intentional or not, are common.⁴ NATO deploys an air policing mission on a permanent basis – voluntary member states usually provide a patrol of four fighters in turns. Scrambles to intercept incoming Russian military aircrafts are frequent and the behavior of Russian fighter and fighter-bomber pilots is occasionally described as "aggressive". It seems that live ammunition is sometimes carried, however with targeting radars switched off. Tension, aggressiveness and airspace violations seem to be a much more common occurrence along Russia's borders in Eastern Europe, especially since the Ukrainian crisis in 2014, than in the Arctic.

Besides, the Russian authorities assert that there has been a similar increase in NATO air activity in recent years. Russia protested over a reported sharp increase of NATO air patrols close to its borders (WSJ, 2014). “US RC-135 reconnaissance aircraft carry out flights almost daily,” said Col. Gen. Viktor Bondarev, commander-in-chief of the Russian Air Force. “In 2014, more than 140 RC-135 flights have taken place compared to 22 flights in 2013.” Bondarev also said that NATO surveillance flights over the Baltic Sea and the Barents Sea have grown to 8-12 a week, and NATO tactical flights (fighters, tactical bombers) have doubled from 2013 to about 3000 flights (USNI News, 2014).

Russian Warplanes Patrols: A Marginal Phenomenon in the Arctic

Comparing the frequency of Russian bomber patrols approaching North American airspace to that of other airspaces such as Japan’s, Norway’s, or those in Eastern Europe, also helps put the phenomenon into perspective. Of course, there is no official databank for such events and collecting the data to make up a comparison relies on partial data, on figures gathered from governmental reports, on media accounts fueled by government notices, on research reports and on newspaper reports. The image thus drawn should not be interpreted as constituting absolute figures, but rather as a way to compare the magnitude of Russian military planes’ patrols close to different airspaces.

Regehr (2013) reminds us that “U.S. NORAD fighters were scrambled 1518 times between 1989 and 1992; 111 times in Alaska.” 7.3% of these fighter-scrambles were therefore in Alaska. More recent figures show a different picture for the Arctic, with rather low figures of activity, especially when compared to other regions.

We set up an analysis so as to track statistics about the occurrence of Russian air military patrols in the Canadian Arctic, and compare these figures with other areas such as Norway, the North Sea, the Baltics, and the Sea of Japan. This research is exploratory as there is no unified source for such data: some governments regularly publish figures; some occasionally do; some figures are at times made public by military organizations like NORAD or NATO; and some figures are proxies built up from media occurrences when no official figure is to be found. It must thus be emphasized that figures from Tables 1 and 2 are not to be taken as absolute figures, but as orders of magnitude.

What Can be Inferred from this Data?

First, indeed there has been a sudden onset in the occurrence of Russian bomber patrols in the air zones close to Arctic Canada in 2007, after years of little activity in the wake of the collapse of the Cold War. Figures from Huebert, Viel and NORAD all underline this fact (see Table 1), and for 2014, do point to another increase in the occurrence of the phenomenon. It must be underlined that this renewed activity is not new, but a resumption of something that was routine during the Cold War.

Second, whether from the analysis of media accounts (Viel, 2014) or from official reports in other areas (Table 2), it appears that the intercepts conducted in the North American Arctic are not numerous: the numbers are modest compared to the intercepts routinely performed in the Barents Sea area by the Norwegian Air Force, or in the North Sea by the Royal Air Force, or by the Japanese Air Force, or even generally in the Baltics or the European area. The NORAD/USNORTHCOM Commander Gortney asserted in 2015 that the figures had steeply expanded but did not give any

specific numbers (USNI News, 2015). We have found that it went from an average of 5 over the period 2009-2014, to 10 in 2014 (implying a recalculated average of about 4 over the period 2009-2013). It is a significant increase, although remaining at moderate levels, and it remains to be seen how it evolves over time.

Third, the level of activity by the Russian air force is by no means comparable to the level of activity that took place during the Cold War era. In the airspace close to Lithuania, figures for 1992-95 (Table 2) are much larger than the present levels of activity, despite the recent surge in Russian air patrols. Similarly, in the air space around northern Norway, according to official numbers from the Norwegian Joint Command Headquarters, “there had been 43 scrambles and 69 identifications in international air space outside the coast of Norway in 2014. In 2013 there were 41 scrambles and 58 identifications, and in 2012 there were 41 scrambles and 71 identifications. The numbers are considerably lower than during the 1980s, when there could be as many as 500 to 600 identifications per year” (Sergunin, 2015); another figure puts the number of total Norwegian scrambles at 471 in 1984 (Robertson, 1988: 131). Around Japan, global figures for scrambles during the Cold War (depicted as largely implying Soviet warplanes) stood at 798 for 1978, 783 for 1980, 929 for 1982 (*ibid.*) and 944 for 1984 (Nishihara, 1987: 163), again considerably above present-day levels. If Japan’s air force scrambled 943 times in 2014, it is not only to intercept Russian warplanes, but also those of North Korea and China (Japanese Ministry of Defense, 2015; RNZ, 2015).

Fourth, since 2014 and the onset of the Ukrainian crisis, the number of intercepts has increased significantly, but again much more so in Europe (Baltic area, Black Sea area, and to a more limited extent in the North Sea, by the Royal Air Force) than in the Arctic, where there is a definite but modest increase in activity (Table 2).

These figures highlight that the level of military activity near the North American Arctic involving Russian planes is by no means comparable to the level observed in other areas, whether it be the Sea of Japan, the Baltics, the Black Sea, the North Sea or the Barents Sea. The intercepts resumed in 2007 and increased in 2014 as a probable consequence of renewed tension because of the Ukrainian crisis, but the figures do not hint at a real pressure from the Russian air force towards the NORAD area of operations.

Observations: What Threat do These Patrols Imply?

Just as there appears to be a pattern of discourse from the Canadian media regarding the interception of Russian bomber patrols in the Arctic (Landriault, 2013; Genest & Lasserre, 2015), several media articles underlined the Russian decision to open Arctic air force bases from 2012 onwards (Barents Observer, 2013b; CASR, 2014). Canada’s Conservative government banked once again on numerous bomber patrols in the Summer 2014 in order to renew the idea that Canada’s sovereignty was threatened in the Arctic: “We are deeply concerned, and we are determined to promote and defend the sovereignty of Canada in the Arctic” asserted then-Foreign Minister John Baird in August (RT News, 2014).

Table 1: Number of intercepts of Russian warplanes by NATO fighter planes, according to various sources, 1992-2014.

Region and source		1990s						2000s																
		92	93	94	95	96	97	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14		
NORAD Arctic 2007-2010 Peter Mackay	North American Arctic															“NORAD fighters have intercepted between 12 and 18 bombers annually since 2007”								
	Canadian Arctic	5	3	2	0	0	0	0	0	0	1	0	0	1	15	8	16	9	9					
2000-2014 Simon Viel (2014)	North American Arctic													1	4		2	3		1	1	8		
	Europe														10	2		2	4	1	1	6		
	Baltic																		1		1	11		
	Black Sea																			1	1	7		
	Japan							2						1		1				1	2	3		
NORAD 2009-2014	North American Arctic																					25 intercepts over 2009-2014, 5 on average per year.	10	
NORAD 2006-2011	North American Arctic																					45 intercepts over 2006-2011, 9 on average per year.		
Alaska 2014-2015 Media sources	Alaska																					4	2	

Sources by category:

Peter Mackay: *CBC News* (2010). Russian planes intercepted near N.L. July 30. www.cbc.ca/news/canada/newfoundland-labrador/russian-planes-intercepted-near-n-l-1.971551, a. March 11, 2016. Mr Mackay gives figures for the number of intercepted bombers, not for the occurrence of intercepts, whatever the number of Russian planes in their group, which is the methodological basis for counting for the other figures.

Rob Huebert, Freedom of Information request to the Department of National Defense, Ottawa, 2015.

Simon Viel, 2014. *La couverture médiatique concernant les interceptions d'avions militaires russes près de l'espace aérien de différents pays autour du monde*, unpublished Working paper, Hautes Études internationales, Laval University, Quebec City.

Work based on media screening conducted Oct. 2014 - January 2015.

NORAD: *Russia – Long Range Aviation Intercept*. July 5, 2015. Reply to a Freedom of Information request. Peterson AFB, CO, US Northern Command; Regehr 2015 for 2006-2011. Alaska: media screening, December 2015-January 2016.

Table 2: Number of intercepts of Russian warplanes by NATO, Japanese or Western fighter planes, 1992-2015.

Region and Period	1990'								2000'															
	92	93	94	95	96	97	98	99	0	1	2	3	4	7	8	9	10	11	12	13	14	15		
Lithuania 1992-2004	2557	2621	133	59	14	10	5	4	8	8	4	3	5											
Baltics by NATO 2013-2015																					30	140	160	
Europe by NATO 2013-2015																					180	442	245*	
Bulgaria 2007-2014														2 to 3 interceptions per year on average								2 to 3 per week		
Norway 2007-2014														47			36	34	41	41	49			
North Sea, UK intercepts 2010-2015																20	11	10	8		2	18		
Japan 2010-2015																	193	197	264	247	248	359	473	288

Sources by region:

Lithuania: number of violations of airspace. "Lithuania Concerned Over Russian Air Incursions and Attempts To Divide NATO", 04VILNIUS1353_a, 29 October 2004, cable from the US Embassy in Vilnius, https://wikileaks.org/plusd/cables/04VILNIUS1353_a.html, a. March 2, 2016.

Baltics: Les interceptions d'aéronefs russes sont trois fois plus importantes qu'en 2013. *Défens-Aéro*, Oct. 30, 2014; www.defens-aero.com/2014/10/les-interceptions-d-aeronefs-russes-sont-trois-fois-plus-importantes-qu-en-2013.html, a. Jan. 5, 2016; NATO cites 'unusual' Russian air activity as intercepts rise, *Stars and Stripes*, Oct. 30, 2014, www.stripes.com/news/nato-cites-unusual-russian-air-activity-as-intercepts-rise-1.311104, a. Jan. 6, 2016; NATO interception of Russian planes in Baltics rise, *UPI*, January 11, 2016, www.upi.com/Business_News/Security-Industry/2016/01/11/NATO-interception-of-Russian-planes-in-Baltics-rise/3031452534461/, a. Jan. 19, 2016.

Europe: NATO fighter jets intercept Russian aircraft, *Financial Times*, July 30, 2015, www.ft.com/cms/s/214bf25e-36ca-11e5-b05b-b01debd57852, a. January 6, 2016; media screening; NATO reports surge in jet interceptions as Russia tensions increase, *The Guardian*, August 3, 2015, www.theguardian.com/world/2015/aug/03/military-aircraft-interventions-have-surged-top-gun-but-for-real, a. March 17, 2016.

*: up to July 2015. The wording of the 2015 Report from the Secretary General says “Allied aircraft scrambled over 400 times to intercept Russian aircraft over Europe in 2015”, which is both close to the 2014 figure and not very precise. *The Secretary General's Annual Report 2015*, www.nato.int/nato_static_fl2014/assets/pdf/pdf_2016_01/20160128_SG_AnnualReport_2015_en.pdf.

Bulgaria: La Bulgarie doit placer son Armée de l’Air en «état d’alerte» en raison de vols russes, *Défens-Aéron*, April, 2, 2014, www.defens-aero.com/2014/04/la-bulgarie-doit-placer-son-armee-de-l-air-en-etat-d-alerte-en-raison-de-vols-russes.html, a. March 15, 2016; L’Otan a mené 400 interceptions d’avions russes près de l’espace aérien de ses pays membres, *Zone Militaire Opex 360.com*, 20 nov. 2014, www.opex360.com/2014/11/20/lotan-mene-400-interceptions-davions-russes-pres-de-lespace-aerien-de-ses-pays-membres/, a. March 17, 2016.

Norway: 2010-2014 : Norwegian Joint Headquarters, in Russian overflights, http://static.guim.co.uk/ni/1424887084071/Russian-flight-paths_DONE.svg, a. Jan. 6, 2016; Norway to restructure military in response to Russian 'aggression', *The Guardian*, Feb. 25, 2015, www.theguardian.com/world/2015/feb/25/norway-to-restructure-military-in-response-to-russian-aggression, a. Jan. 12, 2016; Sergunin and Konyshov 2015b.

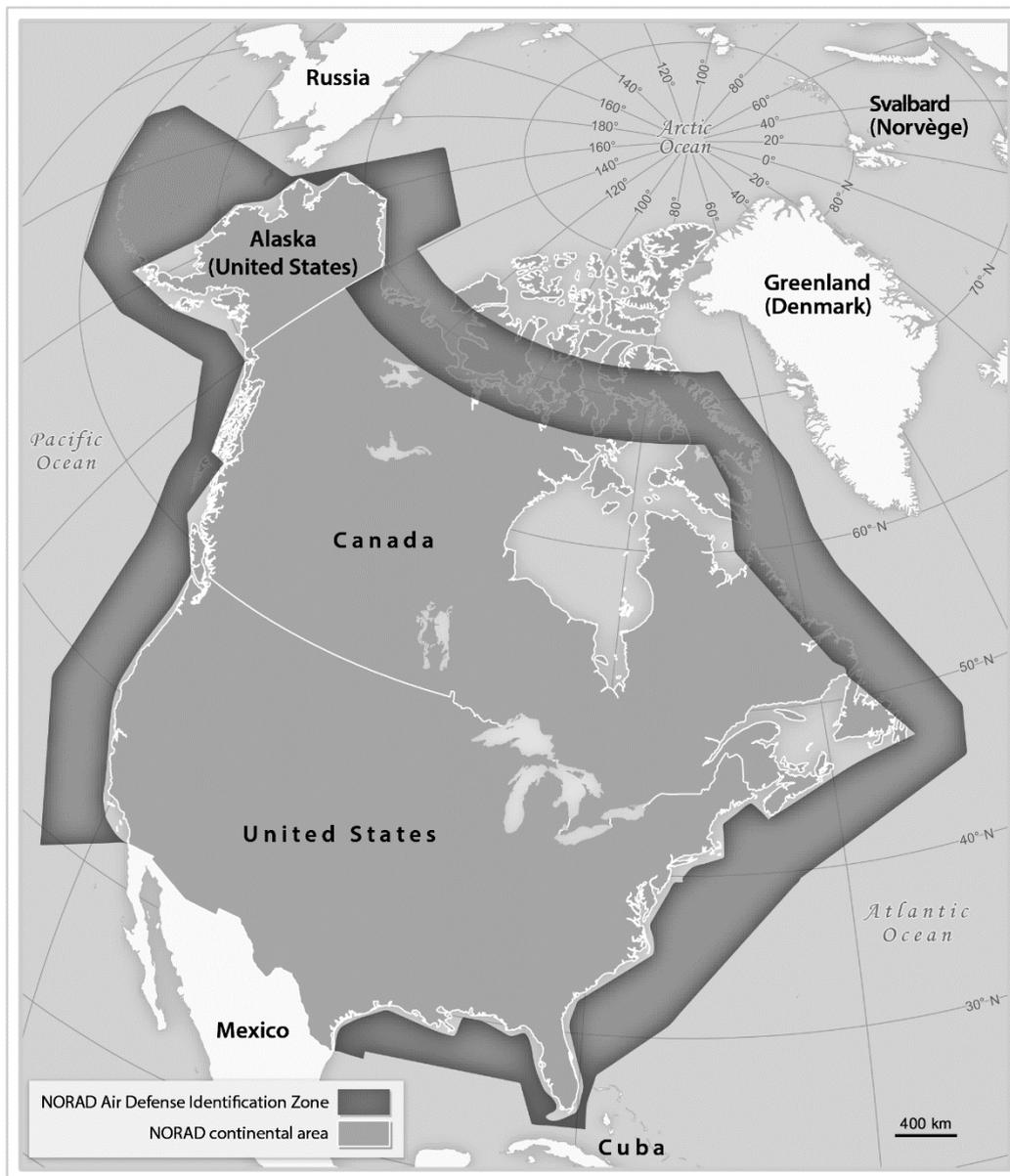
United Kingdom and North Sea : *Number of days QRA launched in response to Russian military aviation*, Written Answers to Questions, 24 January 2013, Parliament of the United Kingdom, London, <http://www.publications.parliament.uk/pa/cm201213/cmhansrd/cm130124/text/130124w0001.htm#13012463001994>, a. Jan. 24, 2016; *Scotsman*, 2010. RAF catches Russian bombers in UK airspace, March 24, www.scotsman.com/news/raf-catches-russian-bombers-in-uk-airspace-1-796434, a. Jan. 6, 2016; media screening.

Japan: Joint Staff Press Release, *Statistics on scrambles through fiscal year 2013*, April 23, 2014; *Statistics on scrambles through fiscal year 2014*, May 22, 2015, Ministry of Defense, Tokyo. *Japan Times*, April 23, 2015, www.japantimes.co.jp/news/2016/04/23/national/japan-scrambled-fighters-china-record-571-times-fiscal-2015/#.VyC2.CG0fkY, a. April 26, 2016; *Wall Street Journal*, April 10, 2014, Japan Scrambles More Jets as Regional Tensions Rise, <http://blogs.wsj.com/japanrealtime/2014/04/10/japan-scrambles-more-jets-as-regional-tensions-rise/>, a. March 22, 2016; *Kyodo News*, <http://japanvisitor.blogspot.ca/2009/04/japan-this-week-26-april-2009.html>, a. Jan. 12, 2016.

The Russian airbases used for these patrols are usually former bases that were abandoned in the years following the collapse of the Soviet Union in 1991, part of the eleven forward bases the USSR had built in the High Arctic (Åtland, 2011). Moscow does not intend to open new bases but to repair, and make operational, airstrips from these old airbases (*Air International*, 2013) (Fig. 3). The Russian government intended to create a stir when, in September 2012, the media reported that Russia was deploying MiG-31 squadrons to such an airfield in Novaya Zemlya (*Barents Observer*, 2012). However, news quickly emerged that Russia had hesitated because the permanent forward deployment of such planes was likely to be costly (*Barents Observer*, 2013). It is not yet clear if these bases are going to be used year-round.

Regehr hinted in 2013 that a hidden motive of the Canadian fighter dispatches to the Arctic is to wave the flag. He quotes a Canadian Defence Department's description of an April 2006 flight of two CF-18 fighter aircraft dispatched on an Arctic patrol; an objective was for the planes to be seen by as many northerners as possible, and the aircraft were flown over as many settlements as possible (Regehr, 2013). Dispatching powerful fighter jets to fly in Arctic areas was part of the government narrative in defending their decision in favor of the F-35, and in promoting the general idea that the government was strong in the defense of a threatened Canadian sovereignty (Roussel & Perreault, 2009; Lasserre et al., 2013; Regehr, 2013; Genest & Lasserre 2015), as the jets would prove to be "an extremely effective deterrent against challenges to Canadian sovereignty" (Government of Canada, 2010). However, the Canadian ADIZ does not extend over the Canadian Arctic Archipelago (Fig. 4). The official reason for this is that the Canadian ADIZ is part of the continental ADIZ, an "area encircling the continental land mass of Canada and the U.S., established to facilitate NORAD's efforts to monitor the approaches to North America. It is primarily within this zone that the identification, location and control of [...] unauthorized aircraft are performed in the interest of national security" (Duval, 2009). The map however conveys the idea that the threat level for Canadian sovereignty is low. Indeed, there is little air surveillance in this remote part of Canada's territory. The contrast between the light monitoring of military movements over the Canadian archipelago and the strong rhetoric of the need to quickly dispatch powerful fighter jets to defend a much threatened Canadian sovereignty is intriguing.

Notwithstanding Canada's Conservative Prime Minister's, his Foreign Minister's, and his Defense Minister's, energetic promises to stand up to Russian bombers, in 2010 the House of Commons Standing Committee on National Defence underlined in its report on Canada's Arctic Sovereignty that "there is no immediate military threat to Canadian territories either in or 'through' the Arctic" (Parliament of Canada, 2010). In 2011 the Senate Defence Committee came to the same conclusion: "The question remains, is there a military threat to Canada in the Arctic? The consensus of witnesses was that there is not, in the sense of an imminent or even foreseeable peril" (28). The head of the Joint Task Force (North) told the Committee: "There is no conventional threat and therefore we are not arming ourselves in preparation for an attack from any country. The likelihood of an attack in the High Arctic is as likely as an attack in downtown Toronto" (Senate of Canada, 2011: 28). This analysis was confirmed in 2016 by Rear Admiral Bishop in 2016: "While the geographic and geopolitical landscape is complex and rapidly evolving, there is currently no military threat to Canada in the Arctic" (Standing Committee on National Defence, 2016).

Figure 4: American and Canadian ADIZ under NORAD coordination

Credit: Pierre-Louis Têtu. Sources: United States: <https://www.gpo.gov/fdsys/pkg/CFR-2003-title14-vol2/pdf/CFR-2003-title14-vol2-chap1-subchapF.pdf>; Canada: www.navcanada.ca/EN/products-and-services/Documents/DAH_Current_EN.pdf

The Russians are doing what they have done for decades, and that is flying in international airspace near Canadian and American airspace to show their presence, train their pilots, and test North American reactions. The Canadians and Americans military also “scramble” their fighter jets, displaying Canada’s and the U.S. presence, thus training their own pilots, and testing response times, with a view towards not giving too much information away on their own speed of reaction (Regehr, 2015). A NORAD spokesperson confirmed in fact that while the incidents of flights had indeed increased, they remained “in keeping with the mission of routine training and exercises” (Kreft, 2014; Regehr, 2015), even after the 2014 Ukrainian crisis as most of the increased air activity is taking place in Europe. For the United States, the Arctic is under U.S. NORTHCOM’s area of responsibility but it is not a priority (Charron, 2015). As NORAD underlined in 2010, “both Russia

and NORAD routinely exercise their capability to operate in the North. These exercises are important to both NORAD and Russia and are not cause for alarm” (CBC News, 2010b).

Attesting to the low level of threat attached to the Russian bomber patrols close to the NORAD area, a few papers even hint at the idea that the American or Canadian air forces do not even systematically scramble fighter aircrafts to intercept them. In May 2015, a media account mentioned that in 2014, “only 6 out of 10 incursions saw U.S. or Canadian aircraft intercept Moscow’s long-range attack aircraft”. In April 2015, similarly, “two Russian Tu-95 Bear H bombers flew into the U.S. ADIZ, in what was the first such incursions since the beginning of the year: pretty routine, except that no U.S. or Canadian fighter jet were launched to intercept” them (Aviationist, 2015). CNN also mentioned the Pentagon considered the idea of “stopping routine intercepts of Russian military aircraft flying off the coast of Alaska” (CNN, 2015).

Conclusion

Since 2007, with the resumption of Russian air and marine patrols in the Arctic, as well as the planting of a Russian flag at the North Pole, a rigorous rhetoric from the Canadian government emerged through Canada’s national media. The official message emphasized that the presence of these Russian bomber patrols in the Arctic were tantamount to a direct threat to Canadian security and sovereignty. This discourse was all the more credible since other accounts emanating from other regions, especially in Europe, also mentioned an increase in Russian air activity, and in recurrent airspace violations.

It turns out that actual airspace violations are extremely scarce, although their number has increased since the Ukrainian crisis in 2014. Moreover, none took place in the Arctic, but rather in the Sea of Japan or in the Baltics. Since no such violation ever occurred in Canadian airspace, the very notion that Canadian security or sovereignty could be threatened seems quite exaggerated. Besides, the behavior of Russian planes seems much more aggressive in other areas. Finally, the sheer number of interceptions in the North American Arctic is quite small when compared with figures from other areas, especially the Black Sea, the Baltics, the Sea of Japan or even the Barents Sea. If Russia is indeed probing the air defenses of its neighbors, for political or for military reasons, it is not doing so in the North American Arctic.

Notes

1. Presidential Decree, President Dmitri Medvedev, *Основы государственной политики Российской Федерации в Арктике на период до 2020 года и дальнейшую перспективу* [Fundamentals of the State policy of the Russian Federation in the Arctic in the period up to 2020 and beyond], September 18, 2008, www.scrf.gov.ru/documents/98.html, c. June 8, 2016.
2. Canada never claimed a 300-nautical mile zone.
3. A few media examples: “Harper warns Russians after two bombers intercepted”, *National Post*, Feb. 29, 2009; “Back off and stay out of our airspace,' Russia”, *The Star* (Toronto), Feb. 28, 2009; “Canadian jets repel Russian bombers”, *Toronto Sun*, July 30, 2010. Official declarations include for example: “We react so strongly when other countries show disrespect for our sovereignty over the Arctic” (PM Harper, *CTV News*, August 10, 2007);

“I have expressed [...] the deep concern our government has with increasingly aggressive Russian actions around the globe and Russian intrusions into our airspace” (PM Harper, *National Post*, Feb. 28, 2009).

4. Katarzyna Zysk, Senior Analyst and Associate Professor, Department of Norwegian Security Policy, Norwegian Institute for Defence Studies, personal communication, September 5, 2014 in Oslo; Barbro Hugaas, Assistant Director General, Department of Security Policy, Norwegian Ministry of Defence, personal communication, June 6, 2012 in Oslo.

References

- Air International (2013). Russian Bases Upgraded, December, p.19.
- Akin, D. (2008). Harper vows to assert Arctic sovereignty: Economic help promised for North as Russia challenges Canada’s claims, *Times-Colonist*, Victoria, Sept. 21, 2008, p. A7.
- Åtland, K. (2011). Russia’s armed forces and the Arctic: All quiet on the northern front? *Contemporary Security Policy*, 32(2): 267-285.
- Aviationist (2013, June 13). Finland’s airspace violated by Russian bombers. Retrieved from <http://theaviationist.com/2013/06/13/finland-tu-22/>.
- Aviationist, (2015, May 5). Russian bombers intrude into the U.S. air defense zone, no interceptor scrambled after them. Retrieved from <http://theaviationist.com/2015/05/04/russian-tu-95-inside-northamerican-adiz/>.
- Baev, P. (2009). Troublemaking and Risk-taking: the north in Russian Military Activities. In Elana Wilson Rowe (ed.). *Russia and the North* (pp. 17-36). Ottawa: University of Ottawa Press.
- Barents Observer. (2012, September 25). Russia sends Mig-31 interceptors to the Arctic. Retrieved from <http://barentsobserver.com/en/security/russia-sends-mig-31-interceptors-arctic-25-09>.
- Barents Observer. (2013, February 4). Russia drops Arctic air force plans. Retrieved from <http://barentsobserver.com/en/security/2013/02/russia-drops-arctic-air-force-plans-04-02>.
- Barents Observer. (2013b, October 30). Russia re-opens Arctic cold war era air base. <http://barentsobserver.com/en/security/2013/10/russia-re-opens-arctic-cold-war-era-air-base-30-10>.
- Barents Observer. (2015, February 1). Russian bomber intercepted by Norwegian F-16s carried nuclear warhead. Retrieved from <http://barentsobserver.com/en/security/2015/02/russian-bomber-intercepted-norwegian-f-16s-carried-nuclear-warhead-01-02>.
- Cannon, L. (2009, November 23). Address by Minister Cannon to the Economic Club of Canada, No. 2009/58 - Toronto, Ontario - *Government of Canada*. Retrieved from <http://news.gc.ca/web/article-en.do?mthd=tp&crtr.page=94&nid=509999&crtr.tp1D=970>.
- CASR. (2014, September). Russian military bases in the High Arctic – Re-opening a Cold War-era Airbase on the New Siberian Islands on the Northern Sea Route. *Canadian American Strategic Review*. Retrieved from www.casr.ca/doc-news-new-siberian-islands.htm.

- CBC News. (2009, February 27). Russia denies plane approached Canadian airspace. Retrieved from www.cbc.ca/news/canada/story/2009/02/27/arctic-russia.html.
- CBC News. (2010, July 30). Russian planes intercepted near N.L. Retrieved from www.cbc.ca/news/canada/newfoundland-labrador/russian-planes-intercepted-near-n-l-1.971551.
- CBC News. (2010b, August 25). NORAD downplays Russian bomber interception. Retrieved from www.cbc.ca/news/politics/norad-downplays-russian-bomber-interception-1.929222.
- CBC News. (2014, September 19). Canadian fighter jets intercept Russian bombers in Arctic. Retrieved from www.cbc.ca/news/canada/canadian-fighter-jets-intercept-russian-bombers-in-arctic-1.2772440.
- Chase, S. (2009, February 28). Ottawa rebukes Russia for military flights in Arctic. *The Globe & Mail*. Retrieved from www.theglobeandmail.com/news/national/ottawa-rebukes-russia-for-military-flights-in-arctic/article1154748/.
- Charron, A. (2015). Canada, the Arctic, and NORAD: Status quo or new ball game? *International Journal*. 70(2): 215-231.
- CNN. (2008, March 26). U.S. jets escort Russian bombers off Alaska coast. Retrieved from www.cnn.com/2008/US/03/26/us.russian.planes/index.html?eref=rss_us.
- CNN. (2015, May 6). Pentagon considered stopping intercepts of Russian aircraft. Retrieved from www.cnn.com/2015/05/06/politics/pentagon-intercepts-russian-aircraft/.
- Cohen, A. (2011). Russia in the Arctic: Challenges to U.S. Energy and Geopolitics in the High North. In Blank, S. (ed.), *Russia in the Arctic* (pp. 1-42). Washington, DC: Strategic Studies Institute.
- Conley, H. and C. Rohloff. (2015, August). The New Ice Curtain. Russia's Strategic Reach to the Arctic. *CSIS Reports*. Washington, DC. Retrieved from <http://csis.org/publication/new-ice-curtain>.
- Défens-Aéro (2013, June 13). La Finlande accuse la Russie de violer son espace aérien. Retrieved from www.defens-aero.com/la-finlande-accuse-la-russie-de-violer-son-espace-a%C3%A9rien.
- Deutsche Welle. (2014, September 20). US fighter planes intercept Russian combat jets off Alaska, Sweden protests 'violation.' Retrieved from www.dw.com/en/us-fighter-planes-intercept-russian-combat-jets-off-alaska-sweden-protests-violation/a-17936231.
- Duval, MGen. (2009, April 1). Communication at the Standing Committee on National Defence. Parliament of Canada. Retrieved from www.parl.gc.ca/HousePublications/Publication.aspx?Language=e&Mode=1&Parl=40&Ses=2&DocId=3796236.
- Euronews (2015, January 30). 'Only Russia' dangerously probes British airspace, says source. Retrieved from www.euronews.com/2015/01/30/only-russia-dangerously-probes-british-airspace-says-source/.
- Financial Times. (2015, July 30). NATO fighter jets intercept Russian aircraft. Retrieved from www.ft.com/cms/s/214bf25e-36ca-11e5-b05b-b01debd57852.
- Genest, P. and F. Lasserre. (2015). Souveraineté, sécurité, identité: éléments-clés du discours du gouvernement canadien sur l'Arctique. *Canadian Foreign Policy Journal*. 21(1): 64-84.

- Gordy, K. C. (2010). Dire Straits: The Necessity for Canadian Sovereignty in the Arctic Waterways. *Fordham Environmental Law Review*. 20: 551-596.
- Government of Canada. (2010, July 16). Canada's Next Generation Fighter Capability – The Joint Strike Fighter F-35 Lightning II. National Defence, Ottawa, BG-10.018. Retrieved from <http://news.gc.ca/web/article-eng.do?m=/index&nid=548059>.
- Henrotin, J. (2011, April/May). La dissuasion de Moscou comme manœuvre stratégique. *Défense & Sécurité Internationale*. (Special Issue) n°17.
- Hickley M. and D. Williams. (2007, August 22). RAF fighter jets scrambled to intercept Russian bombers. *Daily Mail*. Retrieved from www.dailymail.co.uk/news/article-476751/RAF-fighter-jets-scrambled-intercept-Russian-bombers.html.
- Huberdeau, E. (2015). Le lent réveil de l'Ours. *Air & Cosmos*. 2467: 16-19.
- Huebert, R. (2009). Canadian Arctic sovereignty and security in a transforming circumpolar world. *Foreign Policy for Canada's Tomorrow*. Issue 4, Canadian International Council.
- Ibbitson, J. (2010, August 25). Harper's Arctic Ice Show: Political Stagecraft Masks Cold Reality, Toronto: *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/politics/john-ibbitson/harpers-arctic-ice-show-political-stagecraft-masks-cold-reality/article1685471/>.
- ICAO, International Convention on Civil Aviation (1944, December 7). *Convention on International Civil Aviation*, Chicago. Retrieved from www.icao.int/publications/Documents/7300_orig.pdf.
- Japanese Ministry of Defense. (2015, 22 May). Statistics on scrambles through fiscal year 2014. *Joint Staff Press Release*. Tokyo.
- Kefferpütz, R. (2010' February). On thin ice? (Mis)interpreting Russian Policy in the high North, *CEPS Policy Brief* n°205. Centre for European Policy Studies, Brussels.
- Kimberly, G. (2010). Dire Straits: the Necessity for Canadian Sovereignty in the Arctic Waterways, *Fordham Environmental Law Review*. 20: 551-596.
- Kish, J. and D. Turns. (1995). *International law and espionage*. The Hague: Martinus Nijhoff Publishers.
- Konyshov, V. & A. Sergunin (2014). Is Russia a revisionist military power in the Arctic? *Defense Security Analysis*. 30(4):323–335, <http://dx.doi.org/10.1080/14751798.2014.948276>
- Kraska, J. (2009). International Security and International Law in the Northwest Passage. *Vanderbilt Journal of Transnat'l Law*. 42: 1109-1132.
- Kreft, E. (2014, August 7). NORAD Confirms 'Spike in Activity' Regarding Russian Bombers and US Air Defence Zones. *The Blaze*. Retrieved from www.theblaze.com/stories/2014/08/07/norad-confirms-spike-in-activity-regarding-russian-bombers-and-u-s-air-defense-zones-guess-how-close-theyre-coming/.
- Lackenbauer, P. W. and A. Lajeunesse (2016). The Canadian Armed Forces in the Arctic: building appropriate capabilities. *Journal of Military and Strategic Studies*. 16(4): 7-66.
- Landriault, M. (2013). *La sécurité arctique 2000-2010: une décennie turbulente?* PhD thesis in Political Science, University of Ottawa. Retrieved from https://www.ruor.uottawa.ca/bitstream/10393/24353/1/Landriault_Mathieu_2013_these.pdf.
- Lasserre, F., J. Le Roy and R. Garon. (2013). Is there an arms race in the Arctic?, *Journal of Military and Strategic Studies*. 14(3-4): 1-15.

- Le Monde (2015, February 8). Les provocations calculées des vols militaires russes. P.3.
- Le Roy, J. (2010). L'activisme militaire russe dans l'Arctique: nouvelle guerre froide ou volonté d'exister?. In F. Lasserre (ed.). *Passages et mers arctiques. Géopolitique d'une région en mutation* (pp. 99-118). Québec, Presses de l'Université du Québec.
- Libération. (2014, August 28). La Russie viole trois fois l'espace aérien finlandais en six jours. Retrieved from www.liberation.fr/planete/2014/08/28/la-russie-viole-trois-fois-l-espace-aerien-finlandais-en-six-jours_1088848.
- Lilley, B. (2010, July 30). Canadian jets repel Russian bombers. *Toronto Sun*. Retrieved from www.torontosun.com/news/canada/2010/07/30/14874221.html.
- McDermot, R. (2013, December 3). Russian Airpower Skydives to New Depths. *Eurasia Daily Monitor* 10(216). *Jamestown Foundation*.
[www.jamestown.org/single/?tx_ttnews\[tt_news\]=41709&no_cache=1#.Vzx3seSnyao](http://www.jamestown.org/single/?tx_ttnews[tt_news]=41709&no_cache=1#.Vzx3seSnyao).
- National Post. (2009, February 28). Harper warns Russians after two bombers intercepted. www.nationalpost.com/most-popular/story.html?id=1335735.
- National Post (2015, March 3). Commercial planes forced to dodge 'cloaked' Russian bombers flying in Irish airspace: report. Retrieved from <http://news.nationalpost.com/news/world/commercial-planes-forced-to-dodge-cloaked-russian-bombers-flying-in-irish-airspace-report>.
- NATO. (2014, 29 October). NATO tracks large-scale Russian air activity in Europe. www.nato.int/cps/en/natohq/news_114274.htm.
- Nishihara, M. (1987). The Security of North-East Asia (Part I). In R. O'Neill, R. (ed.). *East Asia, the West and International Security* (pp. 161-171). London: Macmillan and International Institute for Strategic Studies.
- Parliament of Canada. (2010, June). Canada's Arctic Sovereignty. 40th Parliament (3rd Session). Retrieved from www.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Mode=1&Parl=40&Ses=3&DocId=4486644&File=21.
- Pepin, E. (1956). Legal Status of the Airspace in the Light of Progress in Aviation and Astronautics. *McGill Law Journal*. 3(1): 70-77.
- Pugliese, D. (2010, September 5). Russian Planes Don't Often Fly Into Canadian Territory: Documents, Ottawa: *Ottawa Citizen*. Retrieved from www.ottawacitizen.com/technology/Russian+planes+often+into+Canadian+territory+Documents/3480401/story.html.
- RAF (Royal Air Force) (2015, January 29). Fighters Scrambled. Jan. 29. Retrieved from www.raf.mod.uk/news/archive/fighters-scrambled-29012015.
- Regehr, E. (2013, May 14). Fighter aircraft and Arctic sovereignty. Disarming Arctic Security. *The Simons Foundation*. Retrieved from www.thesimonsfoundation.ca/sites/all/files/Fighter%20aircraft%20and%20Arctic%20sovereignty%20-%20DAS,%20May%202014%202013_0.pdf.
- Regehr, E. (2015, June 18). Fighter Aircraft (2): Defence at Home and Abroad. Disarming Arctic Security. *The Simons Foundation*. Retrieved from www.thesimonsfoundation.ca/sites/all/files/Fighter%20Aircraft%20%282%29%20-%20Defence%20at%20Home%20and%20Abroad%20-%20DAS,%20June%202018%202015_1.pdf.

- RNZ (Radio New Zealand) (2015, April 16). Japan's jets fend off foreign aircraft. Retrieved from www.radionz.co.nz/news/world/271388/japan's-jets-fend-off-foreign-aircraft.
- Roberts, K. (2010). Jets, Flags, and a New Cold War?: Demystifying Russia's Arctic Intentions. *International Journal*. 65(4): 957-976.
- Roberts, K. (2015) Why Russia will play by the rules in the Arctic. *Canadian Foreign Policy Journal*. 21(2): 112-128.
- Robertson, M. (1988). *Soviet Policy Towards Japan: An Analysis of Trends in the 1970s and 1980s*. Cambridge, U.K.: Cambridge University Press.
- Roussel, S. & F. Perreault. (2009). Le retour du Canada dans l'Arctique ou le parfait alignement des logiques stratégiques, politiques et idéologiques. In M. Fahmy (dir.). *L'état du Québec 2009* (pp. 574-579). Montréal: Fidès.
- RT News. (2014, August 27). Canada to Russia: 'We will defend our sovereignty in the Arctic'. Retrieved from <https://www.rt.com/news/182992-canada-sovereignty-arctic-russia/>.
- RT News. (2015, March 4). Russian bombers disrupted commercial airline flights – Irish authorities. Retrieved from <https://www.rt.com/news/237533-russian-bombers-ireland-disruption/>.
- Scotsman. (2010, March 24). RAF catches Russian bombers in UK airspace. www.scotsman.com/news/raf-catches-russian-bombers-in-uk-airspace-1-796434.
- Senate of Canada. (2011, March). Sovereignty and Security in Canada's Arctic: Interim Report. *Standing Senate Committee on National Security and Defence*. Ottawa. Retrieved from www.parl.gc.ca/Content/SEN/Committee/403/defe/rep/rep07mar11-e.pdf.
- Sergunin, A., (2015, September 21). Russia and the U.S. in the Arctic: A New Confrontation or Damage Limitation? *Valdai Discussion Club*. Retrieved from <http://valdaiclub.com/opinion/highlights/RussiaandtheUSintheArcticANewConfrontationorDamageLimitation/>.
- Sergunin, A. and V. Konyshv (2015). *Russia in the Arctic: Hard Or Soft Power?* New York: Columbia University Press.
- Sergunin, A. and V. Konyshv (2015b). Russian Military Activities in the Arctic: Myths & Realities. Commentary. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds.) *Arctic Yearbook 2015* (pp. 404-407). Akureyri, Iceland. Northern Research Forum. Retrieved from <https://www.joomag.com/magazine/arctic-yearbook-2015/0357456001446028961?short>.
- Sky News (2014, April 24). RAF Jet Chases Russian Planes Away From UK. Retrieved from <http://news.sky.com/story/1247985/raf-jet-chases-russian-planes-away-from-uk>.
- Sky News 2015 (September 11). RAF Intercepts Russian Jets Near UK Airspace. Retrieved from <http://news.sky.com/story/1550997/raf-intercepts-russian-jets-near-uk-airspace>.
- Stadnyk, J. (2015, November 9). Major, Public Affairs Advisor to the NORAD Deputy Commander NORAD and USNORTHCOM. Personal Communication.
- Standing Committee on National Defence. (2016, March 22). Audition of RAdm Scott Bishop (Director General, International Security Policy, Department of National Defence). Retrieved from www.parl.gc.ca/HousePublications/Publication.aspx?Language=e&Mode=1&Parl=42&Ses=1&DocId=8166596.

- STV News. (2010, n/a). RAF Leuchars jets intercept Russian bombers near Stornoway, <http://news.stv.tv/highlands-islands/165643-raf-leuchars-jets-intercept-russian-bombers-naer-stornoway/>.
- Tayloe, S. (2015). Projecting power in the Arctic: the Russian scramble for energy, power, and prestige in the High North. *Pepperdine Policy Rev.* 8(1). Retrieved from <http://digitalcommons.pepperdine.edu/ppr/vol8/iss1/4>.
- Teeple, N. (2010, Winter). A Brief History of Intrusions into the Canadian Arctic. *Canadian Army Journal.* 12(3): 45-68.
- U.S. Northern Command. (2015, July 5). Russia – Long Range Aviation Intercept. Reply to a Freedom of Information request. Peterson AFB, CO.
- USNI News. (2014, December 17). Russian Air Force Chief: U.S. Surveillance Flights Monitor Russia Daily. Retrieved from <http://news.usni.org/2014/12/17/russian-air-force-chief-u-s-surveillance-flights-monitor-russia-daily>.
- USNI News. (2015, February 10). West: NORAD Head Says Russia Increasing Arctic Long Range Air Patrols. Retrieved from <http://news.usni.org/2015/02/10/west-norad-head-says-russia-increasing-arctic-long-range-air-patrols>.
- Vancouver Sun. (2008, August 19). Canada to keep watch on Russia's Arctic activities. www.canada.com/vancouver/sun/story.html?id=a1f76815-b29e-492a-850b-b95bdd75492e.
- WSJ – Wall Street Journal (2014, December 24). Russia Denounces Increased NATO Air Patrols. Retrieved from www.wsj.com/articles/russia-denounces-increased-nato-air-patrols-1419446913.
- Wilson Rowe, E. & H. Blakkisrud. (2014) A New Kind of Arctic Power? Russia's Policy Discourses and Diplomatic Practices in the Circumpolar North. *Geopolitics.* 19(1): 66-85.
- Zysk, K. (2011, July). The Evolving Arctic Security environment: an assessment. In S. Blank (ed.). *Russia in the Arctic. Strategic Studies Institute Monograph* (pp. 91-141). Retrieved from www.strategicstudiesinstitute.army.mil/pdf/files/PUB1073.pdf.
- Zysk, K. (2011b). Military Aspects of Russia's Arctic Policy: Hard Power and Natural Resources. In J. Kraska (ed.), *Arctic Security in an Age of Climate Change* (pp. 85-107). Cambridge: Cambridge University Press.

The Arctic as a Geopolitical Bond among the European Union, Norway & Russia

Matthaios Melas

If there is a place of common ground between the European Union and Russia, it is on the fields of energy, environment and migration. The Arctic binds together the EU with its two major energy suppliers, Norway and Russia. In 2014 the EU imported almost 70% of its total natural gas from Norway and Russia and 44% of its crude oil. The EU, Norway and Russia are also bound together by common efforts to protect the Arctic environment. Moreover, the recent migration crisis in Europe not only rattled the foundations of the Schengen treaty but also raised tensions between Norway and Russia especially at their borders. After two world wars, Europe has sought for stability. Moving forward from the difficult past, geopolitical issues were put to the side, but it was Ukraine that violently reintroduced geopolitics in European international relations. This paper seeks to analyse the common – and not so common – ground of these three major actors on contemporary Arctic issues. Energy exploitation and distribution, environmental protection and migration flows are the new geopolitical elements of the “European” Arctic. With my research, I want to present the Arctic as an example of cooperation and mutual understanding rather than a boiling pot. I am going to argue that violence is not inherent to geopolitics but, as the name itself implies, geopolitics explain how politics and international relations are affected by both human and physical geographical factors. The last point that I will make is that geopolitical analysis is crucial for identifying important underlying issues that could lead to political, military or economic destabilisation if disregarded.

Introduction

The purpose of this article is to examine the emerging geopolitics of the “European” Arctic as demonstrated through energy, environment and migration. The Arctic environment is harsh and unique compared to the rest of the European continent. However, in the last decade, the decrease in sea ice and the development of new technologies have enhanced human accessibility to the living and non-living resources of the Arctic. Moreover, new navigation routes, the Northwest Passage and the Northern Sea Route, are coming forth. Despite the fact that the Arctic is considered one of the most unspoiled and untouched regions on Earth, it is facing increasing risks both from climate change and human activities. It is time to put aside the reluctance¹ to use geopolitical analysis on contemporary issues, as once again geopolitics could help to foresee and address upcoming adverse developments before they escalate.

After the end of WWII and successful cooperation in Arctic waters between the U.S. and Canada

for shipping bulk supplies of military and humanitarian cargoes via the Northern Sea Route to support the Soviet Union and the Allies against the Axis, the Arctic became the centre of the Cold-war confrontation. The two adversaries deployed their state-of-the-art army units; submarines and nuclear deterrence facilities were developed in the Arctic, as it was the shortest route between them. The Arctic was valued for its strategic utility, and neither side valued sovereignty of it (Mychajlyszyn, 2008; Beixi, 2016). Soon after the end of the Cold War though, the disputes in the Arctic were forgotten and cooperation thrived among its nations² and indigenous populations. In the last twenty years the potential for conflict in the Arctic has risen due to increased accessibility of its abundant resources, climate change, migration flows and the increasing global interest for the region and its resources (Heininen, 2011; Østerud & Hønneland, 2014).

Norway, despite being a small country in terms of population and territory relative to the EU and Russia, is a major actor in the Arctic compared with Iceland, Sweden, Denmark and Finland, with more than 470,000 of its population living above the Arctic Circle. Furthermore, it has strategic territories like the Svalbard Archipelago and the island of Jan Mayen which grant to Norway a maritime area in the Arctic of about 1,500,000 km², equal to the area of Germany, France and Spain combined (Arctic Council, 2015b). Additionally, it is a major actor concerning its abundant energy reserves and its exports to the EU. Norway is the third largest exporter of natural gas and oil after Saudi Arabia and Russia. 31% of all gas imports of the EU and 11% of all oil imports came from Norway in 2012. From 2004 until 2014 Norway was consistently the second largest supplier of natural gas and oil to the European Union (European Commission, 2016b; Eurostat, 2016b).

The word “geopolitics” is the combination of the Greek words for “*land/earth*” (γη) and “*politic*” (πολιτική). Put simply, geopolitics deals with the impact of human and physical geography on international politics and relations (Devetak, 2012: 492). In this study, the “*land/earth*” factor consists of two components. On one hand is the Arctic, which, strictly geographically, could be defined as the area north of the Arctic Circle – 66° 33’ 39” North. On the other hand is climate change. Climate change has a bifunctional role in this case, as it is not only a geographical aspect but also the catalyst for emerging international relations and security studies, as it facilitates the exploration and the exploitation of Arctic resources, which under different (colder) conditions, would be inaccessible. But now the Arctic is melting, it is melting fast, and abundant fossil fuel resources are at the sovereign states’ fingertips. Concerning the “*political*” aspects of this study, the factors that are emerging extend not only among the Arctic rim states – Norway, Russia, USA, Canada and Denmark³– but further south to actors like China, Japan, India and the European Union (EU). These actors are very keen to exploit the new energy potential of the Arctic. Recent estimations revealed that the Arctic holds about 30% of the world’s undiscovered natural gas and 13% of undiscovered oil (USGS, 2008; Gautier, et al., 2009; Hong, 2012). However, these resources and the processes of extraction and distribution are mutually dependent on developments miles away from the Arctic. The clearest example of such bilateral reliance is the annexation of Crimea from Russia on March 18th, 2014 (Walker & Traynor, 2014; BBC, 2014), which was followed by sanctions from the EU on Russia on July 2nd, 2014 (European Council, 2014), after a list of sanctions from the US was implemented in March 2014 (U.S. Department of State, 2014). These developments hindered Russia’s plans for the Yamal LNG⁴ mega-project, as the Russian companies were in great need of European and US technology, knowledge and funding (Vazard, 2014a; Vazard, 2014b; Marson & Williams, 2015; Reilly, 2015; Mäe, 2016). As a consequence, Russian firms leant on Chinese banks and funds for financial support (Kuersten, 2015). Novatek,

the major shareholder of the Yamal LNG project, ensured funding for the project from two Chinese banks. The Export-Import Bank of China and the China Development Bank signed two 15-year loans, for €9.34bn and €1.3bn (Farchy, 2016; Yamal LNG, 2016). This relatively simple example outlines nicely how contemporary geopolitics function. Ongoing climate change provides access to untapped resources by the shrinking of the sea ice, and actors from all over the globe are gathering around the Arctic waters, seeking their share on these resources. Arctic geopolitics are starting to affect areas further away from the geographical Arctic Circle, not only the EU and its sanctions but also countries like China, which are willing to fund risky infrastructures in order to fulfil their energy demands. So, the emerging geopolitics of the Arctic are advancing to global geopolitics.

In this paper, I present how the EU, Norway and Russia are geopolitically bound by three major Arctic matters. The bond is so deep and strong that it could be argued that in the fields of energy, environment and migration these actors could comprise a security complex “whose major security perceptions and concerns are so interlinked that their national⁵ security problems cannot reasonably be analysed or resolved apart from one another” (Buzan, Waever, & de Wilde, 1998: 12). The article is divided into three parts. In the first part, the aspect of energy is analysed as one of the three major geopolitical bonds. Energy extraction in the Arctic is a crucial test that humanity is about to win against the relentless environment of the High North. Extraction of energy and its distribution are equally significant. As there are more and more political and technological issues around the distribution of energy, geopolitics offer great opportunities for in depth analysis of the element of energy. Arctic environmental aspects were high in the policy agenda of the EU (European Parliament, 2008) and Norway (Norwegian Ministry of Climate and Environment, 2001). Russia also contributed to the protection of the Arctic environment in 2011 by giving 10 million Euros for pollution prevention initiatives (Arctic Council, 2011). The efforts for the Arctic’s environmental protection are continuous. In 2015 for example the Arctic states⁶ and indigenous organisations⁷ agreed on a common effort to reduce black carbon and methane emissions, which directly affect the Arctic environment (Arctic Council, 2015a). Last but not least, the so-called “polar route,”⁸ used mainly by refugees fleeing the civil war in Syria, but also by refugees and migrants from other countries of Asia and Africa, depicts clearly the size of today’s globalisation. Furthermore, this extreme refugee route is an addition to the well-known fact that in the contemporary world, the institutions of the traditional state of the 20th century have been eroded and, as a result, known concepts, such as borders, territories and distance are collapsing faster than predicted (Huysmans, 1997: 350-351; Ó Tuathail, 1998: 16-34; Huliaras, 2004). For example, where the iron curtain once stood, one could now cross on a bike without any border control. Nowadays, the threats come from global factors, such as terrorism, piracy, drugs trade, human trafficking and cross-border environmental risks, to name a few. In the 21st century there are many threats that do not take into account borders such as environmental disasters, (i.e. a potential oil spill) or irregular migration at the Arctic. On the other hand, cooperation for the development of vulnerable populations and protection of the environment, are reasons to put disputes aside. Geopolitics, which is fundamentally engaged with borders, resources, flows, territories and identities, could provide the means for critical analysis and understanding on places and communities (Doss, 2007: 3).

First Geopolitical Bond: Energy

During the past decade, the difficulties concerning extraction, processing and distribution of energy from the Arctic have decreased. Nevertheless, the movement of large ice chunks and permanent thick ice can still cause irreversible damage to drilling platforms, offshore rigs, pipelines and ships (Hilburn, 2008; Johnston, 2010). This increases the cost of exploitation, and if the cost of overcoming the Arctic's drilling challenges is greater than the profit of the production, the interested parties are not going to venture in exploitation. The Arctic is still a hard place for extraction works. In more detail, the main challenges are the isolated locations and the relentless weather, the complexity of the surface (icy areas), the inadequacy of equipment and infrastructure, the high costs of any operation, seasonal restrictions on drilling activity, the insufficient infrastructure to counter serious accidents, the lack of technology that has been tested under Arctic conditions, the environmental laws for the preservation of flora and fauna and the lengthy procedures for acquiring an exploration and production licence (Terrapinn, 2013). For example, in 2015 with the plunge in oil prices, Royal Dutch Shell abandoned oil extraction from Alaska's Arctic waters, and Statoil gave up its project in West Greenland (Yeo, 2015; Griffiths, 2015).

Additionally, Arctic drilling is the second most expensive way of oil extraction after that of oil sands. It is worth mentioning that in 2015, when the price per barrel was \$37, the break-even price of known but undeveloped oil reservoirs was around \$44 for an onshore, Middle East field, around \$62 for an offshore, deep-water field and \$78.6 for an Arctic one (Bourne Jr., 2016). Another representative example is the Shtokman field, which started being developed in 2008 with the cooperation of the Russian Gazprom with a stake of 51%, the Norwegian Statoil (24%) and the French Total (25%). It is one of the world's biggest deposits of natural gas [3.9 trillion cubic metres of gas and 56 million tons of gas condensate (Gazprom, 2016c)], but remains underdeveloped because of low energy prices, the shale gas revolution in the US and the sanctions of the US and EU on Russia. Signs of reluctance over the project funding and exploitation began in 2009 (Truscott, 2009; Pettersen, 2009), only to be verified in August 2012 with the freezing of the project and the withdrawal of Statoil (Chazan & Belton, 2012). Total sold its share as well in April 2015, making Gazprom the only stakeholder (Shtokman Development AG, 2015). The exploitation of the field was supposed to begin in 2013 but was postponed until 2015 with the first LNG deliveries estimated to be in 2016 (Chazan, 2009). President Vladimir Putin promised in 2012 that the field will start to operate before 2017 (Lenta.ru, 2012; Shtokman Development AG, 2012), but experts are arguing that the production will start no earlier than 2020 or even 2025, depending on the situation of the global oil and gas market (Sputnik, 2015; TASS, 2015). Even with huge difficulties like this in the Shtokman field, Russia has abundant oil and gas production in the Arctic region – onshore – from the Yamalo-Nenets Autonomous District with the main fields to be the Bovanenkovo, in Yamal Peninsula and the Prirazlomnoye oil field, the Yuzhno-Russkoye field, the Achimov deposits, the Zapolyarnoye and the Yamburg field in the rest of the District (Gazprom, 2016a). Natural gas from these fields comes towards Europe via the “SRTO – Torzhok” pipeline which ends up in the city of Torzhok. From there, via the “Nord Stream” and the “Yamal-Europe” pipelines, natural gas is delivered to Europe (Gazprom, 2016d; Gazprom 2016b; Gazprom, 2016e). Also, a liquefaction plant is being built on Yamal peninsula and LNG could be delivered from there to Europe whenever needed, using specifically designed ships (Staalesen A., 2015). Russia is also planning to deliver LNG to East Asia, thanks to the cooperation of the Chinese National Petroleum Corporation (CNPC) and Rosneft. Especially during the summer, the LNG ships could

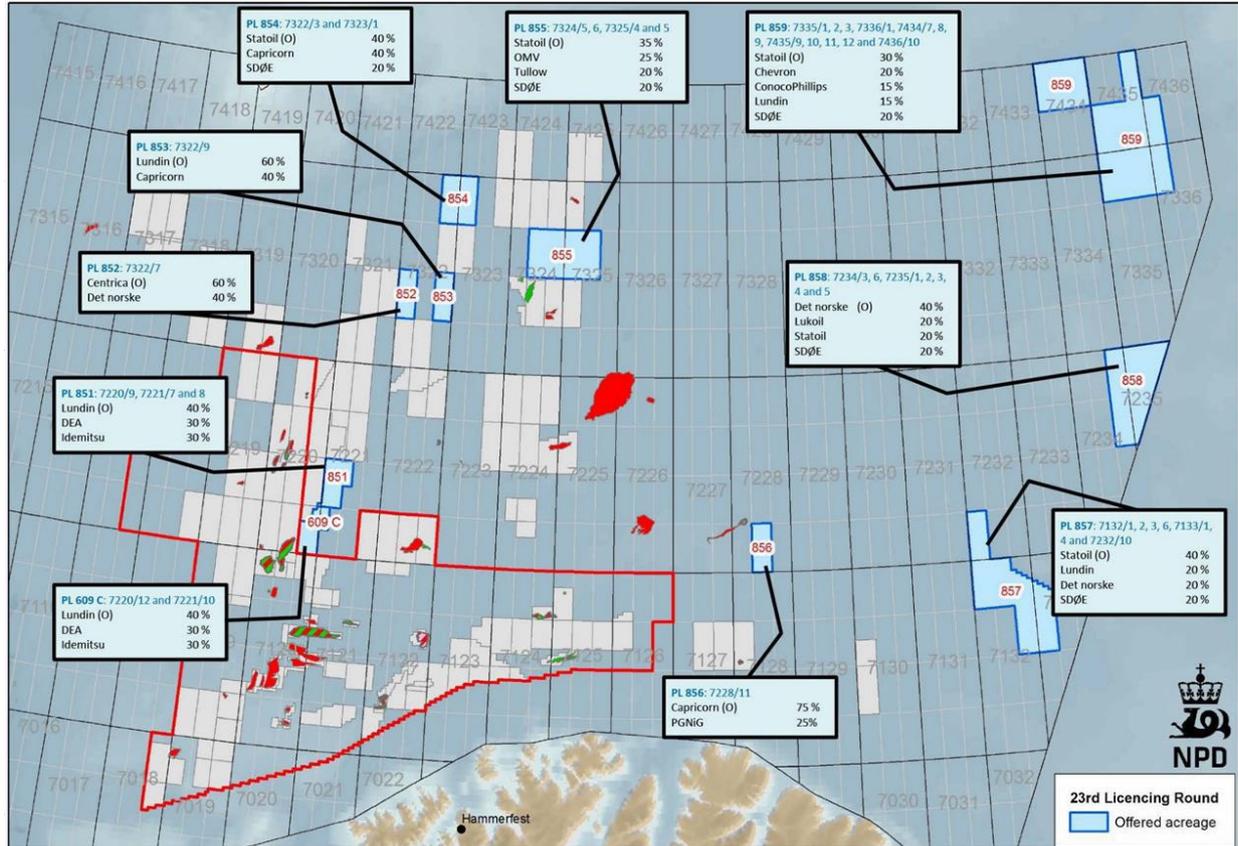
use the Northeast route to deliver LNG to China and Japan, as it will be ice free (Kelley, 2016). Japan is particularly keen on natural gas after the Fukushima disaster and Japanese officials believe that in the future the Arctic resources will be very important for their country (Iwata & Ma, 2014). The ongoing expansion of the Nord Stream with a twin pipeline, Nord Stream 2, which will double the capacity of the original Nord Stream, has already raised tensions among EU officials and transit countries.

The EU consumes 25% of the Norwegian and Russian Arctic's⁹ natural gas and oil production (Eurostat, 2015; Hossain, 2015). The rest of the gas and oil production goes to internal consumption and to other markets, mainly to East Asia. In 2012, Norway supplied 31% of total natural gas and 11% of crude oil imports of the EU, while Russia supplied 35% of total natural gas imports and 34% of crude oil. The 12 OPEC countries¹⁰ in combination delivered almost 40% of the oil imports of the EU in 2012, with Saudi Arabia, Libya, and Nigeria having the biggest individual share of around 8% each (European Commission, 2015b; Eurostat, 2016a). Thus, it is clear that Russia and Norway have a major role in the energy security of the EU as just the two of them together supplied almost 45% of the European oil imports, even more than the 12 OPEC countries. Concerning natural gas, the percentage of Russia and Norway combined is even bigger reaching 66% of the total EU imports with Algeria and Qatar to hold 13.6% and 8.5% respectively (Eurostat, 2016a). Regarding Norwegian Arctic production and infrastructure, on 28 September 2015, Norway completed the Polarled, a gas pipeline which is the first pipeline connecting the newly accessible Arctic gas fields of Aasta Hansteen with southern Norway and Europe. This new project enhances the status of Norway as a reliable gas supplier of Europe while at the same time, increases the energy security of the EU (Statoil, 2015a). Norway drills offshore in the Arctic, in the Barents from 2007, in the Snøhvit gas field (Statoil, 2015b). Additionally, on March 12th, 2016, the Goliat became the first oil field to start production in the Barents Sea (Sørheim, 2016; Eni Norge, 2016). The two fields are quite close to each other and this helps their cooperation. Snøhvit is located 140km northwest of the city of Hammerfest and the Goliat 85km in the same direction. On January 20th, 2015, Norway announced the 23rd licensing round for 57 blocks or parts of blocks, 3 of which are located in the Norwegian Sea and 54 in the Barents Sea (Norwegian Petroleum Directorate, 2015). The results were announced on May 18th, 2016, with 40 blocks to be awarded for exploitation in total (Norwegian Ministry of Petroleum and Energy, 2016a). Three blocks – PL857, PL858 & PL859 – in the Southeast Barents Sea are located in the previously contested area between Russia and Norway, which was resolved with the *“Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean”* (Kremlin, 2010a; Kremlin, 2010b; Norwegian Ministry of Foreign Affairs, 2010; Harding, 2010; Norwegian Office of the Prime Minister, 2010; The Kingdom of Norway and the Russian Federation, 2010; Rozhnov, 2010). An interesting development is that 20% of the licence of the PL858 block, which is situated along the borders with Russia, is awarded to the Russian private company Lukoil.

The greatest motive for the EU concerning its involvement in the Arctic is natural resources. It is well known that most of the energy consumed in the EU comes from Norway and Russia. The European Commission (EC) estimated at the beginning of the new millennium that by 2030 the energy dependence of the EU will reach 70%. Imported gas will account for nearly 70% of the total consumption of natural gas in the EU and the imported oil will account for nearly 90% of the total consumption of oil in the EU (European Commission, 2000). These numbers actually rose in 2007, with gas to reach 84% and oil to touch 93% of the imported dependence respectively

(European Commission, 2007). It is clear under this light how energy security grew so fast in the political agenda of the EU and now holds a position on the foreign policy agenda as well. Eurogas predicted in 2007 that by 2030 the EU will have to import 443 to 478 billion cubic meters (bcm) of natural gas per year to cover its needs –with 88 bcm at least to be imported from Norway– (Eurogas, 2007: 9). The prediction seems rational today as in 2015, the consumption of natural gas in the EU increased again after four years by 4.1%, to reach the total of 426.3 bcm (Eurogas, 2016).

Figure 1: The 23rd Licencing Round Results



Source: Norwegian Ministry of Petroleum and Energy, 2016b

The ongoing turbulence in oil production areas, like the militants in Nigeria delta, the political unrest in Venezuela, the ISIS infiltration in Libya and Canada’s wildfires, will probably increase oil and most likely also gas – prices (Johnson, 2016). It is clear that oil and gas prices have been connected with geopolitical matters and this is the reason for a predicted sharp rise in the coming winter. Under this light, the EU has to enhance its energy security and energy diversification. Norway’s new fields and pipelines are a reliable supply for Europe, while the new Nord Stream pipeline would ensure unhindered deliveries to the EU. What is more, sanctions concerning Arctic energy exploration and exploitation could be suspended as an example of good will from EU towards energy integration with Russia. Still, both parties have a mutual dependence, with Russia to seek a steady demand from EU in order to attract investors, while the EU seeks uninterrupted and economical energy deliveries from Russia. In this system, a potential EU cut off from Russia’s energy could have undesirable results, because if Russia has less stake in the system, it also has less to lose in disrupting it.

Second Geopolitical Bond: Environment

The protection of the fragile environment of the Arctic is a high priority for Norway and Russia. The EU may still lack the status of official Observer in the Arctic Council, but it is engaged in Arctic matters, even in a period when global awareness has moved to other affairs due to low oil prices, fewer Arctic shipments and the ongoing conflict in Ukraine. Nevertheless, there is no decline in interest in matters like climate change, environment and regional development. Additionally, the EU is a core actor in promoting collaboration and stability with Russia. Moreover, Europe acts beneficially for the Arctic as it sets stringent targets for its environmental Arctic policy (Østhagen & Raspotnik, 2015; European Commission, 2015a). The EU presented an integrated policy report in April 2016 that tries to engage all Arctic members in the environmental protection of the Arctic and provides ground for cooperation with Russia (European Commission, 2016a; Eriksson, 2016). Last but not least, the EU finances 30% of environmental projects in the remote Nenets Autonomous Okrug¹¹, specifically in the Amderma village. The target is the setup of four wind turbines that will make the village energy autonomous, environmentally friendly and create more jobs for the local population (Nenets Autonomous Okrug, 2016; Staalesen A., 2016b).

Russia lacks robust legislation for the protection of the Arctic. Of course, the risks to the environment from the Arctic's exploitation could never disappear, but they could be effectively managed under a coherent framework (Rice, 2013). Four specific gaps and their response measures have been identified in the Russian legislation. The first measure takes into consideration an "Expansion of the protected natural areas", adoption of *Measures of climate change adaptations for the Arctic territories* and a revision of *Response action related to oil spills and other contaminants as well as emergency and contingency cases*. The second measure, while it takes into consideration the *Foundations of the Russian Federation Policy in the Arctic until 2020 and Beyond* and the *Strategy of the Arctic Zone Development and National Security of the Russian Federation for the Period until 2020* documents, supports the development of coherent legislation in order to take into consideration all the varieties of harmful activities in the Arctic region. The third measure highlights the lack of targeted laws considering the protection of the Arctic's environment, and the inability of the existing laws to protect it. The last measure advocates the compulsory scientific validation of any project that might take place in the Arctic for minimizing the threat of pollution and contamination. Also the sharing of experience among Arctic states concerning Arctic projects is vital for almost every venture in this unique area (Kokorin, 2007; Gladun, 2015). The Russian government, in an attempt to draw the attention of the public to sustainable development, conservation of biological diversity and environmental security, will conduct "The Year of Ecology" in 2017 (Russian Ministry of Environment, 2016). However, green parties and Non-Governmental Organisations are still under the fear of prosecution in Russia (Staalesen A., 2016a).

On the other hand, Norway has published the *Norwegian Government's High North Strategy* and the *New Building Blocks in the North* reports in 2006 and 2009, respectively, in which environmental protection has a primary role (Norwegian Ministry of Foreign Affairs, 2006). Specifically, until 2025, Norway will focus on developing knowledge about climate and the environment in the High North, improving monitoring, emergency response and maritime safety systems in northern waters, promoting sustainable development of offshore petroleum and renewable marine resources, advocating onshore business development, and further development of the infrastructure in the north, continuing to exercise sovereignty firmly and strengthen cross-

border cooperation in the north and safeguarding the culture and livelihoods of indigenous peoples (Norwegian Ministry of Foreign Affairs, 2009). Since interest in geopolitics of the Arctic is rising, Norway updated its policy in 2014, stressing the significance of international cooperation, development of a knowledge-based business sector, knowledge development, infrastructure and emergency preparedness and environmental protection (Norwegian Ministry of Foreign Affairs, 2014). In accordance with the Sustainable Governance Indicators (SGI), Norway comes fourth out of 41 countries¹² concerning environmental policies, as the country has developed comprehensive regulatory systems and a big percentage of energy consumption comes from renewable sources (SGI, 2015). Comparing data provided by the Organization for Economic Cooperation and Development (OECD), one could see that carbon dioxide (CO₂) emissions¹³ measured as tonnes per capita were reduced by 15.3% in the EU and by 2.3% in Norway from the beginning of the new millennium to 2012. On the contrary, emissions increased by 7.6% in Russia and by a total of 11.4% across all OECD countries. Moreover, in the same time span, greenhouse gas (GHG) emissions¹⁴ were reduced by 14% and 12% in the EU and in Norway respectively, while in Russia and in OECD countries, they have increased by 14% and 11% respectively (OECD, 2016). It is clear that Russia falls behind concerning environmental protection but there is a mutual will among the three parties for enhancing that common purpose.

Third Geopolitical Bond: Migration

The Schengen treaty¹⁵ rattled under the intensity of migration flows that made EU officials and leaders of European countries struggle to find a solution for preserving the treaty intact. The first efforts began in August 2015 (EurActiv, 2015). Despite these actions, the Schengen treaty was on the verge of collapse in November 2015 (Holehouse, 2015). As Greece failed to take responsibility for controlling its external borders on behalf of the other Schengen States, it was threatened with expulsion from the Schengen zone. A three-month probation period was given in order to comply with the Schengen rules, while the EU helped Turkey and the Former Yugoslav Republic of Macedonia to reduce the migration flow, with a desirable outcome for the EU (Traynor, 2016; BBC, 2016a).

A part of the migration crisis in Europe took place in the Arctic region, mainly between late September 2015 and December 2015. A sharp increase was observed in September 2015 when 420 asylum seekers reached the Norwegian border crossing station of Storskog, the only legal crossing between Norway and Russia, 400 kilometres north of the Arctic Circle. The number is not big compared with the numbers in the Mediterranean Sea¹⁶, but is a considerable number for the Arctic region, as only few asylum seekers crossed the border between January and August 2015. Only five asylum seekers reached Storskog in 2014, whereas more than 600 had arrived by early October 2015 (Higgins, 2015). From August to December 2015, over 5,000 migrants and refugees crossed the Russian – Norwegian border, most from Syria and Afghanistan, but including others from over 20 different countries (Nilsen, 2015d). The reasons that such a long and difficult route was established could be the cost of human smuggling through the Mediterranean Sea¹⁷ and the fear of drowning, the building of fences on the borders of countries along the “Balkan or Aegean Route”¹⁸ and the temporary reintroduction of border controls by several European/Schengen countries.¹⁹ Norway does not belong to the EU, but is a member of the Schengen area, which allows travel to the EU without a visa.

On this Arctic border, a loophole has been exploited by human smugglers that allows refugees to cross from Russia to Norway on a bicycle, as Russia does not allow crossing on foot and Norway does not allow undocumented people to cross in automobiles (Standish, 2016). Norway warned the asylum seekers in October that they could be sent back to Russia, as many of them they had residence permits in Russia (Norwegian Ministry of Justice and Public Security, 2015a). In November, Norway passed a fast track procedure in order to reject asylum requests of migrants who had previously resided in Russia or who had Russian transit visas, and introduced border controls (Nilsen, 2015a; Norwegian Ministry of Justice and Public Security, 2015b). Finally, in December, Norway passed a legislation containing 40 legal amendments to current migration laws in order to deal with the ongoing situation, and 371 rejected asylum seekers were sent back on the same bikes that they used to enter, and 13 by bus (BBC, 2016b; Staalsen, 2015b; Norwegian Ministry of Justice and Public Security, 2015c). The reverse flow, from Norway to Russia, stopped after security concerns from the Russian side on January (Deutsche Welle, 2016), but eventually Russia accepted to receive in Moscow - by plane - almost 300 people with legal permits to stay in Russia in early February (Pettersen, 2016a).

After some reports that Russian border guards did not stop undocumented travellers during October (Nilsen, 2015b) and the abrupt stop of migrants heading to Storskog on November 30th, suspicions were raised about the role of Russia in the flow. What is more, the flow changed direction to Finland, a country which belongs both to the EU and to the Schengen treaty, only to also stop abruptly on March 4th. Norwegian, Finnish and EU officials suspected Russia of facilitating the establishment of these new routes because the Russian Federal Security Service (FSB) border guard unit²⁰ has the same inhibitory effect as the bad weather has in the Aegean Sea passage. The Arctic migration route is highly dependent on FSB, as the Russian borders and the adjacent roads are heavily militarised (Higgins, 2016). The Ukraine crisis could be in the background here as well. Russia could be using the migration flow as a power show to the already refugee-burdened EU and/or even as a political tool which would dissolve the unity of European countries concerning the economic sanctions against Russia that have resulted from the Ukraine crisis. In November, the Russian embassy in Norway argued that they strictly follow international law, and there is a well-established cooperation between the foreign ministries of Russia and Norway (Russian Embassy in Norway, 2015). Additionally, the Russian president, Vladimir Putin referred to the Arctic migration route in a speech to the board of the FSB meeting on February 2016, arguing that “We should tighten monitoring of the refugee flows coming into Russia or transiting onwards to European countries” (Bortnikov, 2016).

Joint actions among Norway, Russia and Finland dissolved the tensions on their common borders during the Arctic migration crisis, and the legal gaps that were uncovered have been addressed quite fast and comprehensively. However, it should not be neglected that migration is an ever-changing situation, and Russia had already warned about illegal trespassing from the beginning of November, as the FSB had already stopped 29 attempts of trespassing (Nilsen, 2015c). Furthermore, while Norway is building a 200m long and 3.5m tall fence at Storskog, migrants made their first try to cross the Russia-Norwegian border by sea, before they were stopped by FSB, in March 2016 (Nilsen, 2016; Staalesen A., 2016c). As the Arctic migration route is fading, cooperation among cross-border neighbouring regions is intensifying again. Transnational programs like the “*Kolarctiä*”²¹ funds transportation and border infrastructure but also large cultural events (Belkin, 2016; Myllylä & Cicero, 2015). The program is co-funded by the EU, with no effect

from the economic sanctions on Russia.

Conclusions

The concept of Arctic Geopolitics was forgotten, after the Cold War. New developments that concern EU territory, such as the Crimea crisis, the migration crisis, energy and environmental security, have brought geopolitics back into the spotlight in the past five years. Developments in the Arctic, such as the shrinking of sea ice, the presence of fossil fuels and new shipping routes, brought geopolitics into this region as well. As the Arctic becomes more and more militarised, compared with the post-Cold War period, many have argued that a new Cold War is coming to Arctic waters. Nevertheless, during the Cold War the Arctic was an area of interest not because of which country it belonged to but merely due to its proximity to both USA and Russia. Nowadays, the biggest concerns in the Arctic are not the military developments, but the cooperation to protect the environment and overcome the challenges in energy exploitation. There are already the *Search and Rescue Treaty* and the *Oil Spill Response Treaty*, signed in 2011 and 2013, respectively. After the Cold War, the security agenda has been broadened to other issues, more prominent than military conflict, such as human security, environmental security and energy security. Another parallelism that should be avoided is the comparison of the Arctic Ocean with the Mediterranean Sea in terms of geopolitics. Comparisons to the Mediterranean may have the same meaning as the “Balkanisation” has for continental areas. Balkanisation – and Mediterraneanisation? – is inherited with instability, border disputes, fatal interventions, drowning of thousands refugees and violations of national sovereignty.²² There is only one common political characteristic between the Arctic and the Mediterranean; both the USA and Turkey have not ratified the UNCLOS.²³ It would be preferable to build on the already robust, peaceful cooperation on the Arctic and then to try and disseminate the model rather than trying to downgrade all the important efforts that have led to the current cooperative status in relation to the Arctic.

In terms of energy, one could argue that it is not geopolitically ‘clever’ to transfer or spread the turbulence of one region – Crimea – to another – the Arctic – as the EU does due to implementation of sanctions which hinders Arctic energy exploration and exploitation. Of course, among the great powers involved in the Arctic terrain – the EU, USA and Russia – there are areas of cooperation and fields of conflict. The Arctic is a case that includes both. Cooperation in the field of energy should be promoted as in the fields of environment and migration. The Arctic and especially Arctic energy is rising in global geopolitics. This is an important reason for the EU to cooperate with Russia, despite ongoing conflicts between them.

As it was predicted in May 2016, the two parties – EU and Russia – extended their sanctions (Stratfor, 2016; Pettersen, 2016b) in late June-beginning of July. Russia on June 29th, 2016 announced the expansion of the counter-sanctions till December 31st, 2017 (TASS, 2016) and the EU extended the sanctions on Russia on July 1st, 2016 until January 1st, 2017 (European Council, 2016b). Taking these developments into account, the EU is not going to be a permanent Observer in the Arctic Council in the near future. With oil prices rising slowly, and with renewables not yet a sufficient source of energy, the EU has to push for cooperation with Russia on energy matters. The Arctic could be an exception to the EU’s sanctions in order to develop sufficient and environmentally friendly extraction fields. This will benefit the EU, ensuring its energy supplies despite global disruptions. While the demand of energy in Europe is inherently connected with

the energy on offer from Russia, cooperation is the only way to ensure mutual profits.

The Arctic migration route made clear that migrants and refugees will take whatever route is possible for fleeing war and poverty. Migration flows are as flexible as water; if you close one road they will just find another one; and to raise walls to stop migration it is like raising walls to protect from the rising sea levels. In the Arctic, due to cooperation among neighbouring countries, the flow was treated adequately, despite misunderstandings and temporary tensions. Nevertheless, the EU and Russia have to find solutions not only for the flows but also for the reasons that produce these flows, which means that they have to cooperate on establishing peace in Syria and tackle poverty and instability in the Middle East and Africa. Again, Arctic developments and fast reactions on migratory legislation could be a great example for the rest of Europe. Respect for the Arctic rim states' sovereignty and strong cooperation in the Arctic concerning environmental protection, search and rescue, human mobility, energy technology and infrastructure will not abolish security concerns, but could at least minimise them.

Notes

1. After WWII, geopolitics faded as it was connected with the Nazi regime. Although, many politicians, intellectuals and diplomats continued to produce geopolitical ideas and to act on the basis of geopolitical thinking even if they did not use the term explicitly. Critical geopolitics are a new scientific approach that seeks to uncover and explore contemporary, inherently connected, geographical and political aspects.
2. Norway, Sweden, Denmark, Finland, Russia, USA, Canada and Iceland.
3. It should be noted that even if Iceland, Sweden and Finland are Arctic states and permanent members at the Arctic Council, they have limited or no access at all to Arctic waters and energy resources.
4. Liquefied Natural Gas.
5. Although the EU is not a nation state, the main energy strategy of the EU focused on building interconnectors among its member states, increasing their energy resilience and acting as one, stronger, body.
6. Which are: Canada, the Kingdom of Denmark, the Republic of Finland, the Republic of Iceland, the Kingdom of Norway, the Russian Federation, the Kingdom of Sweden, and the United States of America.
7. Which are: The Arctic Athabaskan Council, the Aleut International Association, the Gwich'in Council International, the Inuit Circumpolar Council, the Russian Association of Indigenous Peoples of the North and the Saami Council.
8. Instead of following more common routes into Southern Europe, some migrants and refugees took a longer route to Norway and Finland via Russia.
9. The Norwegian and Russian Arctic. It includes all the extractions that are taking place 66°33'39' north from the equator.
10. Which are: The Islamic Republic of Iran, Iraq, Kuwait, Saudi Arabia, Venezuela, Qatar, Libya, the United Arab Emirates, Algeria, Nigeria, Ecuador, and Angola. Indonesia and

Gabon re-joined in 2016.

11. The Nenets Autonomous Okrug is a federal subject of Russia. Amderma is located on the coast of Kara Sea and near the Kara Strait.
12. A mix of EU and OECD countries.
13. Gross direct emissions from fuel combustion only.
14. The sum of seven gases that have direct effects on climate change: carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), chlorofluorocarbons (CFCs), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF₆).
15. Signed in 1985, it removes border checks within Europe. It means anyone, regardless of nationality, can move freely between member states without showing a passport or visa. Most of the EU states are members as well as Switzerland, Iceland and Norway (European Commission, 2016c).
16. By September 2015, almost 500.000 migrants and refugees arrived in Greece, Italy, Spain and Malta while more than 2.800 died or have been missed (International Organization for Migration, 2015; Frontex, 2015).
17. From Libya to Italy the Journey costs €4-5.500. From Turkey to Greece the price range is €1.8-2.700, and especially from Bodrum to Kos even less, ranging from €900-1.400. The overall cost estimated to €3-4 thousand in order to reach Germany or 10-12 thousand to reach England (Yeginsu & Hartocollis, 2015; Sly, 2015).
18. Initially, a fence rose between Greece and Turkey in 2012; Bulgaria followed with a fence on its borders with Turkey in 2014 (Hackwill, 2016). The Former Yugoslav Republic of Macedonia rose a fence at its borders with Greece in November 2015 while Hungary rose fences to its borders with Serbia and Croatia in October 2015 (Almukhtar, Keller, & Watkins, 2015).
19. Germany, Austria, Denmark, Sweden and Norway (European Council, 2016a).
20. A branch of Federal Security Service (FSB) of Russia tasked with patrol of the Russian border.
21. It involves eight northern regions from Norway, Russia, Finland and Sweden.
22. Cyprus Dichotomy, Mavi Marmara case, Imia Crisis, Greece's 6n.m. limitation, Arab springs, to name a few.
23. United Nations Convention on the Law of the Sea. It is the international agreement that resulted from the United Nations Conference on the Law of the Sea from 1973 to 1982 and entered into force on 16 November 1994 (UN, 1998).

References

- Almukhtar, S., Keller, J., & Watkins, D. (2015, October 16). Closing the Back Door to Europe. *The New York Times*.

- Arctic Council. (2011, October 06). Russia allocates EUR 10M towards Pollution Prevention Initiatives. Retrieved from <http://www.arctic-council.org/index.php/en/our-work2/8-news-%20and-events/61-psi-agreement-russia>.
- Arctic Council. (2015a, April 24). Annex 4. Iqaluit 2015 Sao Report to Ministers. Enhanced Black Carbon and Methane Emissions Reductions. An Arctic Council Framework for Action. Retrieved from https://oaarchive.arctic-council.org/bitstream/handle/11374/610/ACMMCA09_Iqaluit_2015_SAO_Report_Annex_4_%20TFBCM_Framework_Document.pdf?sequence=1&isAllowed=y.
- Arctic Council. (2015b, May 07). Arctic Council. Retrieved from <http://www.arctic-council.org/index.php/en/about-us/member-states/norway>.
- BBC. (2014, March 21). Ukraine: Putin signs Crimea annexation. Retrieved from <http://www.bbc.com/news/world-europe-26686949>.
- BBC. (2016a, January 27). Migrant crisis: EU threatens Greece over border controls. Retrieved from <http://www.bbc.com/news/world-europe-35416741>.
- BBC. (2016b, January 19). Migrant crisis: Norway begins deportations to Russia. Retrieved from <http://www.bbc.com/news/world-europe-35355727>.
- Beixi, D. (2016, March 30). Russia in Global Affairs. *Arctic Geopolitics*. Retrieved from <http://eng.globalaffairs.ru/number/Arctic-Geopolitics-18074>.
- Belkin, H. (2016, June 08). In Murmansk summed up cross-border cooperation program “Kolarctic.” *Russia 1*. Retrieved from <http://murman.tv/news/29708-v-murmanske-podveli-itogi-programmy-prigranichnogo-sotrudnichestva-kolarktiki.html>.
- Bortnikov, A. V. (2016, February 26). Board of the Federal Security Service meeting. *President of Russia*. Retrieved from <http://www.kremlin.ru/events/president/news/51397>.
- Bourne Jr, J. K. (2016, March 03). In the Arctic’s Cold Rush, There Are No Easy Profits. *National Geographic*. <http://www.nationalgeographic.com/magazine/2016/03/new-arctic-thawing-rapidly-circle-work-oil/>.
- Buzan, B., Waever, O., & de Wilde, J. (1998). *Security: A New Framework for Analysis*. London: Lynne Rienner.
- Chazan, G. (2009, November 19). Shtokman Production Delayed Two Years. *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/SB10001424052748704533904574545400709463742>.
- Chazan, G., & Belton, C. (2012, August 29). Gazprom freezes Arctic gas project. *Financial Times*. Retrieved from <http://www.ft.com/cms/s/0/ab331568-f1d8-11e1-bba3-00144feabdc0.html>.
- Deutsche Welle. (2016, January 24). Russia shuts Arctic border to Norway over 'security reasons'. *DW News*. Retrieved from <http://www.dw.com/en/russia-shuts-arctic-border-to-norway-over-security-reasons/a-19001593>.
- Devetak, R. (2012). Glossary of Terms. In R. Devetak, A. Burke, & J. George, *An Introduction to International Relation* (pp. 487-501). New York: Cambridge University Press.
- Dodds, K. (2007). *Geopolitics. A Very Short Introduction*. Gosport: Oxford University Press.
- Eni Norge. (2016, May 27). Facts. <http://www.eninorge.com/en/field-development/goliat/facts/>.
- Eriksson, A. (2016, April 27). EU's Arctic policy targets environment, Russia. *EU Observer*. Retrieved from <https://euobserver.com/nordic/133240>.

- EurActiv. (2015, August 24). Schengen in danger, Germany warns. *EurActiv.com*. Retrieved from <http://www.euractiv.com/section/justice-home-affairs/news/schengen-in-danger-germany-warns/>.
- Eurogas. (2007). *Long Term Outlook for Gas Demand and Supply 2007 - 2030*. Brussel: Eurogas.
- Eurogas. (2016). *Gas demand in EU rises for the first time in four years, according to new Eurogas data*. Brussels: Eurogass.
- European Commission. (2000, December 04). Green Paper - Towards a European strategy for the security of energy supply /* COM/2000/0769 final */. Retrieved from <http://eur-lex.europa.eu/legal-content/en/TXT/?uri=celex%3A52000DC0769>.
- European Commission. (2007, January 10). *Communication from the Commission to the European Council and the European Parliament - An energy policy for Europe {SEC(2007) 12} /* COM/2007/0001 final */*. Retrieved from <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=URISERV%3A127067>.
- European Commission. (2015a, November 19). *Arctic: The Changing Arctic Environment*. Retrieved from European Commission: Environment http://ec.europa.eu/environment/international_issues/arctic_en.htm.
- European Commission. (2015b, December 05). *Supplier countries*. Retrieved from <http://ec.europa.eu/energy/en/node/11>.
- European Commission. (2016a). *An integrated European Union policy for the Arctic*. Brussels: European Commission.
- European Commission. (2016b, September 08). European Commission Energy. Retrieved from <https://ec.europa.eu/energy/en/topics/imports-and-secure-supplies/supplier-countries>.
- European Commission. (2016c, January 29). Schengen Area. *European Commission*. Retrieved from http://ec.europa.eu/dgs/home-affairs/what-we-do/policies/borders-and-visas/schengen/index_en.htm.
- European Council. (2014). COUNCIL REGULATION (EU) No 833/2014 of 31 July 2014 concerning restrictive measures in view of Russia's actions destabilising the situation in Ukraine. *Official Journal of the European Union*, 1-16.
- European Council. (2016a). *Council Implementing Decision setting out a Recommendation for temporary internal border control in exceptional circumstances putting the overall functioning of the Schengen area at risk*. Brussels: General Secretariat of the European Council.
- European Council. (2016b, July 01). Russia: EU prolongs economic sanctions by six months. Retrieved from <http://www.consilium.europa.eu/en/press/press-releases/2016/07/01-russia-sanctions/>.
- European Parliament. (2008, October 9). *European Parliament resolution of 9 October 2008 on Arctic governance*. Retrieved from <http://www.europarl.europa.eu/sides/getDoc.do?type=TA&language=EN&reference=P6-TA-%202008-474>.
- Eurostat. (2015, August 19). Main origin of primary energy imports, EU-28, 2003–13 (% of extra EU-28 imports)..
- Eurostat. (2016a, July 28). Main origin of primary energy imports, EU-28, 2004–14 (% of extra EU-28 imports). *Eurostat Statistics Explained*. [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Main_origin_of_primary_energy_imports,_EU-28,_2004%E2%80%9314_\(%25_of_extra_EU-28_imports\)_YB16.png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Main_origin_of_primary_energy_imports,_EU-28,_2004%E2%80%9314_(%25_of_extra_EU-28_imports)_YB16.png).

- Eurostat. (2016b, July 29). Energy production and imports. *Eurostat Statistics Explained*. Retrieved from http://ec.europa.eu/eurostat/statistics-explained/index.php/Energy_production_and_imports.
- Farchy, J. (2016, April 29). Chinese lend \$12bn for gas plant in Russian Arctic. *Financial Times, Oil & Gas*. Retrieved from <http://www.ft.com/cms/s/0/4ca8886e-0e14-11e6-ad80-67655613c2d6.html#axzz4Jf3qnWPf>.
- Frontex. (2015, September 09). More than 500.000 Migrants Detected at EU External Borders so far this Year. *Frontex*. Retrieved from <http://frontex.europa.eu/news/more-than-500-000-migrants-%20detected-at-eu-external-borders-so-far-this-year-fGa82v>.
- Gautier, D. L., Bird, K. J., Charpentier, R. R., Grantz, A., Klett, T. R., Houseknecht, D. W., . . . Wandrey, C. J. (2009). Assessment of Undiscovered Oil and Gas in the Arctic. *Science*, 324(5931): 1175-1179.
- Gazprom. (2016a, May 27). Fields. *Gazprom*. Retrieved from <http://www.gazprom.com/about/production/projects/deposits/>.
- Gazprom. (2016b, May 27). Nord Stream. *Gazprom*. Retrieved from <http://www.gazprom.com/about/production/projects/pipelines/active/nord-stream/>.
- Gazprom. (2016c, May 28). Shtokman. *Gazprom*. Retrieved from <http://www.gazprom.com/about/production/projects/deposits/shp/>.
- Gazprom. (2016d, May 27). SRTO – Torzhok. *Gazprom*. Retrieved from <http://www.gazprom.com/about/production/projects/pipelines/active/srto-torzhok/>.
- Gazprom. (2016e, May 27). Yamal – Europe. *Gazprom*. Retrieved from <http://www.gazprom.com/about/production/projects/pipelines/active/yamal-evropa/>.
- Gladun, E. (2015). Environmental Protection of the Arctic Region: Effective Mechanisms of Legal Regulation. *Russian Law Journal*, III(1): 93-109.
- Griffiths, I. (2015, October 29). Shell profits plunge on Arctic drilling retreat and Canadian write-offs. *The Guardian*. Retrieved from <https://www.theguardian.com/business/2015/oct/29/shell-profits-arctic-drilling-retreat-canadian-write-offs>.
- Hackwill, R. (2016, February 07). More problems at FYROM-Greek border slows refugees' journey north. *Euronews*. Retrieved from <http://www.euronews.com/2016/02/07/more-problems-at-fyrom-greek-border-slows-refugees-journey-north/>.
- Harding, L. (2010, September 15). Russia and Norway resolve Arctic border dispute. *The Guardian*. Retrieved from <http://www.theguardian.com/world/2010/sep/15/russia-norway-arctic-border-dispute>.
- Heininen, L. (2011). The end of the post-Cold War in the Arctic. *NGP Yearbook*, 40(4): 31-42.
- Higgins, A. (2015, October 9). Avoiding Risky Seas, Migrants Reach Europe With an Arctic Bike Ride. *The New York Times*.
- Higgins, A. (2016, April 02). E.U. Suspects Russian Agenda in Migrants' Shifting Arctic Route. *The New York Times*.
- Hilburn, M. (2008). Trans-Arctic Shipping? *Sea Power*, 51(8): 34-36.
- Holehouse, M. (2015, November 13). Migrant crisis: European Council president Tusk warns Schengen on brink of collapse. *The Telegraph*. Retrieved from <http://www.telegraph.co.uk/news/worldnews/europe/eu/11991098/Migrant-crisis-Donald-Tusk-warns-that-Schengen-is-on-brink-of-collapse-latest-news.html>.

- Hong, N. (2012). The energy factor in the Arctic dispute: a pathway to conflict or cooperation? *Journal of World Energy Law & Business*, 5(1): 13-26.
- Hossain, K. (2015). EU Engagement in the Arctic: Do the Policy Responses from the Arctic States Recognise the EU as a Legitimate Stakeholder? *Arctic Review on Law and Politics*, 6(2): 89-110.
- Huliaras, A. (2004). *Geographical Myths of International Politics*. Athens: ROES.
- Huysmans, J. (1997). James Der Derian. In I. B. Neumann, & O. Wæver, *The Future of International Relations* (pp. 337-358). New York: Routledge.
- International Organization for Migration. (2015). *Mediterranean Update. Missing Migrants Project 15 September 2015*. London: International Organization for Migration.
- Iwata, M., & W. Ma. (2014, July 09). Shipping Firms to Add Arctic LNG Route. *The Wall Street Journal*. Retrieved from <http://www.wsj.com/articles/china-japan-shippers-to-launch-arctic-lng-route-1404905617>.
- Johnson, K. (2016, June 14). The Era of Cheap Oil is Coming to an End. *Foreign Policy*. Retrieved from <http://foreignpolicy.com/2016/06/14/the-era-of-cheap-oil-is-coming-to-an-end/>.
- Johnston, P. F. (2010). Arctic Energy Resources and Global Energy Security. *Journal of Military and Strategic Studies*, 12(2): 1-21.
- Kelley, J.-D. (2016, April 19). *What is Russia's East Asian Arctic Strategy?*. *New Century GeoStrategist*. Retrieved from <http://www.newcenturygeostrat.org/what-is-russias-east-asian-arctic-strategy/>
- Kokorin, A. (2007, November 24). WWF Global. Protecting the Russian Arctic. Retrieved from http://wwf.panda.org/who_we_are/wwf_offices/russia/index.cfm?uProjectID=RU0127.
- Kremlin, Russian Federation. (2010a, April 27). Russia and Norway are close to a final solution on maritime delimitation. Retrieved from <http://en.kremlin.ru/events/president/news/48815>.
- Kremlin, Russian Federation. (2010b, September 15). Russia and Norway have signed a treaty on the sea borders and on cooperation in the northern seas. Retrieved from <http://en.kremlin.ru/events/president/news/8921>.
- Kuersten, A. (2015, January 03). Russian Sanctions, China, and the Arctic. *The Diplomat*. Retrieved from <http://thediplomat.com/2015/01/russian-sanctions-china-and-the-arctic/>.
- Lenta.ru. (2012, October 31). Путин пообещал запустить Штокман до 2017 года (Putin has promised to launch Shtokman until 2017). Lenta.ru. Retrieved from <https://lenta.ru/news/2012/10/31/putin/>.
- Mäe, A. (2016). *Impact of sanctions on the Russian oil sector*. Tallinn: Estonian Foreign Policy Institute.
- Marson, J., & Williams, S. (2015, August 27). Sanctions Bite Massive Gas Project in Russian Arctic. *The Wall Street Journal*.
- Mychajlyszyn, N. (2008, October 24). The Arctic: Geopolitical Issues. *Parliament of Canada*. Retrieved from <http://www.lop.parl.gc.ca/content/lop/researchpublications/prb0806-e.htm>.
- Myllylä, M., & Cicero, V. (2015). Information about 51 Kolarctic ENPI CBC Projects. Luleå: Kolarctic ENPI CBC programme in cooperation with Yours communication.
- Nenets Autonomous Okrug. (2016, June 09). Work on the installation of wind-diesel complex in Amderma completed this summer (Работы по монтажу ветродизельного комплекса в Амдерме завершат этим летом). *Nenets Autonomous Okrug*. Retrieved from <http://adm-nao.ru/press/government/10772/>.

- Nilsen, T. (2015a, November 26). Norway introduces border control. *The independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/borders/2015/11/norway-introduces-border-control>.
- Nilsen, T. (2015b, October 26). Refugees have started to walk towards the Norwegian border. *The independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/2015/10/refugees-have-started-walk-towards-norwegian-border>.
- Nilsen, T. (2015c, November 03). Russia warns against illegal border-crossings. *The Independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/borders/2015/11/russia-warns-against-illegal-border-crossings>.
- Nilsen, T. (2015d, December 01). Second day without migrants. *The Independent Barents Observer*. Retrieved from <http://www.thebarentsobserver.com/borders/2015/12/second-day-without-migrants>.
- Nilsen, T. (2016, April 29). Norway erects security fence on border to Russia. *The Independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/borders/2016/04/norway-erects-security-fence-border-russia>.
- Norwegian Ministry of Climate and Environment. (2001, June 15). Svalbard Environmental Protection Act. Retrieved from <https://www.regjeringen.no/en/dokumenter/svalbard-environmental-protection-act/id173945/#related>.
- Norwegian Ministry of Foreign Affairs. (2006). The Norwegian Government's High North Strategy. Retrieved from <https://www.regjeringen.no/globalassets/upload/UD/Vedlegg/strategien.pdf>.
- Norwegian Ministry of Foreign Affairs. (2009). New Building Blocks in the North. The next Step in the Government's High North Strategy. Retrieved from https://www.regjeringen.no/globalassets/upload/ud/vedlegg/nordomradene/new_building_blocks_in_the_north.pdf.
- Norwegian Ministry of Foreign Affairs. (2010, September 23). Frequently Asked Questions: The Treaty between Norway and Russia concerning maritime delimitation and cooperation in the Barents Sea and the Arctic Ocean. Retrieved from http://https://www.regjeringen.no/en/topics/foreign-%20affairs/international-law/innsikt_delelinje/questions/id614010/.
- Norwegian Ministry of Foreign Affairs. (2014). Norway's Arctic Policy. Retrieved from https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/nord/nordkloden_en.pdf.
- Norwegian Ministry of Justice and Public Security. (2015a, October 20). Asylum seekers can be sent back to Russia. Retrieved from <https://www.regjeringen.no/en/aktuelt/asylum-seekers-can-be-sent-back-to-russia/id2458499/>.
- Norwegian Ministry of Justice and Public Security. (2015b, November 25). Fast-track procedure for asylum seekers arriving via Russia. Retrieved from <https://www.regjeringen.no/en/aktuelt/fast-track-procedure-for-asylum-seekers-arriving-via-russia/id2464084/>.
- Norwegian Ministry of Justice and Public Security. (2015c, December 29). Measures to address the refugee crisis. Retrieved from <https://www.regjeringen.no/en/aktuelt/measures-to-address-the-refugee-crisis/id2469066/>.

- Norwegian Ministry of Petroleum and Energy. (2016a, May 18). Announcement 23rd licensing round awards. Retrieved from <https://www.regjeringen.no/no/aktuelt/announcement-23rd-licensing-round-awards/id2500936/>.
- Norwegian Ministry of Petroleum and Energy. (2016b, May 18). Announcement 23rd licensing round awards. Retrieved from <https://www.regjeringen.no/contentassets/4e066dda74c34a288ffef0d1b7c15198/vedlegg-1-kart-%20over-tildelte-utvinningstillatelser-eng.pdf>.
- Norwegian Office of the Prime Minister. (2010, September 15). Treaty on maritime delimitation and cooperation in the Barents Sea and the Arctic Ocean signed today. Retrieved from <https://www.regjeringen.no/en/aktuelt/treaty/id614254/>.
- Norwegian Petroleum Directorate. (2015, January 20). 23rd licensing round - announcement. Retrieved from <http://www.npd.no/en/Topics/Production-licences/Theme-articles/Licensing-rounds/23rd-Licensing-round/Announcement/>.
- Ó Tuathail, G. (1998). Postmodern Geopolitics? The modern geopolitical imagination and beyond. In G. Ó Tuathail, & S. Dalby, *Rethinking Geopolitics* (pp. 16-38). London: Routledge.
- OECD. (2016, June 09). *Air and GHG emissions. Indicators*. doi:10.1787/93d10cf7-en
- Østerud, Ø., & G. Hønneland. (2014). Geopolitics and International Governance in the Arctic. *Arctic Review on Law and Politics*. 5(2): 156-176.
- Østhagen, A., & Raspotnik, A. (2015, April 22). The EU's Arctic Policy: Eventually Getting Somewhere? Retrieved from <http://www.thearcticinstitute.org/2015/04/042215-EU-Arctic-Policy-Getting-Somewhere.html>.
- Pettersen, T. (2009, November 26). No need for haste on the Shtokman project. *Barents Observer*. <http://barentsobserver.com/en/sections/russia/no-need-haste-shtokman-project>.
- Pettersen, T. (2016a, February 08). Russia opens borders for migrants with residence permits. *The Independent Barents Observer*. Retrieved from <http://www.thebarentsobserver.com/borders/2016/02/russia-opens-borders-migrants-residence-permits>.
- Pettersen, T. (2016b, May 27). Russian food embargo to continue out 2017. *The Independent Barents Observer*. <http://thebarentsobserver.com/society/2016/05/russian-food-embargo-continue-out-2017>.
- Reilly, T. (2015, January 05). Russia sanctions realign Arctic exploration, geopolitics. *Oil & Gas Journal*. Retrieved from <http://www.ogi.com/articles/print/volume-113/issue-1/exploration-development/russia-sanctions-realign-arctic-exploration-geopolitics.html>.
- Rice, K. (2013). Freezing to heat the future: streamlining the planning and monitoring of Arctic hydrocarbon development. *Colorado Natural Resources, Energy & Environmental Law Review*. 24(2): 391-418.
- Rozhnov, K. (2010, September 15). Norway and Russia 'open up for business' in the Barents Sea. Retrieved from <http://www.bbc.com/news/business-11299024>.
- Russian Embassy in Norway. (2015, November 11). Increasing the number of refugees crossing the Russian-Norwegian border (Об увеличении числа беженцев, пересекающих российско-норвежскую границу). Retrieved from http://www.norway.mid.ru/ru/press_15_019.html.
- Russian Ministry of Environment. (2016, June 05). On approval of the plan for the 2017 Year of Ecology. Retrieved from <http://government.ru/docs/23279/>.

- SGI. (2015, May 25). Norway, Environmental Policies. *Sustainable Governance Indicators*. Retrieved from http://www.sgi-network.org/2014/Norway/Environmental_Policies.
- Shtokman Development AG. (2012, October 31). Putin promised to launch Shtokman prior 2017. Retrieved from <http://www.shtokman.ru/en/press/news/2012/246/>.
- Shtokman Development AG. (2015, August 5). Total withdrew from Shtokman Development AG shareholders board. Retrieved from <http://www.shtokman.ru/en/press/news/2015/274/>.
- Sly, L. (2015, September 18). 8 reasons Europe's refugee crisis is happening now. *The Washington Post*. Retrieved from <https://www.washingtonpost.com/news/worldviews/wp/2015/09/18/8-reasons-why-europes-refugee-crisis-is-happening-now/>.
- Sørheim, T. I. (2016, January 19). A major milestone for the project and for the petroleum industry in north. *E24*. Retrieved from <http://e24.no/energi/statoil/eni-norge-har-faatt-ja-paa-goliat/23599070>.
- Sputnik. (2015, June 24). France's Total to Return 25% Stake in Shtokman Gas Field Project to Gazprom. Retrieved from https://sputniknews.com/business/20150624/1023774908.html?utm_source=short_direct&utm_medium=short_url&utm_content=vRU&utm_campaign=URL_shortening.
- Staalesen, A. (2015a, August 11). Greeks cut Arctic deal. *Barents Observer*. Retrieved from <http://barentsobserver.com/en/energy/2015/08/greeks-cut-arctic-deal-11-08>.
- Staalesen, A. (2015b, December 08). Arctic migrant flow, now in reverse. *The Independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/borders/2015/12/arctic-migrant-flow-now-reverse>.
- Staalesen, A. (2016a, June 07). Ahead of Russia's Year of Ecology, government kicks against green activists. *The Independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/ecology/2016/06/ahead-russias-year-ecology-government-kicks-against-green-activists>.
- Staalesen, A. (2016b, June 10). EU money for Russian Arctic wind power. *The Independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/industry/2016/06/eu-money-russian-arctic-wind-power>.
- Staalesen, A. (2016c, March 30). Migrants aimed for Norway, were stopped by FSB. *The Independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/borders/2016/03/migrants-aimed-norway-were-stopped-fsb>.
- Standish, R. (2016, 26 January). For Finland and Norway, the Refugee Crisis Heats Up Along the Russian Arctic. *Foreign Policy*. Retrieved from <http://foreignpolicy.com/2016/01/26/for-finland-and-norway-the-refugee-crisis-heats-up-along-the-russian-arctic/>.
- Statoil. (2015a, September 29). *Polar led Pipeline now in place*. Retrieved from http://www.statoil.com/en/NewsAndMedia/News/2015/Pages/29Sep_Polarled.aspx.
- Statoil. (2015b, January 19). *Snohvit*. Retrieved from <http://www.statoil.com/en/ouoperations/explorationprod/ncs/snoehvit/pages/default.aspx>.
- Stratfor. (2016, May 27). Negotiating an End to Russia's Sanctions, Eventually. Retrieved from <https://www.stratfor.com/geopolitical-diary/negotiating-end-russias-sanctions-eventually>.
- TASS. (2015, July 29). "Газпром" увеличил долю в Shtokman Development до 100% - "Gazprom" has increased its stake in Shtokman Development up to 100%. Retrieved from <http://tass.ru/ekonomika/2150574>.

- TASS. (2016, June 29). Russian News Agency. Retrieved from Putin signs decree on extension of counter sanctions until end of 2017. Retrieved from <http://tass.ru/en/politics/885504>.
- Terrapinn, C. (2013, May 17). Top 10 Oil-Drilling Challenges in the Arctic Region. *The oil & gas post*. Retrieved from <http://www.oilgaspost.com/2013/05/17/top-10-oil-drilling-challenges-arctic-region/>.
- The Kingdom of Norway and the Russian Federation. (2010, September 15). *Treaty between the Kingdom of Norway and the Russian Federation concerning Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean*. Retrieved from https://www.regjeringen.no/globalassets/upload/smk/vedlegg/2010/avtale_engelsk.pdf.
- Traynor, I. (2016, January 25). EU migration crisis: Greece threatened with Schengen area expulsion. *The Guardian*. Retrieved from <https://www.theguardian.com/world>.
- Truscott, P. (2009). *European Energy Security – Facing a Future of Increasing Dependency?* London: Routledge.
- U.S. Department of State. (2014, March 6). Ukraine and Russia Sanctions. Retrieved from <http://www.state.gov/e/eb/tfs/spi/ukrainerrussia/>.
- United Nations. (1998, June 10). *The United Nations Convention on the Law of the Sea*. Retrieved from http://www.un.org/depts/los/convention_agreements/texts/unclos/unclos_e.pdf.
- USGS. (2008). Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle. Retrieved from <http://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.
- Vazard, J. (2014a, July 30). EU Sanctions Aim at Russia's South Stream and Yamal Projects. *The oil & gas post*. Retrieved from <http://www.oilgaspost.com/2014/07/30/eu-sanctions-aim-russias-south-stream-yamal-projects/>.
- Vazard, J. (2014b, August 21). Western Sanctions' Impact on Yamal LNG Project. *The oil & gas post*. Retrieved from <http://www.oilgaspost.com/2014/08/21/western-sanctions-impact-yamal-lng-project/>.
- Walker, S., & I. Traynor. (2014, March 19). Putin confirms Crimea annexation as Ukraine soldier becomes first casualty. *The Guardian*. Retrieved from <https://www.theguardian.com/world/2014/mar/18/putin-confirms-annexation-crimea-ukrainian-soldier-casualty>.
- Yamal LNG. (2016, April 29). Yamal LNG Signed Loan Agreements With the Export-Import Bank of China and the China Development Bank. Retrieved from <http://yamallng.ru/en/press/news/7540/>.
- Yeginsu, C., & A. Hartocollis. (2015, August 16). Amid Perilous Mediterranean Crossings, Migrants Find a Relatively Easy Path to Greece. *The New York Times*. Retrieved from <http://www.nytimes.com/2015/08/17/world/europe/turkey-greece-mediterranean-kos-bodrum-migrants-refugees.html>.
- Yeo, S. (2015, January 23). Arctic still profitable despite \$50 oil – Statoil. *Climate Change News*. Retrieved from: <http://www.climatechangenews.com/2015/01/23/arctic-still-profitable-despite-50-oil-statoil/>.

“An Arctic Great Power”?

Recent Developments in Danish Arctic Policy

Jon Rahbek-Clemmensen

Denmark has been a firm advocate for Arctic cooperation in the recent decade, most importantly as the initiator of the 2008 Ilulissat meeting. Two new strategic publications – a foreign policy report (Danish Diplomacy and Defence in a Time of Change) and a defense report (The Ministry of Defence’s Future Activities in the Arctic), which were published in May and June 2016 – highlight the Kingdom of Denmark’s status as “an Arctic great power” and the importance of pursuing Danish interests, which could indicate a shift away from a cooperation-oriented policy. This article investigates whether the documents represent a break in Danish Arctic policy. It argues that the two documents represent continuation, rather than change. They show that the High North continues to become steadily more important on the Danish foreign policy agenda, although the region remains just one of several regional priorities for Denmark. They also continue the cooperation-oriented Danish Arctic policy and move this policy forward by adding more analysis of specific policy programs and initiatives that have long been on the agenda. These initiatives are meant to strengthen the Kingdom of Denmark’s High North profile, further Greenlandic development, add more capabilities to the Danish Armed Forces, and build ties to other Arctic nations. However, the real challenges in Danish Arctic policy are not found in bureaucratic reports, but in how these reports become part of an ongoing discussion about identity within the Kingdom of Denmark. Greenlandic policymakers have criticized the documents for being too Denmark-centric, which indicates a nascent Greenlandic resistance to Danish centralization of authority over foreign policy within the Kingdom of Denmark.

In January 2016, Peter Taksøe-Jensen, the diplomat who had been tasked by the Danish Prime Minister to write a strategic assessment of Danish foreign policy, gave a remarkable interview to the newspaper *Politiken*, in which he revealed some of the conclusions contained in his upcoming report (*Danish Diplomacy and Defence in a Time of Change* – DDDTC for short). One particular passage caught the attention of politicians and commentators alike:

“Denmark is, together with Greenland..., an Arctic great power. We must use our strength to ensure that the development in the Arctic corresponds with Danish interests. That is why I will suggest that it becomes an area that we should upgrade more” (Beim, 2016).

It seemed that the Arctic would become a new focus area for Danish foreign policy, but Taksøe-Jensen’s emphasis on Danish interests in the Arctic could also indicate a shift away from its current cooperation-focused Arctic policy (a regional policy that emphasizes inter-state cooperation through formal and informal institutions). Like the other Arctic states, Denmark had thus far supported regional cooperation, but perhaps the new report entails a slight change of tack.

Jon Rahbek-Clemmensen is an Assistant Professor at the Department of Political Science and Management, University of Southern Denmark in Odense, Denmark and a visiting fellow at the Center for Strategic and International Studies in Washington, D.C.

Speculation that a shift was underway gained more traction when it became evident that Taksøe-Jensen's report would be followed by the publication of the Ministry of Defense's long-awaited strategic analysis of its activities in the Arctic (*The Ministry of Defence's Future Activities in the Arctic – MDFAA* for short). The defense report, which was meant to map Danish defense and coast guard activities in the High North and outline potential priorities for future investments and reforms, had been planned since at least 2009 and began in 2013, but its publication had been postponed several times (Danish Ministry of Defense, 2016: 8; Defense Commission of 2008, 2009: 274 & 298).

The two reports should be seen as political interventions in the Danish foreign and security policy debate, which were meant to prepare the ground for a shift in policy that puts further emphasis on the Arctic. Putting forward these comprehensive analyses of the Danish foreign policy (DDDTC) and defense policy in the Arctic (MDFAA) helps to stream-line initiatives within the different bureaucracies and counter opposing arguments in the public debate. More importantly for a wider Arctic studies audience, they serve as weather-vanes that point to current trends in Danish Arctic policy, thus allowing analysts to take stock of the importance of the region within Danish foreign and security policy and the specific initiatives that are likely to come out in the years to come.

This article situates DDDTC and MDFAA and the public reactions to them in the larger context of Danish foreign policy and Arctic policy and examines to what extent these new initiatives represent a change of course. It argues that the documents signal continuity rather than change. The region's importance on the Danish foreign policy agenda seems to be increasing slightly, but this change should not be exaggerated, as the Arctic remains but one of several foreign policy priorities for Denmark. The key test remains whether more funds will be allocated for Arctic initiatives in the upcoming budget or in the defense agreement, which is due in 2017. Danish Arctic policy generally continues on a cooperation-oriented track, as the reports highlight concrete initiatives that may slightly strengthen Denmark's ability to operate in the Arctic and which opens doors for further cooperation with regional partners. The main challenge remains the viability of the Kingdom of Denmark¹ as a constitutional entity that contains Denmark, the Faroe Islands, and Greenland and the new reports do little to address these issues. In that sense, the Kingdom's Arctic policy hobbles along awkwardly with Denmark in the driver's seat and the Faroe Islands and Greenland complaining about the direction but too poor to get out.

The article presents its argument in three steps. The first section locates the Arctic within Danish foreign policy and shows how the new reports may signal a slight increase in the High North's importance within Danish foreign policy. The second section examines how the new policy initiatives fit within Danish Arctic policy, while the final section looks at how the Greenlandic reactions to the new policies indicate fundamental tensions between Denmark and Greenland within the Kingdom of Denmark.

The Arctic Climbs the Agenda

The two reports largely continue long-term trends in Danish foreign policy, where the Arctic has become steadily more important over the past decade. Danish policymakers began to take an interest in Arctic issues after the 2007 Russian flag-planting. Before 2007, Danish Arctic policy focused almost entirely on the bilateral relationship with Greenland, but the Russian flag-planting led Danish policymakers to realize the importance of forging stronger regional relations. Danish thinking matured over the following years, but it was only after the publication of the 2011 Arctic

Strategy that the region truly became a key issue for Danish foreign policy (Rahbek-Clemmensen, forthcoming). All Arctic states are interested in enhancing region-wide cooperation and they mainly focus on creating bi- and multilateral ties that are most relevant for their own part of the High North. Denmark is no different. Greenland remains the center-piece in its Arctic policy even as Copenhagen has become more attentive to wider regional concerns. Denmark was a late-bloomer compared to Norway, where the government had declared the High North (“Nordområdene”) to be “Norway’s most important strategic [foreign policy] priority” as early as 2005 (L. C. Jensen, 2016; Norwegian Prime Minister’s Office, 2005).

Denmark and the other Arctic states have pursued policies that aim to strengthen regional cooperation. Copenhagen initiated the 2008 Ilulissat meeting, where the Arctic coastal states agreed to adhere to international law and further regional cooperation in institutions like the Arctic Council (“The Ilulissat Declaration,” 2008). Though opposed by states and NGOs that felt that the coastal states excluded relevant actors to maximize their own influence and undermined other regional institutions, the Ilulissat Declaration has defined the current regional order, which places the Arctic states, especially the littoral states, at the apex of the decision-making structure. Danish policymakers strive to preserve this order (Government of Denmark, Government of Greenland, & Government of the Faroe Islands, 2011: 10 & 13–15), which strengthens Copenhagen’s regional influence and arguably provides clear and effective decision-making structures. Denmark is not exceptional in its dedication to High North cooperation – a similar, if not greater, commitment can be found in the other Arctic states.

DDDTTC solidifies this enhanced focus on the Arctic by explicitly making it one of Denmark’s four foreign policy priorities, the others being the stabilization of the global south, deterrence and the defense of Eastern Europe, and engagement with the new Asian economies. The report represents a move away from a narrow focus on out of area operations in the global south (Afghanistan, North Africa, and the Middle East), which has dominated Danish foreign policy since the 1990s, by adding a new focus on areas within Russia’s sphere of interests (Eastern Europe and the Arctic).

Danish security policy during the Cold War was based on the security guarantee provided by NATO, where Danish territorial defense was seen as the main way of showing its dedication to the common cause (Defense Commission of 1988, 1989; Ringsmose, 2008). Greenland’s geostrategically important location made it an important part of the defense of North America and the island functioned as a crucial bargaining chip vis-à-vis the United States, which Copenhagen used to improve its relationship to Washington and solidify its position within NATO (Rahbek-Clemmensen, 2014: 400–1). Territorial defense faded as a policy priority during the 1990s and 2000s as the Russian threat to Europe, and thus Denmark’s geostrategic importance, vanished (Defense Commission of 1997, 1998; Defense Commission of 2008, 2009; Government of Denmark, 2003; Rasmussen, 2005). A foreign policy white-book from 2003 went as far as arguing that “the conventional military threat against Danish territory has disappeared and there is consequently no need for territorial defense” (Government of Denmark, 2003: 37) and territorial defense was replaced by an expeditionary agenda that focused on out of area operations, mainly in Afghanistan, North Africa, and the Middle East (Defense Commission of 2008, 2009; Ringsmose & Rynning, 2008). Danish operations abroad were meant to strengthen the Western alliance as well as Denmark’s position within NATO and give it influence in Washington DC (Henriksen & Ringsmose, 2011). Greenland remained important for Denmark’s position within the Western

alliance, as the American Thule Air Base and the adjacent radar installations in Northwest Greenland continued to be a vital part of the United States' early warning system for intercontinental ballistic missiles (Rahbek-Clemmensen, 2014: 400–1).

DDDTTC is a slight shift in prioritization away from stabilization operations in the global south to securing areas in Eastern Europe and the Arctic. It maintains that a “conventional military threat to Danish territory remains unlikely, but Denmark’s and Europe’s neighborhoods have become less secure” (Taksøe-Jensen, 2016a: 12, 2016b: 71) and “the foundation for the abolishment of the territorial defense is therefore still relevant” (Taksøe-Jensen, 2016b: 74). Russia does not pose a direct military threat to Denmark, but Russian adventurism in these areas could diminish Denmark’s territorial security down the line. DDDTC therefore suggests that the Arctic and Eastern Europe should receive increased priority. DDDTC also highlights the continued importance of the global south and, as such, the document entails an expansion of the list of policy priorities.

The size of the strategic reorientation can be gauged by looking at the suggested shift in defense spending. Both reports suggest allocating an additional DKK 120 million (USD 18 million) from the defense budget to Arctic Command to finance new initiatives (Danish Ministry of Defense, 2016; Taksøe-Jensen, 2016b). However, though a large increase in Arctic Command’s budget, these funds are only little more than a half percent of total defense spending. The new documents thus represent a small step, rather than a comprehensive pivot, to the north (Ministry of Finance, 2015). These suggestions must be written into the next five-year defense agreement, which is due in 2017, before they come into effect.

It is in this context that one should understand the aforementioned references to Denmark as an “Arctic great power” and the calls for a more “interest-based foreign policy” in general and specifically in the High North. Of course, the term “great power” is not used in a strict IR sense, where a great power is commonly thought to be either a state “with substantial industrial and military potential” (Posen & Ross, 1996: 17, see also Waltz, 1979: 131) or a state that is “recognised by others to have... special rights and duties” (Bull, 1977: 196). Compared to the resources of other Arctic players, such as the United States, Russia, and, arguably, Canada, China, and the EU, Denmark’s material capabilities are too feeble to make it a regional great power. Also, there is no evidence that the other Arctic players recognize Denmark as playing a special role in the Arctic that makes it one of the central regional states on par with Russia and the United States. The term “great power” is used to aggrandize Denmark’s position in the High North to a domestic audience that will not scrutinize it further.

In sum, the Arctic is becoming moderately more important as one of three geographical priorities on par with deterring Russia in Eastern Europe and stabilization in the global south. It has thus yet to gain the status it has in Norway, where it is considered *the* main priority in Norwegian foreign policy. The references to interests and great power status are made for domestic consumption and they do not signal a significant shift in how Denmark approaches the Arctic.

Continued Cooperation

In spite of emphasizing “an effective pursuit of the Kingdom’s interests [in the High North]” (Taksøe-Jensen, 2016b: 35) and highlighting Denmark’s status as “an Arctic great power” (Taksøe-Jensen, 2016b: 86) – phrases that could indicate a shift towards more unilateral and bellicose

regional policies – the new policy document advocates for a continuation of Denmark’s current cooperation-oriented Arctic policy. Denmark’s Arctic policy has thus far focused on four implicit priorities:

1. Use the Arctic to strengthen Western institutions and gain international influence
2. Preserve the current constitutional arrangement
3. Maintain an operational defense of Greenland
4. Support regional interstate cooperation

First, as outlined above, Denmark strives to use its Arctic presence to strengthen Western institutions, most notably NATO, and to gain international influence. Copenhagen facilitates an American presence on the geo-strategically important island, which in turn improves Denmark’s clout in Washington. Similarly, Denmark has been trying to become a gate-keeper to the Arctic for European and Asian governments interested in the region (Jakobson & Lee, 2013; Rahbek-Clemmensen, 2014: 400–1 & 404–5).

The documents follow previous strategies in barely addressing *how* Denmark can gain influence via its Arctic engagement (Rahbek-Clemmensen, 2014: 402–3). DDDTC highlights that Denmark has a strategic interest in “strengthening the Kingdom’s Arctic profile in order to maximize its influence on the regional development for the benefit of the region, the Kingdom, and the local population” (Taksøe-Jensen, 2016b: 37). It suggests that the Kingdom should improve its public diplomacy in the Arctic by hosting international conferences, including a conference about the Ilulissat initiative in 2018, and by striving to make Greenland a new hub for Arctic research (Taksøe-Jensen, 2016b: 35), but it does not offer a wider strategy for gaining international influence. One can only speculate that such matters are considered taboo, as they would entail “giving away the diplomatic game plan” to international partners and addressing the fact that the three nations – Denmark, the Faroe Islands, and Greenland – do not necessarily share the same interests (the latter is discussed in detail below).

Second, Denmark can only pursue these interests as long as Greenland remains a member of the Kingdom of Denmark. Independence remains an ambition of all parties in the Greenlandic parliament, though the likelihood of it happening has declined in recent years as the island’s economy has stalled due to problems in the mining and energy industries. The Danish Arctic policy still aims to minimize tensions between Nuuk and Copenhagen by attracting foreign investments and providing government services to Greenland in order to show the Greenlanders that they benefit from the current constitutional arrangement.

The new reports include several minor initiatives that are meant to enhance Greenlandic development. The aforementioned initiative to make Greenland an Arctic science hub would also benefit Greenland economically as “experiences from ... Svalbard and New Zealand show that an increased influx of scientists and science funding has an economic effect, including in tourism and other industries” (Taksøe-Jensen, 2016b: 35). The report also suggests “examining possible financial mechanisms” from various Danish sources and to “explore [international] Arctic investment opportunities, for instance through the establishment of an Arctic Investment Bank” (Taksøe-Jensen, 2016b: 35). Furthermore, the reports also suggest enhancing defense activities that also benefit Greenlandic society, including exploring the possibilities of strengthening the island’s communications infrastructure through satellite-based solutions and building an organizational

structure for involving Greenlandic volunteers in Arctic Command's activities (search-and-rescue and environmental protection) (Danish Ministry of Defense, 2016; Taksøe-Jensen, 2016b: 35 & 83). The latter idea, which has been floated at least since 2008 and is based on previous attempts to involve the Greenlandic population in the Danish Armed Forces in the 1950s, is of minor operational value for the Danish Armed Forces and should instead be seen as an attempt to forge stronger bonds between the Danish authorities and Greenlandic society (P. H. Jensen, 2001: 142; Kristensen, Hoffmann, & Pedersen, 2013; Rahbek-Clemmensen, forthcoming).

Third, maintaining the Kingdom of Denmark entails having a credible defense force in place in order to survey the island and enforce Danish sovereignty over it. While operating in Greenland, the Danish Armed Forces also functions as Greenland's coast guard by performing tasks such as search-and-rescue, fisheries inspection, and maritime pollution prevention. These coast guard operations are among the services provided for Greenland by the Danish government. The opening of the Arctic, due to globalization and climate change, increases the need for additional defense capabilities to handle increased traffic in the Greenlandic waters and adding capabilities, such as additional Knud Rasmussen Patrol Vessels or a permanent Challenger aircraft in Kangerlussuaq (Jørgensen & Rahbek-Clemmensen, 2009; Rahbek-Clemmensen, forthcoming).

Both reports recognize the need for an enhanced military presence in the High North and MDFAA makes three concrete suggestions for Arctic Command in addition to the aforementioned voluntary schemes for Greenlanders (Danish Ministry of Defense, 2016; Taksøe-Jensen, 2016b: 35, 72 & 83). First, MDFAA suggests giving Arctic Command access to satellite surveillance capabilities from commercial sources, the European Space Agency, and in cooperation with other nations, such as the US, Canada, the UK, France, and Germany (Danish Ministry of Defense, 2016: 11–12 & 222–27). Second, it also proposes enhancing the presence of existing capabilities, including a Challenger aircraft and C-130 transport aircraft (Danish Ministry of Defense, 2016: 11–12). Finally, it recommends stationing one of the existing Iver Huitfeldt class frigates in the North Atlantic for two months in the summer period (Danish Ministry of Defense, 2016: 12 & 198). Fighter aircraft (currently F-16 and most likely F-35 in the future) may occasionally operate in the Arctic, but the report is careful not to specify how often, if at all, this would occur (Danish Ministry of Defense, 2016: 192–93). These suggestions signal a wish to enhance operational presence on the cheap. MDFAA does not specify new presence levels, which gives defense planners room to scale down presence later to facilitate operational as well as fiscal concerns. Furthermore, alternative, and more expensive, capabilities, such as a fourth Knud Rasmussen patrol vessel, anti-submarine capabilities, icebreakers, and large drones (such as Global Hawk) are either rejected or bracketed for now (Danish Ministry of Defense, 2016: 188–99).

Finally, preserving the status quo also entails avoiding political and military tensions in the High North and the Danish Arctic strategy is consequently focused on maintaining the current cooperative order.

As a small power, Denmark's presence in the North Atlantic has historically been vulnerable to geopolitical shocks and the whims of greater powers. For instance, the Second World War enabled Iceland to become fully independent and challenged Danish sovereignty over Greenland (Bertelsen, 2014; Lidegaard, 1996). An Arctic conflict – say between Russia and the United States – would strain the Danish Armed Forces and could make Denmark more dependent on American protection. The complex political relationship within the Kingdom of Denmark makes it vulnerable

to foreign political-military harassment, which could show that Denmark is unable to enforce its sovereignty over Greenland. Danish policymakers have long recognized that all Arctic states seem dedicated to regional cooperation and the Danish Arctic policy has subsequently focused on engaging Russia and strengthening regional institutions to maintain the status quo (Government of Denmark et al., 2011; Rahbek-Clemmensen, 2014).

The new reports continue this benign view of the region by arguing that it remains “an area where it has been possible to continue the dialogue and cooperation with Russia” and where “it is in Europe and Denmark’s interest to have Russia on board when establishing durable solutions” (Taksøe-Jensen, 2016b: 34). In general,

All Arctic coastal states have to strengthen their military presence in order to enforce their sovereignty and provide government services as a consequence of increased civilian activity. The heightened Russian military presence in the Arctic should not, in of itself, be seen as a militarization of the Arctic, but partly as a legitimate wish to enforce sovereignty, partly as a broader strategic buildup vis-à-vis the US and NATO (Taksøe-Jensen, 2016b: 72).

The reports suggest that Denmark should continue to strengthen existing cooperation and institution through concrete initiatives, such as the aforementioned satellite cooperation scheme, the 2015 declaration concerning high seas fishing in the Central Arctic Ocean, and the Arctic Council’s work in general (Taksøe-Jensen, 2016b: 36).

MDFAA also supports a conciliatory Arctic approach. Danish defense planners have for long feared that misunderstandings or clumsy signaling can spark a security dilemma. This fear has influenced the writing of the new defense report, which explicitly notes that

“other Arctic nations ... pay significant attention to the Danish analysis [and they hope it] ... will not add to the militarization of the Arctic. ... The report will send signals to other nations about the Kingdom’s dedication to and prioritization of Arctic questions and Arctic security” (Danish Ministry of Defense, 2016: 30).

Consequently, the Danish authorities have been in close dialogue with the other Arctic nations to ensure that these new reports are not seen as escalatory steps. Furthermore, the fact that MDFAA recommendations – satellite cooperation, intermittent stationing of surveillance aircraft and frigates – almost entirely focus on civilian coast guard operations underscore the importance assigned to signaling among Danish defense planners.

Two recommendations warrant special attention. First, DDDTC suggests that “the increased military presence and activity” necessitates “an international structure for handling security questions in the Arctic”, which “could work as a room for security policy dialogue in case of tense periods” and create “a platform for additional trust-building measures in the region, such as advance advertisement of military movements or expansions of military infrastructure” (Taksøe-Jensen, 2016b: 36). This idea has been floated elsewhere to no avail (Conley & Rohloff, 2015) and it seems to have very little support within the Danish civil service, which regards it as unrealistic to set up such a structure in the midst of a foreign policy crisis with Russia. Furthermore, one could argue that the current set-up lowers tensions as it allows Arctic diplomats to meet and have informal conversations about the bigger issues in the corridors without having to address the elephant in the room that is military security. These views are shared by many High North experts

and can be found within the halls of government in most Arctic nations (Groenning, 2016; Keil, 2016). It seems unlikely that Denmark will push for such a structure in the coming years.

Second, DDDTC also recommends that Denmark and the other coastal states settle the ongoing continental shelf claims sooner rather than later. The report highlights that the Commission on the Limits of the Continental Shelf will present its evaluation of Russia's continental shelf claim long before it evaluates the Danish claim, implying that this could lead to political complications. The report argues that Denmark and the other Arctic coastal states should "explore the possibilities for identifying other possible – and faster models [sic] – for a solution", which might be possible as it "is in the interest of both the Kingdom and the other Arctic coastal states to ensure that the drawing of boundaries in the Arctic is settled through negotiations based on the Law of the Sea" (Taksø-Jensen, 2016b: 37). Some Copenhagen experts and policymakers fear that the continental shelf question could become a hot button issue in domestic Russian politics, forcing Moscow to take a harsh stance. Domestic rumblings in Russia after the 2010 Barents Sea agreement and the 2014 Danish continental shelf claim can be seen as evidence of potential opposition arising from within Russia. Some commentators have criticized the Danish claim for being unnecessarily large, arguing that it might spark tensions in Russo-Danish relations (Breum, 2015), and DDDTC indicates that Denmark may be interested in compromising with Russia and Canada.

In sum, the new reports largely continue the overall goals of the cooperation-oriented Danish Arctic policy, but they do move it forward by specifying how these ends can be achieved through specific measures. They indicate that Denmark will try to develop a satellite and communications partnership with other Arctic states and that Copenhagen is willing to settle its overlapping continental shelf through a compromise with Russia and Canada.

New Tensions between Denmark and Greenland

Though the content of the new reports are crucial for understanding the development of Danish thinking about the Arctic, perhaps the most important development has occurred outside the halls of government, as Greenlandic policymakers reacted harshly to what they saw as a Danish centralization of power within the Kingdom of Denmark. The tensions between Denmark and Greenland (and, to a lesser extent, the Faroe Islands) essentially spring from the use of the term "the Kingdom of Denmark" in the new reports, which conceals the fundamental tension between the three nations. The Kingdom of Denmark is riven with tensions between a Danish political culture that emphasizes an overlap between the Danish state and the Danish nation and the need to contain several polities (Denmark, the Faroe Islands, and Greenland) within one constitutional unit. Danish political discourse rarely distinguishes between citizenship and membership of the Danish nation. Denmark is seen as the home of a specific cultural group – the Danes – and although immigration and globalization challenge this view, being a citizen entails not just adopting a political identity, but also entails learning Danish and adopting certain cultural customs (Hansen, 2003). This identity constellation has always made it difficult to find room for Greenland and the Faroe Islands within the Danish state and most Danes think of them as separate polities that might as well be independent. The new papers implicitly try to articulate the Kingdom of Denmark as a

multicultural state that contains several nations, but they struggle to get this vision accepted in the Danish public and in the Faroe Islands and Greenland.

Like the 2011 Danish Arctic Strategy before them, the new reports refer to the Kingdom of Denmark as a unitary actor, thus ignoring that Denmark, the Faroe Islands, and Greenland sometimes have different and conflicting interests and goals. Greenlandic politicians have consequently criticized DDDTC for being “a report that sees through Danish eyes” and ignoring “Greenlandic interests” (Nyvold, 2016; Sørensen, 2016).

The Greenlandic criticism represents a new development in Danish-Greenlandic relations, as politicians from Nuuk seem to have realized that Denmark retains for itself the right to speak on behalf of all three nations, thus potentially subsuming Nuuk and Thorshavn’s interests under those of Copenhagen. No such criticism has previously been voiced when foreign policy documents referred to the Kingdom as a unitary actor. For instance, when the Kingdom’s Arctic Strategy was released in 2011, the Greenlandic premier backed it publicly at several occasions and made it a cornerstone of his tenure (Anonymous, 2011b; Espersen, Kleist & Johannesen, 2011; Kleist, 2011; Schultz-Lorentzen, 2011). The only opposition criticism focused on the lack of resources dedicated to Greenland, not on the notion that a unitary Kingdom could represent all three nations (Anonymous, 2011a).

The criticism is a symptom of how the enhanced importance of the Arctic is altering the internal dynamics of the Kingdom of Denmark. As the Arctic became a foreign policy priority for Denmark, the importance of the bilateral relationship between Denmark and Greenland declined, with Denmark becoming more focused on forging bi- and multilateral ties with the other regional states to the detriment of Greenland. Denmark’s lack of interest for Arctic politics had previously given Greenland the opportunity to have an independent diplomatic role. For instance, the Greenlandic premier represented the Kingdom of Denmark several times in the Arctic Council before 2009, as the Danish Minister of Foreign Affairs could not find the time to attend the meetings (Rahbek-Clemmensen, forthcoming). The foreign minister, of course, insisted on retaking his seat at the table when Denmark came to see the Arctic Council as a crucial foreign policy venue, thus removing one of Greenland’s few foreign policy arenas.

As Denmark began to focus on Arctic politics, it instead became commonplace to view the “Kingdom of Denmark” as a unitary actor. Before 2009, Danish policy documents readily referred to Denmark and Greenland as separate cooperating entities. For instance, the 2008 Arctic Strategy Draft, a failed attempt to write a Danish Arctic Strategy, which nevertheless defined Danish Arctic policy from 2008 to 2011, focused on “Danish-Greenlandic cooperation” and aimed to “support and strengthen Greenland’s development towards increased independence” (Home Rule of Greenland & Danish Ministry of Foreign Affairs, 2008: 5; Rahbek-Clemmensen, forthcoming). Such references to the different entities of the Kingdom and to the prospect of Greenlandic independence disappeared, when the Arctic Strategy was published a few years later (Rahbek-Clemmensen, forthcoming). Though the two documents are of roughly equal length, the 2008 Arctic Strategy Draft uses the term only 35 times, while it appeared 191 times in the 2011 Arctic Strategy (conversely, the 2008 Strategy Draft referred to “Greenland” more often than the 2011 Arctic Strategy).²

Greenlandic resistance to the Danish take-over takes two forms that both utilize ambiguities within the constitutional arrangement to their advantage. The moderate IA party insists that DDDTC is

a *Danish*, but not a Greenlandic, document and that Greenland should write its own foreign policy analysis to determine its own interests (Veirum & Jakobsen, 2016). In contrast, the nationalist Siumut party (which currently leads Greenland's government) combines a critique of Danish brashness with an insistence on making its voice heard in Danish foreign, security, and defense policy. If Denmark speaks on behalf of all three nations, Siumut's argument seems to go, the two minor nations should get a say in Danish foreign, security, and defense policy. For instance, Aleqa Hammond has interfered in the debate about the upcoming Danish fighter aircraft procurement, where she has been very critical of the F-35 Joint Strike Fighter, "a very expensive plane that is not useful in fulfilling the Danish Armed Forces' obligations in the Arctic". Procuring the F-35 would signal that Denmark is "turning away from the Arctic and prioritizing its effort and its resources in other parts of the world [, sending] ... a very clear signal to Greenland" (Hammond, 2015). This argument aims to make the Danes get a taste of their own medicine: if the Kingdom of Denmark is a unitary actor, then Danish foreign and defense policy should reflect Greenlandic interests. Both of these responses – rejection (IA) or cooption (Siumut) – will lead to tensions in the coming years and it seems likely that the foreign, security, and defense policy of the Kingdom will become a new arena for Danish-Greenlandic arm-wrestling.

To be sure, though these tensions will not lead to the demise of the current constitutional set-up – the Faroe Islands and Greenland remain economically dependent on Denmark – they show that the challenges facing Denmark go beyond the policies devised within the government. Copenhagen policymakers offer bureaucratic reports that slowly push new measures that make a marginal difference for Greenland without allocating the funds necessary to make a tangible difference. The tensions between the three nations can only be addressed by clarifying the division of labor within the Kingdom to outline how Greenland and the Faroe Islands can be heard when it comes to common policy questions that are within Copenhagen's purview. This would entail challenging existing notions of citizenship and nationhood within Danish national identity that can only be done through a political intervention. Denmark's current policy is to ignore the fact that there are ambiguities and then use these same ambiguities to monopolize control over common issues, while hoping that Greenland remains too penniless to leave the Kingdom. This policy may work in the long term, but perhaps there would be more to gain by thinking out of the box and rethinking the fundamental mechanics of the current set-up.

Conclusion

The two new policy initiatives – the foreign policy report and the defense report – largely represent a continuation of existing trends in Danish Arctic policy. The High North continues to become a more important part of the Danish foreign policy agenda and it is part of a general priority shift from stability operations in the global south to regions where a resurgent Russia can hurt Danish interests. The documents continue the cooperation-oriented Danish Arctic policy and focus on strengthening the Kingdom's High North profile, increasing Greenlandic development, adding capabilities to the Danish Armed Forces in the region, and building ties to other Arctic states. They move Danish Arctic policy forward by adding details and analysis to existing ideas that can then be taken up in coming political negotiations. The reports are thus just one more incremental step in the Danish policy process – the real test is the upcoming budget and defense negotiations, where

the importance of the Arctic in Danish foreign policy and the shape of Danish Arctic policy can be solidified if funds are allocated for the High North.

Perhaps the most important development in Danish Arctic policy is occurring outside of the reports themselves, as a fault line seems to be opening between how Danish and Greenlandic policymakers understand the division of labor within the Kingdom of Denmark's foreign policy process. Greenlandic politicians have begun to use different strategies to resist Denmark's insistence that the Kingdom of Denmark is a unitary actor. The current set-up can continue to function as long as Greenland remains fiscally dependent on Denmark, though tensions are likely to cause awkward episodes and clashes as Nuuk and Copenhagen struggle over final say. Reducing these tensions would entail going beyond bureaucratic reports and rethinking how the Kingdom of Denmark works – a task that requires political will, which currently seems absent in Copenhagen.

Acknowledgments

The author would like to thank the many Danish and Greenlandic politicians and civil servants (current and former) who were willing to participate in background interviews for this article and the *Arctic Yearbook's* two anonymous reviewers for their helpful comments and recommendations. The author would also like to thank Vincent Keating for his extensive help with the review of the manuscript. The research for this paper is supported by the Carlsberg Foundation.

Notes

1. The Kingdom of Denmark is the constitutional unit that comprises of Denmark, the Faroe Islands, and Greenland.
2. The 2008 Strategy Draft is 18,200 words, while the 2011 Arctic Strategy is 25,660 words.

References

- Anonymous. (2011a, September 7). Arktisk Strategi uden midler. Retrieved from <http://sermitsiaq.ag/kl/node/106955>
- Anonymous. (2011b, October 18). Arktisk Strategi vigtigt omdrejningspunkt. Retrieved from <http://sermitsiaq.ag/node/110131>
- Beim, J. H. (2016, January 19). Der er behov for yderligere fokusering og prioritering. Både geografisk og tematisk. *Politiken*.
- Bertelsen, R. G. (2014). The Kingdom of Denmark - an Arctic History and a Complex Arctic Future. In K. Jong-Deog, *A Study on the Development of National Strategy for the Arctic Era* (pp. 238–288). Busan: Korea Maritime Institute.
- Breum, M. (2015, September 8). Aflys kampen med Rusland om Nordpolen. *Politiken*. Retrieved from <http://politiken.dk/debat/kroniken/premium/ECE2831114/aflys-kampen-med-rusland-om-nordpolen/>

- Bull, H. (1977). *The Anarchical Society: A Study of Order in World Politics*. Palgrave Macmillan.
- Conley, H. A., & Rohloff, C. (2015). *The New Ice Curtain - Russia's Strategic Reach to the Arctic*. Washington, D.C.: Center for Strategic and International Studies.
- Danish Ministry of Defense. (2016). *Forsvarets Fremtidige Opgaveløsning i Arktis*. Copenhagen: Ministry of Defense.
- Defense Commission of 1988. (1989). *Forsvaret i 90'erne. Beretning fra Forsvarskommissionen af 1988*. Copenhagen: Ministry of Defense.
- Defense Commission of 1997. (1998). *Fremtidens Forsvar. Beretning fra Forsvarskommissionen af 1997*. Copenhagen: Ministry of Defense.
- Defense Commission of 2008. (2009). *Dansk forsvar - Globalt engagement. Beretning fra Forsvarskommissionen af 2008*. Copenhagen: Ministry of Defense.
- Espersen, L., Kleist, K., & Johannesen, K. L. H. (2011, August 22). En ny strategi for Arktis. *Jyllandsposten*.
- Government of Denmark. (2003). *De sikkerhedspolitiske vilkår for dansk forsvarspolitik*. Copenhagen: Ministry of Defense.
- Government of Denmark, Government of Greenland, & Government of the Faroe Islands. (2011). *Strategy for the Arctic 2011– 2020*. Copenhagen: Ministry of Foreign Affairs.
- Groenning, R. (2016, June 2). Why military security should be kept out of the Arctic Council – *The Arctic Institute*. Retrieved from <http://www.thearcticinstitute.org/why-military-security-should-be-kept-out-of-the-arctic-council/>
- Hammond, A. (2015, November 20). Hvad vil Danmark. *Weekendavisen*, p. 12.
- Hansen, L. (2003). Sustaining Sovereignty: the Danish Approach to Europe. In L. Hansen & O. Wæver, *European Integration and National Identity: The Challenge of the Nordic States* (pp. 50–87). Routledge.
- Henriksen, A., & Ringsmose, J. (2011). *Hvad fik Danmark ud af det? Irak, Afghanistan og Forholdet til Washington*. Copenhagen: Danish Institute for International Studies.
- Home Rule of Greenland, & Danish Ministry of Foreign Affairs. (2008). *Arktis i en Brydningstid. Forslag til Strategi for Aktiviteter i det Arktiske Område*. Copenhagen: Ministry of Foreign Affairs.
- Jakobson, L., & Lee, S.-H. (2013). *The North East Asian States' Interests in the Arctic and Possible Cooperation with the Kingdom of Denmark*. Stockholm: Stockholm International Peace Research Institute.
- Jensen, L. C. (2016). *International Relations in the Arctic: Norway and the Struggle for Power in the New North*. London: I.B.Tauris.
- Jensen, P. H. (2001). *Grønlands Kommando i 50 år*. Copenhagen: Aschehoug.
- Jørgensen, H. J., & Rahbek-Clemmensen, J. (2009). *Keep It Cool! Four Scenarios for the Danish Armed Forces in Greenland in 2030*. Copenhagen: Danish Institute for Military Studies.
- Keil, K. (2016, May 26). An Arctic Security Forum? Please, no! – *The Arctic Institute*. Retrieved from <http://www.thearcticinstitute.org/an-arctic-security-forum-please-dont/>
- Kleist, K. (2011, September 12). Debatindlæg: Arktisk Strategi er vores pejlemærke frem til 2020. Retrieved from <http://sermitsiaq.ag/node/107328>
- Kristensen, K. S., Hoffmann, R., & Pedersen, J. (2013). *Samfundsbåndhævelse i Grønland - Forandring, Forsvar og Frivillighed*. Copenhagen: Center for Military Studies.

- Lidegaard, B. (1996). *I Kongens Navn : Henrik Kauffmann i Dansk Diplomati 1919-1958*. Copenhagen: Samleren.
- Ministry of Finance. (2015). *Finanslov for finansåret 2016*. Copenhagen: Ministry of Finance.
- Norwegian Prime Minister's Office. (2005). Soria Moria-erklæringen. Retrieved from <https://www.regjeringen.no/no/dokumenter/soria-moria-erklaringen/id438515/>
- Nyvold, M. (2016, May 7). Forsker støtter Aleqas kritik af Taksøe-rapport. Retrieved from <http://sermitsiaq.ag/forsker-stoetter-aleqas-kritik-taksoee-rapport>
- Posen, B. R., & Ross, A. L. (1996). Competing Visions for U.S. Grand Strategy. *International Security*, 21(3): 5–53.
- Rahbek-Clemmensen, J. (Forthcoming). The Arctic Turn – How did the High North become a Foreign and Security Policy Priority for Denmark? In K. S. Kristensen & J. Rahbek-Clemmensen, *Greenland and the International Relations of a Changing Arctic - Postcolonial Paradiplomacy between High and Low Politics*. Forthcoming.
- Rahbek-Clemmensen, J. (2014). “Arctic-vism” in Practice – The Challenges Facing Denmark's Political-Military Strategy in the High North. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *Arctic Yearbook 2014* (pp. 399–414). Akureyri, Iceland: Northern Research Forum.
- Rasmussen, M. V. (2005). “What”'s the Use of It?: Danish Strategic Culture and the Utility of Armed Force. *Cooperation and Conflict*, 40(1): 67–89.
- Ringsmose, J. (2008). *“Frihedens Assurancepræmie” - Danmark, NATO og forsvarsbudgetterne*. Odense: Syddansk Universitetsforlag.
- Ringsmose, J., & Rynning, S. (2008). The Impeccable Ally? Denmark, NATO, and the Uncertain Future of Top Tier Membership. In N. Hvidt & H. Mouritzen, *Danish Foreign Policy Yearbook 2008*. Copenhagen: Danish Institute for International Studies.
- Schultz-Lorentzen, C. (2011, November 13). Politisk debat om Arktisk Strategi. Retrieved from <http://sermitsiaq.ag/kl/node/111859>
- Sørensen, H. N. (2016, May 2). Ris fra Aleqa – ros fra Espersen. Retrieved from <http://knr.gl/da/nyheder/ris-fra-aleqa-%E2%80%93-ros-fra-espersen>
- Taksøe-Jensen, P. (2016a). *Danish Diplomacy and Defence in Times of Change - English Executive Summary*. Copenhagen: Ministry of Foreign Affairs.
- Taksøe-Jensen, P. (2016b). *Dansk diplomati og forsvar i en brydningstid - Vejen frem for Danmarks interesser og værdier mod 2030*. Copenhagen: Ministry of Foreign Affairs.
- The Ilulissat Declaration. (2008).
- Veirum, T. M., & Jakobsen, S. K. (2016, May 7). IA efterlyser Arktisk-strategi for Grønland. Retrieved from <http://knr.gl/da/nyheder/ia-efterlyser-arktisk-strategi-gr%C3%B8nland>
- Waltz, K. N. (1979). *Theory of international politics*. McGraw-Hill.

The Political Economy of Russia's Reimagined Arctic

George Soroka

This article examines Russia's evolving approach to Arctic development in light of the Kremlin's "Asian pivot" and the ongoing political rift between Russia and the West over the crisis in Ukraine. Specifically, I contend that the Arctic represents a key component of Moscow's attempts to reorient geopolitically and economically after its annexation of Crimea, and that it is part of a larger, long-term plan to develop Siberia and the Russian Far East as both a resource base for the country and a transit route for goods moving between Asia and Europe. Consequently, this piece assesses the region's political economy from the perspective of two interrelated Arctic projects—the construction of the Yamal LNG facility and government-led efforts to promote utilization of the Northern Sea Route. Adopting a constructivist approach, I argue that Russia's recent efforts to develop the Arctic are motivated not only by material incentives, but also involve a significant status-seeking component that draws on Russia's view of itself as the preeminent Arctic power.*

The Arctic is staggeringly rich in natural resources, with an oft-cited 2008 United States Geological Survey report estimating that it harbors "undiscovered, technically recoverable" hydrocarbons equivalent to 90 billion barrels of oil, 1,670 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids, or approximately 22 percent of the globe's unexploited reserves (Stauffer, 2008). This is in addition to sizable mineral deposits, which run the gamut from prosaic metals like lead and copper to more precious commodities such as gold, diamonds, and various rare-earth elements. Its biological resources are also impressive; for example, major cod and haddock stocks exist in the Barents Sea. As a result, with ice cover on northern waters shrinking precipitously over the last several decades and technological innovations making possible commercial activities unthinkable just a few years ago, it is becoming increasingly plausible to talk about the large-scale development of the Arctic. This holds true not only across extractive industries, but also in the shipping sector.

Russia, given its propitious geology, long history of Arctic engagement, and the sheer size of its northern territories, is particularly well-positioned to benefit from this confluence of events under favorable macroeconomic conditions. Even though the Russian Arctic is home to fewer than two million people (Ahlenius, 2008), the region already accounts for approximately one-fifth of the country's GDP, and Moscow is eager to increase these numbers. Yet it has some catching up to

do. For much of the 20th century the Arctic was a focal point for Soviet military and industrial activity, but the mounting fiscal pressures and competing political priorities that emerged in the wake of the Soviet Union's dissolution caused Russia to pull back from the High North in the early 1990s. It was not until the 2000s that the Kremlin's interest in the Arctic began to noticeably rekindle, fueled by a peculiar blend of resource nationalism and historically contingent ideas about the region's role in defining Russia's national identity and international standing.¹

Concerned with the present, this article examines Russia's economic push northward in light of its estrangement from the West and Moscow's attempts to rebalance geopolitical and trade relations toward the Pacific Rim. The argument advanced consists of two parts. First, I claim that material inducements are, by themselves, insufficient to explain the Kremlin's approach to developing the Arctic, especially as President Vladimir Putin has indicated that he wants Russia to be acknowledged as a major power by the global community and believes an active Arctic presence will help achieve this recognition. Consequently, Moscow's northern development strategy is mediated by a significant status-seeking imperative that not only complements economic incentives, but also aids in defining how these are understood and acted upon. Second, I claim that in the aftermath of the Ukraine crisis the role the Arctic plays in Russia's efforts to reorient toward Asia has been underappreciated. True, Moscow's attention began turning northward well before its March 2014 annexation of Crimea and the outbreak of fighting in the Donbas region; already in 2008, then-president Dmitrii Medvedev, speaking before the Security Council, stated that he wanted to "convert the Arctic into Russia's resource base for the 21st century" (2008). The Kremlin's "Asian pivot" predates it as well, Putin having explicitly called for this two years prior (2012b). Nonetheless, the worsening of relations with the West that resulted from the confrontation over Ukraine has intensified the emphasis placed on both developing the Arctic and establishing closer ties with Asia, serving to increasingly conflate these objectives while simultaneously foregrounding their status-related dimensions.

In examining how the latter interact with material incentives, a tripartite distinction between motivations, processual policy "drivers" and "audience effects" provides a useful heuristic (see Figure 1 below). At the top-most analytic level, Russia's plans for developing the Arctic—which represent a critical component of what may be thought of as a wider "nesting doll" economic strategy for Siberia and the Russian Far East, as well as Eurasia more generally—are spurred on by pragmatic as well as status-oriented motivations. Moscow is today striving to position itself at the head of a vast Eurasian confederation, one whose claim to occupying a distinctive geographic space is predicated on its latitudinal intermediation between Asia and Europe. At the same time, the longitudinal penetration of Russia's understanding of Eurasia is extending ever-further northward, propelled by economic pragmatism as well as resentment over how Russia has been treated in the international system.

However, while the economic allure of a warming Arctic is self-evident, the impetus for engaging in status-seeking behavior requires explanation. Nostalgia for the great-power standing Russia ceded when the bipolar world order that had characterized the latter half of the twentieth century crumbled has long been a prominent feature of its post-communist politics. Not only do surveys conducted over the last two-plus decades consistently show that a majority of the population regrets the Soviet Union's demise, but they likewise reveal many hold extremely negative opinions of the two men most identified with this outcome, Russia's first democratically elected (and pro-

Western) president, Boris Yeltsin, and the hapless last leader of the Soviet Union, Mikhail Gorbachev. Consequently, striving to recover international prestige resonates with a domestic audience; while seeking after status is an avowedly elite-led phenomenon, it conspicuously taps into, and reinforces, mass demand. Putin, who once described the USSR's collapse as the "greatest geopolitical catastrophe" of the twentieth century (2005), finds this an attractive appeal to make, in his speeches repeatedly invoking imagery of the West trying to "put Russia on her knees" or "chain the Russian bear." As he emphasized in a February 2012 article penned while he was seeking re-election to a third presidential term, "Russia is accorded respect, and treated with consideration, only when she is strong and stands firmly on her feet" (2012b).

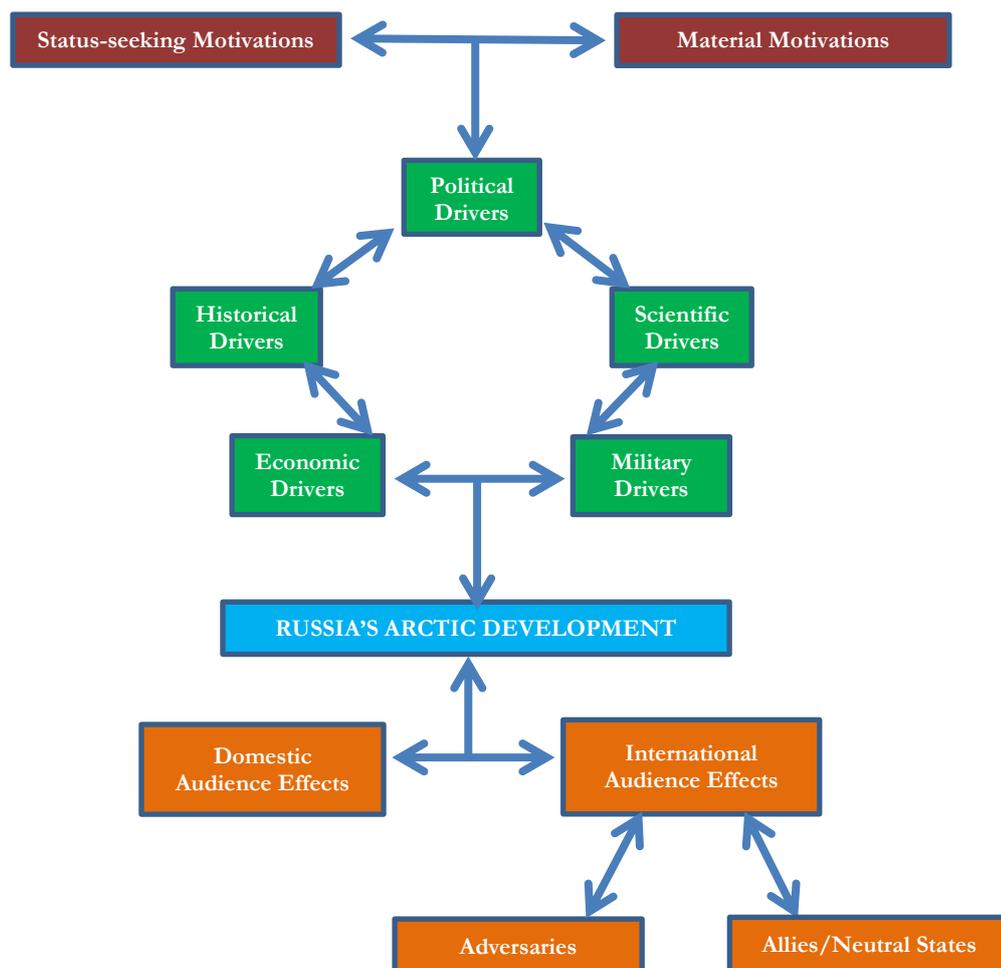


Figure 1: Conceptual representation of factors governing Russia's Arctic development strategy.

At a secondary level of analysis, there exist a number of policy drivers that serve as the mechanisms through which both material and status-related motivations are reified. They include economic, political, military, scientific and historical factors, all of which, to varying degrees, contain within themselves objective material and subjective perceptual components. Moreover, these are not discrete, self-contained units, but rather porous categories that interact dynamically. For example, developing an offshore hydrocarbon field is an economic endeavor, but it also generates military implications, such as the need to protect shipping lanes utilized by oil tankers and reinforce territorial claims.

Finally, who the intended audience is for these narratives and their associated behaviors matters (audience effects likewise do not exist just as outputs, but provide systemic feedback in ways that may affect drivers and even motivations). Emphasizing its Arctic identity for a domestic audience is certainly part of the appeal of increasing regional involvement, but Russia's actions also concurrently function to send messages to neighboring states and other countries interested in the Arctic. However, not only does the content of these dual communication streams vary (as they are expected to perform differing functions), but dealing with this "lack of alignment" and the consequent "potential for counter-productive setbacks caused by inconsistencies between them" poses a significant political challenge (Gorenburg, 2014). Illustrating this, there is a tension between Moscow's hardline domestic rhetoric concerning issues such as NATO's holding of military exercises in the region and the multi-track diplomatic cooperation Russia continues to exhibit in its relations with other northern NATO-member states,² both bilaterally and through organizations such as the Arctic Council.³

This mode of argumentation is informed by the theoretical framework of social constructivism, an underlying premise of which is that intersubjectively constructed identities affect how national interests are defined (Ruggie, 2000: 14). The "social facts" that emerge from this process may "differ fundamentally from material facts, the reality that exists irrespective of collective beliefs about its existence," but they do not lack causal power (Abdelal, Blyth & Parsons, 2005: n.p.). With regard to economics, this approach holds that the perception of material interests is not universal, but rather the product of specific contexts and actors, with *ex-ante* collective identities and beliefs "endowing the economies in which they are embedded with social purposes" (Abdelal, Blyth & Parsons, 2010: 9). It would therefore be a mistake to interpret what is happening in the Russian Arctic only through the prism of *realpolitik* and a rationalist, material ontology that overlooks the ability of social agency to create meaning.⁴ Factors other than objectively knowable, tangible facts may serve to accentuate or attenuate the attractiveness of various economic options, allowing, for example, fiscally sub-optimal projects to be pursued if they satisfy status-seeking demands. Exactly this tendency is today being evinced in Moscow's economic vision for the Far North, where state-led development goals are not only determined by straightforward economic calculations, but also take into account more subjective geopolitical motivations intended to buttress Russia's international prestige and reinforce its self-concept of being a key global player.

Developing the Russian Arctic: Domestic & International Considerations

Domestically, the Russian government sees the High North as central to the country's development, not only in terms of exploiting its natural resources and geographic location, but also as providing a revenue engine capable of furthering regional integration into the Moscow-centered economy. The latter represents a real concern, as parts of Siberia and the Russian Far East are more closely tied economically with their Asian neighbors than Russia's European heartland.⁵

Arctic development is likewise regarded as a means of stemming demographic declines in Russia's northern regions, where decrepit Soviet-era monotowns still arise incongruously from the tundra, transportation infrastructure is woefully lacking and the distances between population hubs are vast. Re-invigorating these sparsely inhabited hinterlands is, among other things, viewed as a way to ensure territorial integrity and bolster national security. As to why this is an issue, consider that if we include its Arctic islands, Russia's northern coastline stretches for roughly forty thousand

kilometers (Antrim, 2010: 19)—a distance equivalent to the circumference of the earth at the equator—but most of it is guarded by nothing more than fierce weather patterns.

Internationally, meanwhile, the Arctic plays a growing role in Russian foreign policy. Tellingly, although the annexation of Crimea had taken place just weeks earlier, Putin emphasized the region during his April 2014 Security Council address, explaining that Russia wants to not only restore its previous role in the Arctic, but also to markedly strengthen its presence there at a time when the interests of regional states increasingly “intersect and collide” and even distant countries are eyeing the Arctic’s potential (2014b).

Specifically, the Arctic is crucial to Moscow’s much-vaunted pivot towards Asia. Despite the impact of Western sanctions and the Russian economy entering a recessionary phase, the European Union (EU) remains Russia’s leading trading partner. In 2015, the country’s total trade with the EU-28 amounted to more than 212 billion EUR, while the commensurate figure for trade between Russia and China was just slightly above 57 billion EUR (European Union, 2016: 8). Given that animosity and mistrust have come to define Russia’s relationship to the West, this heavy economic reliance on the EU does not sit well with the Kremlin, which has come to view the European marketplace as prone to manipulation by anti-Russian ideologues.

Russia is working with multiple partners to reorient its trade flows to Asia, but China is indisputably the linchpin of the strategy. Citing “colossal potential” for bilateral cooperation with Beijing and describing the turn toward the region as “a chance to catch the ‘Chinese wind’ in the ‘sails’ of our economy” (2012b), Putin has stressed that far from feeling threatened by China’s global ascendance, Moscow welcomes it. As a result, instead of trying to compete with Beijing’s Silk Road initiative, the Kremlin has decided to piggyback on it, with Putin and Chinese leader Xi Jinping announcing during a May 8, 2015 press conference that the two countries would seek to integrate China’s proposed “One Belt, One Road” trade and development framework with the Moscow-led Eurasian Economic Union.⁶ Concurrently, Putin issued an explicit invitation for China to partner with Russia on Arctic ventures (Ofitsial’nye, 2015b).

In sectoral terms, Moscow’s plan for Arctic development is focused primarily on hydrocarbons, with the expansion of regional shipping a secondary, albeit closely related, goal. This is not surprising, as Russia possesses enormous energy reserves. According to a 2009 United States Department of Energy report, out of 61 major oil and gas fields in the Arctic, 43 are located within Russia’s borders (Kramer & Krauss, 2011), and more are continually being discovered and explored.⁷ However, this means that Moscow’s Arctic gambit is highly dependent on the vicissitudes of global energy markets. Showcasing how reliant the Russian economy is on hydrocarbons, in 2013—the year before global prices collapsed—oil and gas accounted for 68% of export revenues (Metelitsa, 2014).

Two initiatives highlight the economic promise and peril of this region, along with its status-related appeal: Yamal LNG, a liquefied natural gas facility being built on an icy, wind-swept peninsula in northwestern Siberia, and Russian efforts to develop the Northern Sea Route (NSR) into a major shipping lane, one which, it is hoped, will someday become a viable alternative to the Suez Canal for moving cargo between Asia and Europe.

Yamal LNG

Located on the Gulf of Ob in the Yamalo-Nenets Autonomous Okrug, Yamal LNG will harness the Yuzhno-Tambeyskoye field, thought to contain 926 billion cubic meters of natural gas (Novatek, 2016). Construction began in 2012 and will continue until 2021, costing 27 billion USD.

Supplied by over 200 wells, it will have an annual LNG production capacity of 16.5 million metric tons once all three planned liquefaction trains are functioning. Additional infrastructure associated with the facility includes the new port of Sabetta (developed as a public-private partnership with the Russian government), an international airport, and a planned rail extension that will run nearly 200 kilometers south to Bovanenka, currently the world's northernmost rail terminus. Envisioned as a part of the proposed Northern Latitudinal Railway, this extension could eventually link Sabetta to the Trans-Siberian and Baikal-Amur Mainline railways (Putin, 2015a).

Being developed by Novatek, Russia's largest independent gas producer, together with France's Total (since 2011) and the Chinese National Petroleum Corporation, or CNPC (since 2013), in March 2016 Yamal LNG acquired a new partner when Novatek sold a 9.9% stake to China's Silk Road Fund (SRF)⁸ for 1.087 billion EUR, leaving it with 50.1% ownership (Total and CNPC retained their respective 20% positions) (Novatek, 2016).

Speaking at a trade event in March 2016, Yamal LNG's head, Evgenii Kot, revealed that 96% of the plant's projected output has already been booked in the form of long-term (20-25 year) contracts, with around 86% of it destined for Asia ("Yamal LNG," 2016c). During the summer months shipments are expected to travel directly from Sabetta to Asia, with transshipment via northern European ports the rest of the year (Shiryaevskaya, 2013). In preparation for the start of production, South Korean shipbuilder Daewoo is constructing up to fifteen Arc 7 class double-acting LNG tankers, the first having been launched in January 2016 ("DSME," 2016).

Until recently, however, Yamal LNG's future appeared uncertain. The United States imposed sanctions on Novatek in 2014, targeting both the company and its director, Gennadii Timchenko (personally close to Putin, Timchenko owns 23.49% of Novatek [Barsukov, 2016]), curtailing access to capital markets and dollar-denominated loans.⁹ Consequently, taking into account the contributions of Yamal LNG's partners, state subventions (including more than 2 billion USD from Russia's National Wealth Fund [Staalesen, 2015c]), a 730 million EUR loan from the SRF (Novatek, 2015), and 4 billion USD pledged by Russia's Sberbank and Gazprombank, the project was still short an estimated 10 billion USD in funding at the beginning of 2016. Meanwhile, Chinese banks were reportedly stalling on a long-awaited loan package because they wanted European financial houses involved in the deal to mitigate their political risk (Barsukov, 2016). Amid this scenario, Novatek sought to assuage investors' fears in the beginning of March 2016 by reaffirming that it was committed to launching the first liquefaction train in 2017, notwithstanding the funding shortfall and speculation that operations might begin at a loss due to low gas prices ("Yamal LNG," 2016d). These unsettling developments prompted the Russian government to intervene, with Deputy Prime Minister Arkadii Dvorkovich telling reporters at the Boao Forum for Asia in late March 2016 that Chinese Premier Li Keqiang had agreed to "speed up" financing for the plant ("China," 2016). By the following month the situation was improving. On April 11, 2016 it was announced that loan agreements with Sberbank and Gazprombank had been concluded (Yamal LNG, 2016b), and less than three weeks later a deal worth over 12 billion USD was finally

signed with China Development Bank and the Export-Import Bank of China (Yamal LNG, 2016a). Moscow's advocacy on behalf of Yamal LNG is revealing, because unlike state-controlled Gazprom, which also has a presence on the peninsula and just began year-round shipment of its Novy Port oil via the NSR in early 2016, Novatek is a privately held firm. Putin has long been a vocal supporter of the project, declaring in a December 2015 press conference that he was "amazed" at how efficiently construction was progressing and observing that Russia had an obligation to support it in light of the substantial sums already invested by foreign businesses (2015a). Economic advantages aside, the successful completion of Yamal LNG holds considerable propaganda value, as it will undoubtedly be spun to highlight Russia's technological prowess and the impotency of Western sanctions. Moscow therefore cannot afford a debacle, particularly after terminating Gazprom's monopoly on LNG exports in 2013.

The Northern Sea Route

For all the mystique the Northwest Passage commands in the Western imagination, it is the Northeast Passage, and specifically the NSR portion of it,¹⁰ which holds the greatest promise for Arctic shipping given its potential to serve as a conduit between Europe and Asia.¹¹ With one terminus at Novaya Zemlya and the other at Cape Dezhnev on the Bering Strait, the NSR is not so much a defined route as a series of interlaced passages that primarily run along the Russian coastline, ranging from around 2,200 to 2,900 nautical miles in length (Østreng, 2010).

Soviet leaders had long sought to develop the NSR as an internal shipping lane.¹² They were fairly successful in this, with cargo transported peaking in 1987 at 6.58 million tons (Farré et al., 2014: 302). The USSR's collapse, however, ushered in a sharp decline in utilization, even though the NSR formally opened to foreign-flagged vessels in July 1991. Consequently, although segments of it continued to be plied by the Russian Navy and domestic ships, only in the last few years has the NSR come to be regularly, if erratically from year-to-year, visited by outsiders.

Post-communist Russia's push to promote Arctic shipping is not new; the 2001 Maritime Doctrine already addressed the importance of the NSR to the country's economic and strategic interests ("Morskaja doktrina," 2001). But the prospect was largely hypothetical until not that long ago. Two German heavy-lift vessels, the *Beluga Fraternity* and *Beluga Foresight*, brought the NSR to global prominence in 2009, when they traversed it in the course of a voyage that took them from South Korea all the way to Nigeria via various ports of call. Although they were not, as often claimed, the first foreign-flagged commercial ships to complete a transit of the NSR (Revkin, 2009), their journey received wide media coverage due to its tie-in with global warming. Utilizing the NSR cut an estimated 3,000 nautical miles off the trip and saved 200 tons of fuel per vessel (Beluga, 2010), no small matter given bunker fuel typically accounts for more than two-thirds of a voyage's cost. Another highly publicized transit occurred in 2013, when the *Yongsheng*, operated by China's state-owned COSCO Group, became the first ship to transport containerized cargo along the NSR. It made the trip from Dalian to Rotterdam in just 35 days, shaving 2,400 nautical miles and nearly two weeks off a transit of the Suez Canal (McMillan, 2015). As these examples suggest, for shipping between many major hubs the NSR has the potential to save significant time and distance compared to traditional routes, while also lowering fuel consumption and avoiding piracy around the Strait of Malacca and Horn of Africa.¹³

However, the NSR also poses myriad challenges beyond the vagaries of Arctic weather (its full length has historically only been navigable for a few months per year), including: higher insurance premiums; shallow near-shore passages and the limited beam-width of Russian icebreakers, both of which restrict vessel size and preclude optimizing economies-of-scale; a lack of ice-strengthening on the vast majority of the world's commercial fleet; insufficient maintenance and emergency-response facilities;¹⁴ incomplete bathymetric data; and outdated or unavailable navigation and communication systems. Moreover, while under ideal conditions it is possible to travel the NSR without icebreaker accompaniment (as 14 of 18 transiting ships did in 2015 ["NSR Transits 2015"]) or ice pilots, if required the costs for these services can run into hundreds of thousands of dollars.¹⁵

Environmental and political risks must similarly be considered. The Arctic's remoteness and ecological fragility guarantees a major maritime accident or oil spill will represent a public relations nightmare. Russia and other countries, most prominently the United States, also disagree as to whether portions of the NSR constitute internal waterways or international straits.¹⁶ (Jurisdictional issues became even more of a potential problem after the revised 2012 Federal Law on the NSR codified its boundaries as corresponding to Russia's Exclusive Economic Zone [EEZ]).¹⁷

Furthermore, in 2017 additional regulations on Arctic waterways are slated to go into effect when the International Maritime Organization's Polar Code is finally implemented.¹⁸ In short, the obstacles preventing the NSR from being an attractive option for shippers are substantial, and rectifying the most problematic of them will require huge upfront expenditures that Russia can ill afford at present. However, these capital outlays are essential if it is to become a full-fledged shipping lane.



Figure 2: Image created to author's specifications by Fei Carnes of Harvard University's [Center for Geographic Analysis](#) using ArcGIS.

Still, the NSR remains tempting, particularly given the unexpectedly rapid warming of the northern cryosphere. A 2007 study examining data from 1953–2006 found that Arctic sea ice had disappeared at a rate even faster than the most pessimistic models had earlier predicted (Stroeve, Holland, Meier, Scambos, & Serreze, 2007), and the overall trend has shown no signs of abating since then. Indicative of this, although ice levels fluctuate year-to-year and seasonal measurements are

imperfectly correlated, in 2012 Arctic sea ice registered the lowest summer level observed since satellite monitoring began in 1979, while 2016 witnessed a new winter low, besting the previous record established in 2015 (“Daily Sea Ice,” 2016). However, it is not just the extent of the ice cover that is decreasing; as melting intensifies during now-warmer Arctic summers, the ice that reforms in the colder months is increasingly becoming thinner and easier to navigate than multi-year ice, raising the possibility that the NSR could someday remain open year-round.¹⁹ In any case, if declines continue at the present rate, Arctic waters may witness virtually ice-free summers before mid-century (Overland & Wang, 2013).

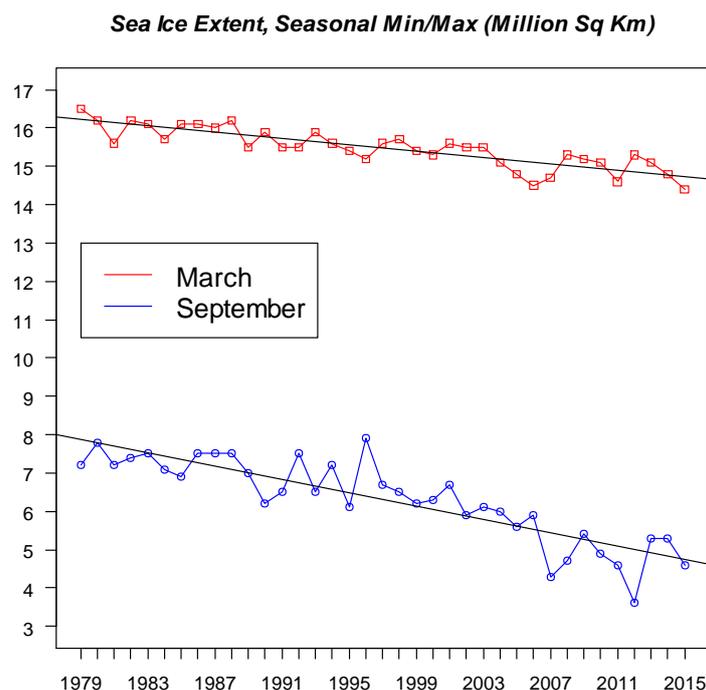


Figure 3: Graph based on data from the National Snow and Ice Data Center’s *Sea Ice Index*.²⁰

Moreover, the NSR does not simply run along an east-west vector. It also possesses a north-south component, with Russian officials keen to integrate it more fully into a transport corridor of railways and rivers such as the Ob, Yenisei and Lena in order to expedite the movement of raw materials out of the country’s expansive interior to Arctic ports, as well as to resupply isolated inland communities. This is not without precedent. Norilsk Nickel, the world’s leading producer of nickel and palladium, already utilizes the Yenisei River port of Dudinka, located 370 kilometers from the Arctic Ocean, to ship nearly year-round via the NSR, having begun doing so in 1979 (Armstrong, 1983: 254).²¹

Concomitantly, in keeping with the observation that the emergence of new maritime trade routes is not only dependent on climate and sea conditions, but is also driven by attempts to circumvent or attenuate political problems (Blunden, 2012: 117), Russia views increasing the commercial viability of the NSR as part of its broader Far East development strategy. As Russia’s Minister of Economic Development, Alexei Uliukaev, recently stated, these projects represent “links in a chain,” as “transit through the Northern Sea Route requires the use and capabilities of ports in the Far East and the ability to use ports in the Arctic Ocean basin” (Ofitsial’nye, 2016).

Putin, for his part, is clear about Moscow's vision for the NSR, calling once again for it to be turned "into a competitive transport corridor of global significance" during his September 2015 address to the Eastern Economic Forum in Vladivostok (2015c). (Three months prior, the Kremlin announced the completion of a classified fifteen-year development plan for the NSR.²²) To facilitate this, Russia is rebuilding its aging icebreaker fleet, with at least fourteen ships in the construction or planning phases (Staalesen, 2015a).²³ However, even without these new vessels Russia already controls more than half of the world's polar-class icebreakers, with nineteen owned by the state (including the only nuclear icebreakers in existence), and twenty-two more operated by Russian firms. In contrast, Canada, another country with a vast Arctic coastline, possesses six total (O'Rourke, 2016: 10).

Russia is also putting into place formal institutions to aid the NSR's development. In May 2013 Prime Minister Dmitrii Medvedev signed a decree creating the Moscow-based Northern Sea Route Administration (NSRA) (Ministerstvo, 2013), which is responsible for issuing permits, ensuring navigational safety, assisting with emergency-response operations, and monitoring environmental conditions along the waterway.²⁴ Meanwhile, Russia's Arctic Commission was established in early 2015. Headed by Deputy Prime Minister Dmitrii Rogozin, its task is to centralize and coordinate policy implementation across the region, a significant portion of which concerns the NSR.²⁵

Bolstering trans-Arctic shipping will also require the participation of Asian states, and Moscow has been steadily laying the groundwork for this. During Putin's visit to China in May 2014, he and Xi issued a joint statement agreeing to foster collaboration across a number of spheres, including the NSR's utilization (Ofitsial'nye, 2014). Similarly, in December 2015 Russia's Minister for Far East Development, Aleksandr Galushka, and Xu Shaoshi, the head of China's State Committee for Development and Reform, signed a memorandum of understanding intended to strengthen regional cooperation, of which Arctic shipping is an integral component ("Minvostokrazvitiia," 2015).

Official expectations for the NSR's future tend toward optimism: Russian Deputy Prime Minister Arkadii Dvorkovich stated in June 2015 that the NSR has the potential to handle over eighty million tons of cargo annually by 2030 (Pravitel'stvo, 2015a). Likewise, China's Polar Research Institute has modeled a scenario under which between 5-15% of that country's international trade could pass through the NSR by 2020 (Doyle, 2013), with COSCO noting in August 2015 that it was "assessing the possibilities for more regular shipping between Europe and Asia along the NSR" and was "optimistic" about prospects for the future (cited in Staalesen, 2015b). Meanwhile, in January 2016 Kazuko Shiraishi, Japan's Ambassador of Arctic Affairs, announced that Japan was ready to redirect up to 40% of its Europe-bound cargo, which currently ships through the Indian Ocean, to the NSR (Zabelina, 2016).

Efforts to promote the NSR have yielded mixed results to date, however. Utilization grew dramatically in the early years of this decade, especially for trans-Arctic voyages. While only four transits were reported in 2010, 38 uninterrupted crossings took place in 2012, moving nearly 1.21 million tons of cargo ("NSR Transits 2012") and the same number occurred in 2013, moving almost 1.18 million tons of cargo ("NSR Transits 2013").²⁶ Yet since peaking in 2012-2013, both the number of transits and the volume of cargo transited have declined appreciably. In 2014, only 31 such voyages took place ("NSR Transits 2014"), accounting for 274.3 thousand tons of cargo ("Ob'em perezvok," n.d.). According to the head of the NSRA, this decline resulted from local

economic conditions and not wider political problems (Litvintseva, 2014), but it is hard to accept this assertion unreservedly, especially as last year the number fell even further. In 2015 only 18 transits took place, resulting in just 39.6 thousand tons of cargo transported, most of it carried by one Chinese ship (the *Yongsheng*) in the course of two voyages (“NSR Transits 2015”). As to what caused this dramatic dropoff, it is correlated with three broad factors: lower bunker fuel prices,²⁷ the August 2015 opening of a second shipping lane in the Suez Canal, and Russia’s ongoing political isolation.

Nonetheless, even in these challenging economic conditions, the total volume of cargo shipped along the NSR has steadily risen, in large part due to the build-out of Yamal LNG and other Arctic projects (Olshevsky, 2016). Statistics reveal 5.43 million tons of cargo passed through at least a segment of the NSR in 2015, up from 3.98 million in 2014 (“Ob”em perevozok,” n.d.). Moreover, although applying for a permit to use the NSR does not guarantee that a voyage will be made, in 2015 the NSRA received a total of 730 requests (132 of them from foreign-flagged vessels), up from 661 in 2014.²⁸

Realistically, the prognosis for Arctic shipping needs to be tempered.²⁹ The NSR will not replace the Suez Canal, which recorded 17,483 transits in 2015,³⁰ as a major cargo thoroughfare anytime in the near-to-medium term. With regard to utilizing it for container shipping, according to Maersk Group CEO Nils Andersen, this “is not something that will happen within the next 10 to 20 years” (cited in Milne, 2013). Even Russia’s Deputy Transportation Minister, Viktor Olersky, has admitted that the NSR “is no alternative to the Suez Canal” (cited in Pettersen, 2013a). Instead, its prospects for the foreseeable future will remain highly dependent on hydrocarbon exports and the health of Russia’s domestic shipping industry, particularly if tensions with the West do not abate and fuel prices remain depressed. Nor will continuing regional warming necessarily work in the NSR’s favor, as this raises the possibility of still-shorter routes opening up through the so-called “donut hole” in the middle of the Arctic Ocean, which falls outside the legal jurisdiction of any state.³¹

Russia’s Arctic Imaginary

Contextualizing the emphasis the Russian government is placing on projects such as Yamal LNG and developing the NSR requires assessing the wider relevance of the Arctic, a region that enjoys tremendous resonance in the national consciousness. Connoting “the great frontier: a place of adventure, symbol of territorial grandeur, and source of abundant resources” (Medvedev, 2016: 1), its appeal is not hard to comprehend. Russia has been a palpable presence in the Arctic since Tsarist times,³² and for much of the twentieth century it functioned as a space wherein the Soviet Union could credibly demonstrate its military, technological and scientific capabilities to the world. Moscow’s northward turn is also occurring amid political efforts to selectively rehabilitate the Soviet past, and the USSR’s impressive achievements in polar exploration, navigation and research are obvious fodder for this recourse to history. All these associations render the Arctic symbolically potent.

Exemplifying this, Putin’s speeches concerning the region have consistently emphasized the interplay between material and status-seeking motivations and highlighted connections between economic and other policy drivers, as well as the physical and conceptual interconnectedness of the Arctic with other regions, both Russian and foreign. As he once declared, the Arctic is a “sphere of Russia’s special interests” precisely because “practically all aspects of national security—the

military-political, economic, technological, environmental, [and] resource-based” are concentrated there (2014b).

Consider the following: in his December 2012 address to the Federal Assembly, Putin noted that the enormous potential of Siberia and the Far East presents Russia with “an opportunity to occupy a worthy place in the Asia-Pacific region, the most energetic, dynamically developing region in the world” (2012a). Speaking before the same body a year later, he accentuated: “I am sure that Russia’s pivot to the Pacific Ocean, and the dynamic development of all our eastern territory, will not only open up for us new economic possibilities, new horizons, but will also provide us with additional instruments for conducting an active foreign policy” (2013). Subsequently, in his 2015 remarks Putin stressed the importance of the Northern Sea Route and Arctic to the development of the Russian Far East, along with the need to cooperate with Asian states and regional structures such as the Association of Southeast Asian Nations (ASEAN) and the Shanghai Cooperation Organization (SCO) (2015b).

Below, meanwhile, is an excerpt from the Russian President’s 2014 keynote speech to the St. Petersburg International Economic Forum:

Nations want to determine their own fates, preserve their cultural, historical and civilizational identity. Given this, the whole geo-economic map of the world changes; alternative centers of economic growth, trade and investment routes form, new associations for integration arise and strengthen, the call is amplified for collective leadership in which to develop common, concerted decisions taken in solidarity, and not imposed by someone else (2014a).

Official documents mirror this integrated stance, with the seminal State Policy Principles in the Arctic to 2020 defining four areas of Russian national interests: exploiting northern resources for the country’s socio-economic development; maintaining the polar region as a “zone of peace and cooperation”; preserving its environment; and expanding the NSR’s utilization (“Osnovy,” 2008). The 2014 iteration of Moscow’s Arctic development plan to 2020 likewise sets four broad regional goals: ensuring national security; bolstering Russia’s international standing; promoting socio-economic development; and introducing statistical monitoring (“Ob utverzhdanii,” 2014).

The connection between economic and military drivers in Arctic policy is especially acute, as in the High North they are linked more tightly than in most other parts of the world due to the formidable logistics of operating in such an extreme environment.³³ This interdependence is evident in the 2015 Maritime Doctrine, which, relative to the Arctic, emphasizes: maintaining unimpeded passage between the Atlantic and Pacific, the growing significance of the NSR; the resources of the continental shelf; and protecting the polar environment (Ofitsial’nye, 2015a). Meanwhile, the 2015 National Security Strategy assigns the Arctic a role in bringing about a multipolar world and notes the need for expanding international cooperation in the region (Ofitsial’nyi, 2015).

Russia, of course, did not completely exit the Arctic after 1991. The Northern Fleet, based in the closed town of Severomorsk in Murmansk oblast, has long been the largest of its five geographic fleets, having assumed preeminent status in the Soviet naval hierarchy during the Cold War. Yet after more than two decades of neglect, the current pace of military rebuilding can legitimately be labeled as unprecedented. Since 2013, Moscow has been actively revitalizing abandoned Soviet-era military installations and airfields, as well as constructing new facilities in such locales as Franz

Josef Land and the Novosibirsk Islands. Work has progressed swiftly, with a high-ranking military source revealing in December 2015 that six bases had already been completed and equipped (“Russia Completes,” 2015).

Looming behind these developments is the fear that a re-militarized Arctic stands poised to become a zone of conflict, proxy or otherwise. Responding to these concerns, Russia’s Arctic Ambassador Anton Vasiliev justified Moscow’s actions by highlighting the need to protect Russian economic interests and improve polar search-and-rescue capabilities, adding everything was being done “transparently and predictably” and that there was no intent to destabilize the region (cited in “Posol RF,” 2014).³⁴ In a similar vein, an unnamed General Staff official explained that the new Northern Fleet-United Strategic Command (which went into operation in December 2014) would be responsible for “protecting Russia’s Arctic shipping and fishing, oil and gas fields on the Arctic shelf, and the country’s national borders in the north” (“Russia,” 2014). Russian Foreign Minister Sergei Lavrov weighed in on the matter as well, recently stating that safeguarding Arctic shipping and the region more generally from accidents and myriad other threats represents an impossible task “without the restoration of the infrastructure, including military, which was almost entirely lost in the 90s” (cited in “Lavrov,” 2016).

Clearly, real strategic interests are present in the Arctic,³⁵ and Russia is not the only state expanding its regional military footprint.³⁶ However, it must be borne in mind that Moscow’s efforts to rebuild a military presence there are part of a larger initiative to modernize the entirety of the Russian armed forces. Moreover, its military facilities in the High North are increasingly being tasked with multiple-use functions, including supporting the Border Service (Lavrov, 2014). Moscow, thus far at least, appears more concerned with “the legal ramifications of the changing Arctic environment” and “establishing an irreversible precedent of control” over shipping than pursuing any grand strategic designs in the region (Flake, 2014: 112-13). Therefore, despite an increase in status-related brinkmanship after the annexation of Crimea (such as occurred when Putin ordered a massive snap drill in March 2015 as a response to NATO holding its largest northern exercise since 1967 in Norway),³⁷ no fundamental paradigm shift has occurred in the Kremlin’s Arctic military strategy, which remains focused on three main goals: asserting Russia’s sovereignty, shielding its economic interests, and demonstrating that it is still a world-class power (Sergunin & Konyshchev, 2015).³⁸

A similar dichotomy between material interests and status-related optics is inherent in Moscow’s revised submission to the United Nations’ Commission on the Limits of the Continental Shelf (CLCS), which holds that Russia should be allowed to extend its territorial claims in Arctic waters beyond the standard 200 nautical-mile limit based on new mappings of its continental shelf morphology.³⁹ Submitted in August 2015, the pending claim contends that the Lomonosov Ridge, Mendeleev-Alpha Rise and Chukchi Plateau, along with the Podvodnikov and Chukchi Basins, are all underwater extensions of Russia’s landmass (“Partial Revised,” 2015). If the data provided are verified, Article 76.5 of the United Nations Convention on the Law of the Sea (UNCLOS) would allow Russia to extend its EEZ up to 350 nautical miles from land (or 100 nautical miles from the 2,500 meter isobar), granting it exclusive control of an additional 1.2 million km² of potentially hydrocarbon- and mineral-rich seabed.⁴⁰ However, as part of this filing, the Kremlin is also touting that the North Pole belongs to Russia. As the proposal, even if it were approved, would not grant control over the water column and the ocean floor at the Pole lies some 4,000 meters beneath its ice-locked surface, playing this up is a purely symbolic gesture.⁴¹ Still, who “owns” the Pole and the

seabed around it has proven a contentious international topic.⁴² Indicative of this, Denmark (via Greenland) filed an overlapping submission with CLCS in December 2014 claiming an additional 895,000 km² of undersea territory for itself (Tulupov, 2015), and Canada is expected to follow suit in 2018 (Sevunts, 2016).

Russia's reengagement with the Arctic also encompasses more quixotic expressions of status-seeking. For example, during the Arktika 2007 expedition polar explorer Artur Chilingarov—a Duma deputy at the time—descended to the bottom of the Arctic Ocean in a submersible to plant a small Russian flag made of titanium beneath the North Pole, afterwards averring “[o]ur task is to remind the world that Russia is a great Arctic and scientific power” (cited in Chivers, 2007). Other examples include the Olympic torch traveling to the Pole aboard the Russian icebreaker *50 Let Pobedy* in 2013, and Bishop Iakov of Nar’ian-Mar and Mezensk releasing a memorial capsule into the Pole’s frigid waters in September 2012 containing a message from the Russian Orthodox Church’s head, Patriarch Kirill, on the occasion of “the 1150th anniversary of the Russian state’s existence” (Arkhangelskaia eparkhiia, 2012).

The China Factor

An ironic byproduct of Western sanctions, Russia’s Arctic ambitions increasingly hinge on Chinese financing and energy-market access.⁴³ But this does not mean that Moscow’s and Beijing’s interests fully align. For one thing, although China officially affirms the littoral states’ territorial claims in the Arctic, government representatives have sent distinctly mixed signals over the years.⁴⁴ Russia, like all the littoral states, adamantly opposes any hint of making the region an international commons along the lines of the 1959 Antarctic Treaty, a point underscored by the 2008 Ilulissat Declaration. China, meanwhile, has previously intimated its support for just such an arrangement. While this rhetorical strand disappeared in the run-up to China joining the Arctic Council as an observer in May 2013,⁴⁵ there remains a lingering wariness of Chinese motives and the reasons for it styling itself a “near-Arctic” state. For another, Russia’s dependence on China does not fit comfortably with Moscow’s increasing promotion of autarky and an import-substitution development model, forcing an awkward discursive shift away from competing with the West to allying with Asia for normative as well as material reasons.⁴⁶ Finally, even though China does not appear to have any territorial ambitions in the Arctic (or Siberia and the Russian Far East more generally) and the region is not nearly as high a priority for Beijing as it is for Moscow, Russia is still cognizant of the need to develop its northeastern flank in order to avoid it becoming “a resource base for China and its sphere of influence” (Trenin 2011: 190).

Moreover, the Chinese economy is facing headwinds and may be unable to digest all the fossil fuel Russia would like to feed it.⁴⁷ Trade relations are also profoundly unbalanced; on a country basis, China has been Russia’s leading trading partner since 2009, but the Russian market represents a tiny one for China, absorbing 1.53% of its exports in 2015 (“Distribution,” 2016). Beijing therefore has reason to avoid alienating its Western trading partners by cooperating too closely with Moscow. Russian businesses, meanwhile, are leery of borrowing from Chinese lenders; not only do costs tend to be considerably higher, but giving China control over the purse strings provides it with unwanted leverage in negotiating future commodity prices. Beijing has also developed a reputation for over-promising and under-delivering on large-scale foreign projects, implying Russian-Chinese cooperation may be more aspirational than realizable.⁴⁸

As a result, despite outwardly amicable diplomatic relations and efforts to promote not only economic partnerships between the two countries, but also cooperation across military and scientific spheres,⁴⁹ there exists an undercurrent of reticence in the relationship, neither state appearing to be the partner of first choice for the other. Along these lines, it is worth noting that Russia's largest military exercise since the Soviet period, *Vostok 2014* ("East 2014") took place not on Europe's doorstep, but rather in the Russian Far East. Thus, while today Russian politicians reserve their public opprobrium for NATO, Russian military leaders continue to regard China as a potentially major strategic threat.⁵⁰

In short, Beijing needs Russia for its natural resources, as China is seeking to cultivate multiple sources of energy and raw materials to insulate its economy from exogenous shocks, while Moscow needs China for its capital. This, coupled with the emphasis both states place on creating a multi-polar world and upholding hard conceptions of state sovereignty, explains their natural, if unsentimental, alliance. It also does not hurt matters that both countries assiduously avoid criticizing one another's domestic policies and human rights records. (It should be noted, however, that China is forging economic and political relationships with multiple northern nations.⁵¹) Moreover, as Russia is the only Arctic state that shares a border with China, why Moscow would prefer to have Beijing as an ally rather than an adversary is no mystery. Unlike Tsar Peter I, who wanted a "window to the West," Vladimir Putin increasingly needs a portal to Asia, but this does not mean tensions do not lurk below the surface of Russian-Chinese relations.

Conclusion

Former Canadian Prime Minister Stephen Harper liked to remind audiences that "the first principle of Arctic sovereignty is use it or lose it" (cited in Austen, 2007). Russia has taken this admonition to heart, intent on asserting itself as the leading northern power. However, whether Russia will be able to achieve the full scope of its Arctic ambitions is still very much uncertain, as there exists a wide disconnect between Moscow's sanguine pronouncements and the rate at which investment capital is flowing into the region. So while likening the Kremlin's Arctic development plans to a "Potemkin village" (Medvedev, 2016: 5) is overly pessimistic, the fact remains that bold statements about the region's potential have thus far proven more bluster than prediction.

Indicative of this, in March 2016 Aleksandr Tsybul'skii, Russia's Deputy Minister of Economic Development, stated that implementing Russia's Arctic development goals through 2020 would cost 260.2 billion rubles ("Minekonomrazvitiia," 2016), a modest increase from the 222 billion rubles Dmitrii Rogozin had previously cited for this same period ("Rogozin," 2015). However, after a May 2016 Arctic Commission meeting, it was announced that 145 priority projects (no date was specified for their completion) would alone require investments totaling around 4.8 trillion rubles, of which about 3.75 trillion would have to come from off-budget sources (Pravitel'stvo, 2016). Finally, on September 7, 2016, Alexei Uliukaev reported that some 150 Arctic projects would require investments totaling 5 trillion rubles by 2030 (Ofitsial'nye, 2016). Even this latter sum, however, may prove too low to build-out the comprehensive infrastructure required to achieve Moscow's aggressive development targets.⁵² Nor can foreign investment or financing be counted on in the present geopolitical climate.

Western sanctions have hurt Russia not only by restricting the availability of external capital, but also by making it more difficult to access the expertise and equipment needed to tackle demanding

Arctic projects.⁵³ The need for foreign technology and services is especially acute for offshore drilling in the region, with one expert estimating that Russia will not be able to muster domestic equivalents before 2020-2025. Meanwhile, replacing the required equipment with Chinese or other third-party substitutes is risky (Panichkin, 2015). Collapsing hydrocarbon prices have only exacerbated the situation, making many long-planned ventures, like the development of the gargantuan Shtokman gas and condensate field in the Barents Sea, economically unfeasible.⁵⁴ Lower energy prices, along with heightened political risk, have also reduced the NSR's allure. China, meanwhile, has proven more reluctant to invest in Russian oil and gas ventures than homegrown proponents of the "Asian pivot" had initially anticipated, although it continues to actively explore the possibilities for Arctic shipping.

In conclusion, Russia's growing Arctic presence is being propelled by a re-imagining of its commercial and strategic possibilities, a move that is predicated not only on the rise of the Asia-Pacific region and an ensuing recalibration of trade relations, but also Moscow's estrangement from the West. This leaves the Kremlin balancing between the nationalistic appeal the Arctic holds for its domestic constituents and the critical skepticism with which many international observers have greeted Russia's plans for regional development. While the reputational costs of failing to deliver on economic promises differ based on the audience in question, Moscow is currently unwilling to pay either price. As the Russian Minister of Natural Resources and the Environment, Sergei Donskoi, stated in May 2016, postponing regional development until macroeconomic conditions improve will not happen "under any circumstances" (cited in "Nef't i gaz," 2016). Plainly, the Kremlin does not want to lose its hard-won share of the global hydrocarbon market, but such categorical pronouncements also implicitly concede that status-related concerns have, at least temporarily, eclipsed objective material realities. This should not surprise us, as the Arctic represents a region where operating even under optimal conditions requires considerable technical competence and resources, rendering it a geographic canvas upon which states can project power and signal their rising international stature.

Notes

1. This was also, in part, a response to the growing interest other states were beginning to exhibit toward the region and its resources, a trend that was on ample display by 2007. Marking the start of the Third International Polar Year (which actually ran to 2009, the prior polar "years" being 1882-1883 and 1932-1933), 2007 saw a precipitous decline in Arctic summer sea ice cover. The latter caused a general upwelling of environmental and economic interest in the region, including among countries like India that were geographically far removed from it. The motivations that propelled these new players into the polar game were multifaceted. Certainly, a warming Arctic could presage rising sea levels and adverse weather effects throughout the world, making its study germane to countries with densely populated, low-lying coastal areas such as China and Japan. The economic promise associated with rapid climate change also provided an impetus, as did the desire of ascendant powers, most notably China, to showcase their increasing international importance (China has in recent years developed an active polar research program [see "China's Polar Research," n.d.]). Also noteworthy is that the growing international attention that started to be paid to the Arctic in the latter half of the 2000s

coincided with a dramatic increase in geopolitical tensions between Russia and the West (for example, over Kosovo and South Ossetia).

2. In his address to the 1st annual International Arctic Forum held in Moscow, Putin noted that while “serious geopolitical and economic interests intersect in the Arctic” he had “absolutely no doubt that existing Arctic issues, including questions about the continental shelf, can be resolved in the spirit of partnership, through negotiations and on the basis of existing international legal norms” (2010). Despite everything that has happened since, Russia appears to be adhering to this script.
3. Many observers believe—citing, for example, the signing of binding agreements on Arctic search and rescue (2011) and marine oil pollution preparedness and response (2013)—that the Council will remain a sufficient *modus vivendi* for dealing with the High North, despite it now being far larger than when it was founded in 1996 due to the addition of twelve states as non-voting observers and the fact that five out of its eight voting members belong to NATO, including all of the Arctic littoral states save Russia. (The Council has no mandate to deal with strategic issues under the terms of the Ottawa Declaration.) But there have been occasional manifestations of political discord. For example, Canada took a hard line with Moscow under Stephen Harper’s Conservative government, with Minister of the Environment Leona Aglukkaq (at the time also Chair of the Council) refusing to attend a three-day task force meeting held in Moscow in 2014 to protest Russia’s actions in Ukraine. And when in April 2015 United States Secretary of State John Kerry assumed the two-year chairmanship of the Council in Iqaluit, Canada, Russian Foreign Minister Sergei Lavrov was conspicuously absent.
4. For examples of social constructivism related to economic matters, see Abdelal, Blyth & Parsons, 2010; Herrera, 2007; Abdelal, 2001.
5. For a relevant discussion, see Bennett, 2014.
6. The “One Belt, One Road” initiative consists of both the land-based Silk Road Economic Belt (SREB) encompassing Central Asia and more distant regions, and the Maritime Silk Road (MSR) linking Southeast Asia, Oceania and North Africa.
7. Offshore exploration and drilling in the Russian Arctic, in particular, is still in its infancy. The first such well, located in the Pechora Sea’s Prirazlomnoe field and originally developed as a collaborative venture between ExxonMobil and Gazprom, only went into production in December 2013.
8. The SRF was established by Beijing in December 2014 to foster economic ties across Eurasia by focusing on the development of industrial assets, energy resources and regional infrastructure.
9. EU sanctions do not specifically target Novatek or Timchenko, but European banks are unlikely to risk incurring Washington’s disapprobation (or angering their own governments) in order to bankroll the project.
10. The Northeast Passage is technically longer, as it extends past Novaya Zemlya into the Barents Sea, but the two designations are often used interchangeably.
11. To give an indication of the magnitude of this market, in 2014 eight of the ten top exporters of containerized cargo were Asian countries. China was the largest source, accounting for over 28% (36 million TEU [Twenty Foot Equivalent Units]) of the containerized cargo shipped by the world’s top twenty exporters. Meanwhile, the top twenty EU importers of containerized cargo in 2014 accounted for more than 16 million TEU of goods (note:

- statistics exclude Cyprus and Malta and treat Belgium/Luxembourg and the Baltics [Latvia, Lithuania and Estonia] as single analytical units) (“Trade Statistics,” n.d.).
12. On early Soviet attempts, see Armstrong, 2011 [1952].
 13. Whether it is ultimately a shorter route between Asia (or North America) and Europe depends on the point of origin and the final destination. Hong Kong is essentially equidistant from Rotterdam via the NSR or Suez Canal, meaning all else being equal, the NSR represents the shorter option for more northerly ports, and the longer one for more southerly ones (Blunden, 2012: 120). For example, sailing from Rotterdam to Vancouver covers 13,445 nautical miles via the NSR, compared to 16,350 via the Panama Canal and 28,400 via the Suez Canal. But sailing from Barcelona to Hong Kong via the Suez is only 14,693 nautical miles, versus 20,686 via the NSR (Christensen, 2009: 2).
 14. In 2009, it was announced that 10 new search-and-rescue/emergency-response centers were to be built by 2015, but as of the first half of 2016, only those located at Dikson, Tiksi and Pevek were functioning according to the NSRA’s website (“Obespechenie,” n.d.).
 15. See “Tarify,” n.d. for the rate schedule.
 16. See Treadwell, 2015; Flake, 2014: 110; Fadeev, 2013; Solski, 2013. At issue are differing interpretations of UNCLOS’ Article 234, which grants coastal states special rights intended to prevent or mitigate pollution of ice-covered waters, and Russia’s stance that the NSR falls under its legal control because it represents an “historically established integrated national transport and communications” route (“O vnutrennikh,” 1998). A similar point of contention exists between Canada and other countries, most notably the United States, concerning the Northwest Passage.
 17. See “Federal’nyi zakon,” 2012.
 18. See “What does the Polar Code,” n.d. for details.
 19. Already in 2015 the NSR remained navigable into late December, when the Russian nuclear-powered icebreaker *Vaygach* navigated it in a little over seven days at an average speed of more than twelve knots per hour (Rosatomflot, 2015).
 20. See Fetterer, Knowles, Meier & Savoie, 2016.
 21. The Yenisei port of Igarka, established in 1929, sits even further upstream: it is located nearly 700 kilometers from the NSR.
 22. For more details, see Pravitel’stvo, 2015b.
 23. Among them is the largest nuclear icebreaker ever built, a 173-meter-long behemoth slated to enter service in 2017. This 33,500 ton dual-reactor vessel will be capable of breaking through ice up to 13 feet thick (Pettersen, 2013b).
 24. See “Predmet,” n.d. for additional information.
 25. In early 2016, Rogozin proposed the creation of new entity that would actively promote the NSR and coordinate transportation logistics along it (“Arktika v fokuse,” 2016).
 26. Author’s calculations, made on the basis of “NSR Transits 2012” and “NSR Transits 2013.” Officially, 46 transits took place in 2012, moving more than 1.26 million tons of cargo and 71 transits took place in 2013, moving nearly 1.36 million tons of cargo. However, as Humpert (2014) and Keil (2014) have noted, statistics for 2013 include voyages that were not full transits, either because they did not span the entire NSR, made stopovers within the NSR, or both began and concluded within its confines. The same holds true for eight voyages counted as full transits in 2012. (Note, though, that as the reported data are not entirely clear in all instances, certain educated assumptions had to be made to derive these

- figures.) An email sent to the Northern Sea Route Information Office on May 30, 2016 requesting clarification was not answered.
27. Although at the time of writing bunker fuel prices have rebounded from lows set in early 2016, they remain significantly depressed: as of 27 May 2016, the average price for 380 CST fuel was 272.21 USD/metric ton, as compared to 398.21 USD/metric ton a year prior. Two years earlier, the average price was 626.45 USD/metric ton (“Bunker Index,” n.d.).
 28. “Postupivshie zaiavleniia 2015” and “Postupivshie zaiavleniia 2014.”
 29. See, for example, Ørts Hansen, Grønsedt, Lindstrøm Graversen, & Hendriksen, 2016; Humpert, 2013; and *Arctic Marine*, 2009.
 30. See “Brief Yearly Statistics,” n.d.
 31. See Smith & Stephenson, 2013 and Humpert & Raspotnik, 2012.
 32. The brainchild of Tsar Peter I, Vitus Bering’s Great Northern Expedition took place between 1733-1743, under the sponsorship of Empresses Anna and Elizabeth.
 33. Language about the need to protect Russian interests in the Arctic appeared in the Russian Military Doctrine for the first time in December 2014 (Klimenko, 2015).
 34. Consonant with this assessment, the United States’ Special Representative for the Arctic, retired Admiral Robert Papp, observed that “Russia is doing those things we would be doing ourselves if there was an increase in traffic above our coast” (cited in Jopson & Milne, 2015).
 35. Moscow, for instance, has felt vulnerable against aircraft and ballistic missiles from the time military complexes in the Arctic deteriorated or were abandoned in the 1990s (Ponomarev, 2014). Meanwhile, warming waters have eroded what Western military strategists during the Cold War referred to as the “fourth wall” of Soviet enclosure (see Antrim, 2010), Arctic ice cover having served to contain the USSR but also, in turn, protecting it from its enemies.
 36. Canada, in particular, is also expanding its military capabilities in the Arctic.
 37. It involved 38,000 service members, 41 naval vessels, 15 submarines, and 110 aircraft (Sergunin & Konyshchev, 2015), dwarfing the scale of NATO’s earlier *Joint Viking* exercise, which deployed 5,000 military personnel.
 38. Military status-seeking, however, has been on ample display in recent years (see, for instance, Pettersen, 2014 and Kramer, 2013). Moreover, strategic drills have increased significantly in scope and scale on both sides after NATO and Russia stopped hosting joint training exercises in 2014.
 39. Russia’s first claim, submitted in December 2001, was denied for technical reasons.
 40. The figure of 1.2 million km² has been widely reported, though in September 2016 Sergei Donskoi, Russia’s Minister of Natural Resources and the Environment, stated Russia stood to gain 1.3 million km² (Ofitsial’nye, 2016).
 41. This is about 1,550 meters deeper than the Gulf of Mexico-based *Perdido*, currently the world’s deepest offshore oil rig, operates at.
 42. Deciding the matter, however, may take decades, particularly as the final disposition will need to be directly negotiated between the parties involved and, if no agreement can be reached, may be referred to the International Court of Justice (Tulupov, 2015).
 43. Large-scale cooperation with Russian enterprises only dates to 2013, when CNPC partnered with Rosneft to conduct surveys in the Pechora and Barents seas and bought into Yamal LNG (Kuersten, 2015). Yet despite having shut China out of majority ownership of oil and gas projects for years, in February 2015 Arkadii Dvorkovich

- announced that Moscow would consider allowing Chinese firms to own a controlling stake in strategic land-based hydrocarbon fields, defined as those holding more than 70 million metric tons of oil or 50 billion cubic meters of gas (Starinskaia, 2015).
44. Recognizing the sovereign rights and territorial claims of the Arctic littoral states was an explicit precondition for China gaining observer status in the Arctic Council in May 2013 (see “Observers,” 2015). However, in the past Chinese officials and academics have questioned these claims, as when Rear Admiral Yin Zhou declared in 2010 that “the current scramble for the sovereignty of the Arctic among some nations has encroached on many other countries’ interests” (cited in Chang, 2010). See Jakobson & Peng, 2012: 14-16, for how Chinese rhetoric concerning the Arctic has changed in recent years. (For a Russian perspective on China’s participation in the Arctic Council see Tulupov 2013; for a general discussion of Chinese interests in the Arctic, see Karlusov, 2012.)
 45. Formalizing the status of “outsider” countries such as China in the Council, even as non-voting observers, reinforces its centrality in handling Arctic matters (for background, see Jakobson & Peng, 2012: 11-14). At the same time, giving China a seat at the table legitimates its presence in the Arctic and provides it with the ability to influence regional policy (Feng, 2015).
 46. An example of the latter was evinced at the May 2015 press conference where Putin welcomed Chinese participation in the Arctic, which took place on the eve of Russia’s 70th commemoration of Victory Day. The timing prompted Putin to link Russia and China by noting that “our two countries suffered the greatest losses” in WWII, which, according to him, explains why Russia and China both oppose the rehabilitation of “Nazism and militarism” and the falsification of history. Not only was this an obvious denunciation of the post-Maidan government in Kyiv, but it also represented an attempt to historically legitimate stronger bonds with China. As Putin concluded: “Our common heroic past has become a good basis on which to build mutually beneficial, neighborly bilateral relations in the 21st century” (Ofitsial’nye, 2015b).
 47. China is today the world’s largest hydrocarbon importer (Dunn, 2014), and Russia has made considerable inroads into its oil and gas markets, having become China’s largest monthly supplier of oil for the first time on record in May 2015, when it temporarily supplanted Saudi Arabia (Raval, 2015). That same year China became the main importer of Russian oil (Kaczmarek, Kardaś & Jakóbowski, 2016).
 48. A Chinese media report from 2015 claimed that the SRF had already committed to nearly a thousand projects with an estimated aggregate cost of 890 billion USD (Schuman, 2015), raising questions of how it would finance them all. Specifically regarding Russia, China has been slow to commit funds for hydrocarbon projects, with most of the deals signed so far being non-binding framework agreements (Kaczmarek, Kardaś & Jakóbowski, 2016). All this has prompted some pundits to preemptively label Moscow’s “Asian pivot” a failure (see Eder & Huotari, 2016; Gabuev, 2016; Putz, 2016).
 49. For instance, in September 2016 Russia and China held bilateral military exercises in the South China Sea (Gady, 2016) and kicked off a joint scientific expedition to the North Pole (“Kitai i Rossiia,” 2016).
 50. The “China as potential foe” rhetoric has been downplayed since 2014, but before then it was quite prevalent. See, for instance, the comments of the Commander-in-Chief of Russia’s Navy, Admiral Vladimir Vysotskii, in “Rossiia obespokoena,” 2011.

51. For a survey of other Arctic states in which China is interested, see Feng, 2015.
52. Achieving 2030 Arctic offshore production targets of 65 million tons of oil and 230 billion m³ of gas annually may alone demand investments totaling more than 1 trillion USD (Panichkin, 2015).
53. For a discussion, see Mordiusenko, 2015.
54. The Russian Ministry of Energy cites a break-even figure of 63 USD/barrel for Russia's Arctic oil ("Nef' i gaz," 2016).

References

- Abdelal, R. (2001). *National purpose in the world economy: Post-Soviet states in comparative perspective*. Ithaca, NY: Cornell UP.
- Abdelal, R., Blyth, M. & Parsons, C. (2010). Introduction: Constructing the international economy. In R. Abdelal, M. Blyth & C. Parsons (Eds.), *Constructing the International Economy* (pp. 1-19). Ithaca, NY: Cornell UP.
- Abdelal, R. , Blyth, M., & Parsons, Craig (2005, January 14). *The case for a constructivist international political economy* (n.p.). Retrieved from <http://ducis.jhfc.duke.edu/wp-content/uploads/archive/documents/ABP.pdf>.
- Ahlenius, H. (2008). Population distribution in the circumpolar Arctic, by country (including indigenous population). Retrieved from http://www.grida.no/graphicslib/detail/population-distribution-in-the-circumpolar-arctic-by-country-including-indigenous-population_1282.
- Antrim, C. L. (2010). The next geographical pivot: The Russian Arctic in the twenty-first century. *Naval War College Review* 63(3), 15-37.
- Arctic marine shipping assessment report* (2009). Arctic Council. Retrieved from http://www.arctic.noaa.gov/detect/documents/AMSA_2009_Report_2nd_print.pdf.
- Arkhangelskaia eparkhiia (2012, September 14). *Episkop Nar'ian-Marskii i Mezenskii Iakov opustil na Severnom poliuse v okean memorial'nuiu kapsulu* [Press release]. Retrieved from http://www.arh-eparhia.ru/news/index.php?ELEMENT_ID=27817.
- Arktika v fokuse vnimaniia (2016, March 15). *Vodnyi transport* 3, 3. Retrieved from <http://rus-shipping.ru/ru/print/magazine/?action=magazine&id=107>.
- Armstrong, T. (2011 [1952]). *The Northern Sea Route: Soviet exploitation of the North East Passage*. New York, NY: Cambridge UP.
- Armstrong, T. (1983). The Northern Sea Route today. *Cold Regions Science and Technology* 7, 251-257.
- Austen, I. (2007, August 11). Canada announces plans for 2 new bases in its Far North. *The New York Times*. Retrieved from http://www.nytimes.com/2007/08/11/world/americas/11canada.html?_r=0.
- Barsukov, I. (2016, March 22). Novatek vse eshche zhdet kitaiskikh deneg. *Kommersant.ru*. Retrieved from <http://www.kommersant.ru/doc/2944762>.
- Beluga Shipping. (2010, July 5). *Beluga Shipping masters first commercial transit of the Northeast Passage* [Press release]. Retrieved from <http://cdn.pes.eu.com/assets/misc/belugaa-1pdf-83.pdf>.

- Bennett, M. (2014). North by northeast: Toward an Asian-Arctic region. *Eurasian Geography and Economics*, 55(1), 71-93.
- Blunden, M. (2012). Geopolitics and the Northern Sea Route. *International Affairs*, 88(1), 115-129.
- Brief yearly statistics. (n.d.). Retrieved June 23, 2016, from <http://www.suezcanal.gov.eg/TRstatHistory.aspx?reportId=4>.
- Bunker Index 380 CST (BIX 380) (n.d.). Retrieved June 6, 2016 from http://www.bunkerindex.com/prices/bix.php?priceindex_id=2.
- Chang, G. G. (2010, March 9). China's Arctic play. *The Diplomat*. Retrieved from <http://thediplomat.com/2010/03/chinas-arctic-play/1/>.
- China promises to speed up work on financing for Yamal LNG project—Russian official (2016, March 24). *TASS*. Retrieved from <http://tass.ru/en/economy/864981>.
- China's Polar Research (n.d.). Retrieved from <http://www.china.org.cn/english/features/PolarResearch/168048.htm>.
- Chivers, C.J. (2007, August 3). Russians plant flag on the Arctic seabed. *The New York Times*. Retrieved from http://www.nytimes.com/2007/08/03/world/europe/03arctic.html?_r=0.
- Christensen, S. A. (2009, March). Are the Northern Sea Routes really the shortest? Maybe a too rose-coloured picture of the blue Arctic Ocean. *DIIS Brief*. Retrieved from <https://www.ciaonet.org/attachments/13834/uploads>.
- Daily sea ice extent updates resume with provisional data (2016, May 6). Retrieved from <https://nsidc.org/arcticseaicenews/>.
- Distribution of Chinese exports in 2015, by trade partner (2016). Retrieved June 1, 2016 from <http://www.statista.com/statistics/270326/main-export-partners-for-china/>.
- Doyle, A. (2013, March 12). China plans first commercial trip through Arctic shortcut in 2013. *Reuters*. Retrieved from <http://www.reuters.com/article/shipping-china-idUSL6N0C4F9720130312>.
- DSME launches world's first icebreaking LNG carrier (2016, January 18). *The Maritime Executive*. Retrieved from <http://www.maritime-executive.com/article/dsme-launches-worlds-first-icebreaking-lng-carrier>.
- Dunn, C. (2014, March 24). China is now the world's largest net importer of petroleum and other liquid fuels. Retrieved from <https://www.eia.gov/todayinenergy/detail.cfm?id=15531>.
- Eder, T. S., & Huotari, M. (2016, April 17). Moscow's failed pivot to China. *Foreign Affairs*. Retrieved from <https://www.foreignaffairs.com/articles/china/2016-04-17/moscow-s-failed-pivot-china>.
- European Union, trade in goods with Russia. Retrieved April 14, 2016 from http://trade.ec.europa.eu/doclib/docs/2006/september/tradoc_113440.pdf.
- Fadeev, A. (2013, January 29). Effektivnoe osvoenie arkticheskikh territorii. *Rossiiskii sovet po mezhdunarodnym delam*. Retrieved from http://russiancouncil.ru/inner/?id_4=1328#top-content.
- Farré, A. B., Stephenson, S.R., Chen, L., Czub, M., Dai, Y., Demchev, D. , . . . Wighting, J. (2014). Commercial Arctic shipping through the Northeast Passage: routes, resources, governance, technology, and infrastructure. *Polar Geography* 37(4), 298-324. doi: 10.1080/1088937X.2014.965769

- Federal'nyi zakon ot 28 iulia 2012 g. N 132-Φ3 "O vnesenii izmenenii v otdel'nye zakonodatel'nye akty Rossiiskoi Federatsii v chasti gosudarstvennogo regulirovaniia torgovogo moreplavaniia v akvatorii Severnogo morskogo puti (2012, July 30). *Rossiiskaia gazeta*. Retrieved from <https://rg.ru/2012/07/30/more-dok.html>.
- Fetterer, F., Knowles, K., Meier, W., & Savoie, M. (2016, updated daily). *Sea Ice Index, Version 1.1* [Monthly Data]. Boulder, CO: National Snow and Ice Data Center. doi: 10.7265/N5736NV7.
- Feng, B. (2015, April 30). China looks north: Carving out a role in the Arctic. Retrieved from <https://www.asiapacific.ca/canada-asia-agenda/china-looks-north-carving-out-role-arctic>.
- Flake, L. E. (2014). Russia's security intentions in a melting Arctic. *Military and Strategic Affairs*, 6(1), 99-116.
- Gabuev, A. (2016, April 22). A pivot to nowhere: The realities of Russia's Asia policy. Retrieved from <http://carnegie.ru/commentary/2016/04/22/pivot-to-nowhere-realities-of-russia-s-asia-policy/ixfv>.
- Gady, F-S. (2016, August 31). Russia to send anti-submarine warfare destroyers to South China Sea. *The Diplomat*. Retrieved from <http://thediplomat.com/2016/08/russia-to-send-anti-submarine-warfare-destroyers-to-south-china-sea/>.
- Gorenburg, D. (2014, August). Russian interests and policies in the Arctic. Retrieved from <http://warontherocks.com/2014/08/russian-interests-and-policies-in-the-arctic/>.
- Herrera, Y. M. (2007). *Imagined economies: The sources of Russian regionalism*. New York, NY: Cambridge UP.
- Humpert, M. (2014). Arctic shipping: An analysis of the 2013 Northern Sea Route season. In L. Heininen, H. Exner-Pirot & J. Plouffe (Eds). *The Arctic Yearbook 2014*. Akureyri, Iceland: Northern Research Forum. Retrieved from <http://arcticyearbook.com/index.php/briefing-notes2014/#section1>.
- Humpert, M. (2013, November). *The future of Arctic shipping: A new Silk Road for China?* Washington, D.C.: The Arctic Institute. Retrieved from https://issuu.com/thearcticinstitute/docs/the_future_of_arctic_shipping_-_a_n.
- Humpert, M., & Raspotnik, A. (2012). The future of Arctic shipping along the Transpolar Sea Route. In L. Heininen, H. Exner-Pirot & J. Plouffe (Eds). *The Arctic Yearbook 2012* (pp. 281-307). Akureyri, Iceland: Northern Research Forum. Retrieved from http://arcticyearbook.com/images/Articles_2012/Humpert_and_Raspotnik.pdf
- Jakobson, L., & Peng, J. (2012, November). China's Arctic aspirations. *SIPRI Policy Paper 34*. Retrieved from <http://arcticportal.org/images/PDFs/SIPRIPP34.pdf>.
- Jopson, B. & Milne, R. (2015, March 9). US urged to assert itself over Arctic. *Financial Times*. Retrieved from <https://www.ft.com/content/de5fb444-c5e5-11e4-bd6b-00144feab7de#axzz4LfoLnw7Z>.
- Kaczmarek, M., Kardaś, S., & Jakóbowski, J. (2016, February 17). "The oil friendship": The state of and prospects for Russian-Chinese energy cooperation. *Ośrodek Studiów Wschodnich*. Retrieved from <https://www.osw.waw.pl/en/publikacje/osw-commentary/2016-02-17/oil-friendship-state-and-prospects-russian-chinese-energy>.
- Karlusov, V. (2012, March 15). Arkticheskiĭ vector globalizatsii Kitaia. *Rossiiskii sovet po mezhdunarodnym delam*. Retrieved from http://russiancouncil.ru/inner/?id_4=244#top-content.

- Keil, K. (2014, January 13). Evaluation of the Arctic shipping season 2013. *The Arctic Institute*. Retrieved from <http://www.thearcticinstitute.org/2014/01/evaluation-of-arctic-%20shipping-season.html>.
- Kitai i Rossiia v pervye provedut sovmestnye issledovaniia na Severnom poliuse (2016, August 31). Retrieved from http://m.russian.china.org.cn/russian/doc_1_26351_1839809.html.
- Klimenko, E. (2015, October 14). Russia's military buildup in the Arctic: Political rhetoric versus reality. Retrieved from <http://www.worldpolicy.org/blog/2015/10/14/russia%E2%80%99s-military-buildup-arctic-political-rhetoric-vs-reality>.
- Kramer, A. E. (2013, September 14). Russia preparing patrols of Arctic shipping lanes. *The New York Times*. Retrieved from http://www.nytimes.com/2013/09/15/world/europe/russia-preparing-patrols-of-arctic-shipping-lanes.html?_r=1.
- Kramer, A. E., & Krauss, C. (2011, February 15). Russia embraces offshore Arctic drilling. *The New York Times*. Retrieved from http://www.nytimes.com/2011/02/16/business/global/16arctic.html?_r=2
- Kuersten, A. (2015, January 3). Russian sanctions, China, and the Arctic. *The Diplomat*. Retrieved from <http://thediplomat.com/2015/01/russian-sanctions-china-and-the-arctic/>.
- Lavrov, A. (2014). Northern Joint Strategic Command of the Russian Armed Forces. *Moscow Defense Brief* (6)44, 26-28.
- Lavrov: RF namerena povyshat' bezopasnost' ispol'zovaniia Severnogo morskovo puti (2016, April 12). *TASS*. Retrieved from <http://tass.ru/politika/3197550>.
- Litvintseva, G. (2014, December 11). Tranzit cherez Severnyi morskoi put' upal na 77%. *Proved*. Retrieved from <http://xn--b1ae2adf4f.xn--p1ai/economics/logistics/21556-tpanzit-chepez-sevepnyy-mopskoy-puty-upal-na-77.html>.
- McMillan, T. (2015, February 10). Breaking through the ice: An assessment of Northern Sea Route opportunities. *The Maritime Executive*. Retrieved from <http://www.maritime-executive.com/features/breaking-through-the-ice>.
- Medvedev, D. (2008, September 17). *Vystuplenie na zasedanii Soveta Bezopasnosti «O zashchite natsional'nykh interesov Rossii v Arktike»* [Speech]. Retrieved from <http://kremlin.ru/events/president/transcripts/1433>.
- Medvedev, S. (2016, June). The Kremlin's Arctic plans: More gutted than grand. *PONARS Eurasia Policy Memo no. 430*. Retrieved from <http://www.ponarseurasia.org/memo/kremlin-arctic-plans-more-gutted-grand>.
- Metelitsa, A. (2014, July 23). Oil and natural gas sales accounted for 68% of Russia's total export revenues in 2013. Retrieved from: <http://www.cia.gov/todayinenergy/detail.cfm?id=17231>.
- Milne, R. (2013, October 6). Arctic shipping routes still a long-term proposition, says Maersk. *Financial Times*. Retrieved from <https://www.ft.com/content/f44bd53a-2e74-11e3-be22-00144feab7de>.
- Minekonomrazvitiia RF: gosprogramma razvitiia Arktiki potrebuat 260 mlrd rublei (2016, March 9). *TASS*. Retrieved from <http://tass.ru/ekonomika/2725586>.

- Ministerstvo transporta Rossiiskoi Federatsii. (2013, March 19). *Predsedatel' Pravitel'stva RF Dmitrii Medvedev podpisal rasporyazhenie Pravitel'stva RF ot 15 marta 2013 g. № 358-r o sozdanii federal'nogo gosudarstvennogo kazennogo uchrezhdeniia "Administratsiia Severnogo morskogo puti," podvedomstvennogo Rosmorrechflotu* [Press release]. Retrieved from http://www.mintrans.ru/news/detail.php?ELEMENT_ID=19803.
- Minvostokrazvitiia Rossii. (2015, December 17). *Minvostokrazvitiia i Gosudarstvennyi komitet KNR po razvitiuu i reforme podpisali Memorandum o sotrudnichestve na Dal'nem Vostoke* [Press Release]. Retrieved from http://minvostokrazvitiia.ru/press-center/news_minvostok/?ELEMENT_ID=3949.
- Mordiushenko, O. (2015, September 17). Burovaia ugroza. *Kommersant.ru*. Retrieved from <http://kommersant.ru/doc/2811635>.
- Morskaia doktrina Rossiiskoi Federatsii na period do 2020 goda [Doctrine] (2001, July 27). Retrieved from <http://www.scrf.gov.ru/documents/34.html>.
- Neft' i gaz rossiiskoi Arktiki: malen'kie shagi k bol'shim resursam. (2016, May 25). *RIA Novosti*. Retrieved from <http://ria.ru/economy/20160525/1439399879.html>.
- Novatek. (2016, March 15). *Novatek and China's Silk Road Fund conclude selling 9.9% stake in Yamal LNG* [Press release]. Retrieved from http://www.novatek.ru/en/press/releases/index.php?id_4=1165.
- Novatek. (2015, December 17). *Novatek and China's Silk Road Fund sign binding definitive agreements* [Press release]. Retrieved from http://www.novatek.ru/en/investors/events/archive/index.php?id_4=1056&afrom_4=01.01.2015&ato_4=31.12.2015.
- NSR transits 2015. Retrieved from http://www.arctic-l.io.com/docs/nsr/transits/Transits_in_2015.pdf.
- NSR transits 2014. Retrieved from http://www.arctic-l.io.com/docs/nsr/transits/Transits_2014.pdf.
- NSR transits 2013. Retrieved from http://www.arctic-l.io.com/docs/nsr/transits/Transits_2013_final.pdf.
- NSR transits 2012. Retrieved from http://www.arctic-l.io.com/docs/nsr/transits/Transits_2012.pdf.
- O vnutrennikh morskikh vodakh, territorial'nom more i prilozhashchei zone Rossiiskoi Federatsii [Law] (1998, July 17). Retrieved from <http://pravo.gov.ru/proxy/ips/?docbody=&nd=102054703&rdk=0>.
- Ob utverzhdenii gosudarstvennoi programmy Rossiiskoi Federatsii "Sotsial'no-ekonomicheskogo razvitiie Arkticheskoi zony Rossiiskoi Federatsii na period do 2020 goda" [Regulation]. (2014, April 21). Retrieved from <http://government.ru/media/files/AtEYgOHutVc.pdf>.
- Ob'em perevozok gruzov po trassam Severnogo morskogo puti. (n.d.) Retrieved June 16, 2016 from <https://fedstat.ru/indicator/51479.do>.
- Obespechenie po poisku i spasaniuu, obespechenie po LRN. (n.d.) Retrieved from <http://www.nsra.ru/ru/pso/>.
- Observers (2015, May 7). Retrieved from <http://www.arctic-council.org/index.php/en/about-us/arctic-council/observers>.

- Ofitsial'nye setevye resursy Prezidenta Rossii. (2016, September 7). *Soveshchanie s chlenami Pravitel'stva* [Video file]. Retrieved from <http://kremlin.ru/events/president/news/52843>.
- Ofitsial'nye setevye resursy Prezidenta Rossii. (2015a, July 26). *Morskaiia doktrina Russkoi Federatsii* [Transcript]. Retrieved from <http://kremlin.ru/events/president/news/50060>.
- Ofitsial'nye setevye resursy Prezidenta Rossii. (2015b, May 8). *Zaiavleniia dlia pressy po itogam Rossiisko-kitaiskikh peregovorov* [Video file]. Retrieved from <http://kremlin.ru/events/president/transcripts/49433>.
- Ofitsial'nye setevye resursy Prezidenta Rossii. (2014, May 20). *Sovmestnoe zaiavlenie Rossiiskoe Federatsii i Kitaiskoi Narodnoi Respubliki o novom etape otnoshenii vseob"emliushchego partnerstva i strategicheskogo vzaimodeistviia* [Statement]. Retrieved from <http://kremlin.ru/supplement/1642>.
- Ofitsial'nyi internet-portal pravovoi informatsii. (2015, December 31). *Strategiia natsional'noi bezopasnosti Rossiiskoi federatsii* [Decree]. Retrieved from <http://publication.pravo.gov.ru/Document/View/0001201512310038>.
- Olshevsky: Northern Sea Route to handle growing traffic volumes [Interview] (2016, January 29). *The Arctic*. Retrieved from <http://arctic.ru/analytic/20160129/279590.html>.
- O'Rourke, R. (2016, April 15). Coast Guard polar icebreaker modernization: Background and issues for Congress. *Congressional Research Service*. Retrieved from <https://www.fas.org/sgp/crs/weapons/RL34391.pdf>.
- Ørts Hansen, C., Grønsedt, P., Lindstrøm Graversen, C., & Hendriksen, C. (2016, January). *Arctic shipping--commercial opportunities and challenges*. CBS Maritime. Retrieved from <https://services-webdav.cbs.dk/doc/CBS.dk/Arctic%20Shipping%20-%20Commercial%20Opportunities%20and%20Challenges.pdf>.
- Osnovy gosudarstvennoi politiki Rossiiskoi Federatsii v Arktike na period do 2020 goda i dal'neishuiu perspektivu (2008, September 18). Retrieved from <http://www.scrf.gov.ru/documents/98.html>.
- Østreng, W. (2010). The Northeast Passage and Northern Sea Route. *ARCTIS*. Retrieved from <http://www.arctis-search.com/The+Northeast+Passage+and+Northern+Sea+Route+2>.
- Overland, J. E., & Wang, M. (2013). When will the summer Arctic be nearly sea ice free? *Geophysical Research Letters* 40, 2097-2101. doi:10.1002/grl.50316,2013
- Panichkin, I. (2015, November 19). Razvedat' i osvoit'. *Rossiiskii sovet po mezhdunarodnym delam*. Retrieved from http://russiancouncil.ru/inner/?id_4=6871#top-content.
- Partial revised submission of the Russian Federation to the Commission on the Limits of the Continental Shelf in respect to the continental shelf of the Russian Federation in the Arctic Ocean [Executive summary] (2015, April). Retrieved from http://www.un.org/depts/los/clcs_new/submissions_files/rus01_rev15/2015_08_03_Exec_Summary_English.pdf.
- Pettersen, T. (2014, April 10). Russian paratroopers conquer North Pole. *Barents Observer*. Retrieved from <http://barentsobserver.com/en/security/2014/04/russian-paratroopers-conquer-north-pole-10-04>.
- Pettersen, T. (2013a, December 19). Northern Sea Route no alternative to Suez – Deputy Minister. *Barents Observer*. Retrieved from <http://barentsobserver.com/en/business/2013/12/northern-sea-route-no-alternative-suez-deputy-minister-19-12>.

- Pettersen, T. (2013b, November 6). Russia lays down world's largest nuclear icebreaker. *Barents Observer*. Retrieved from <http://barentsobserver.com/en/arctic/2013/11/russia-lays-down-worlds-largest-nuclear-icebreaker-06-11>.
- Ponomarev, V. (2014, April 18). Russkii brodok na Sever. *Ekspert Online*. Retrieved from http://expert.ru/2014/04/18/brosok-na-sever_1/.
- Posol RF: voennoe sotrudnichestvo mezhdru stranami Arktiki ne iavliaetsia militarizatsiei regiona (2014, February 1). *ITAR-TASS*. Retrieved from <http://itar-tass.com/politika/930631>.
- Postupivshie zaiavleniia 2015. Retrieved from http://www.nsra.ru/ru/perechen_zayavlenii/2015/.
- Postupivshie zaiavleniia 2014. Retrieved from http://www.nsra.ru/ru/perechen_zayavlenii/2014/.
- Pravitel'stvo Rossii. (2016, May 24). *Dmitrii Rogozin provel v Arkhangel'ske zasedanie prezidiuma Goskomissii po voprosam razvitiia Arktiki* [Press release]. Retrieved from <http://government.ru/news/23329/>.
- Pravitel'stvo Rossii. (2015a, June 8). *Soobshchenie Arkadiia Dvorkovicha na soveshchanii s vitse-prem'erami* [Transcript]. Retrieved from <http://m.government.ru/news/18410/>.
- Pravitel'stvo Rossii. (2015b, June 8). *Spravka o Kompleksnom proekte razvitiia Severnogo morskogo puti* [Press release]. Retrieved from <http://government.ru/orders/selection/405/18405/>.
- Predmet deiatel'nosti i funktsii ASMP (n.d.). Retrieved from http://www.nsra.ru/ru/celi_funktsii/.
- Putin, V. (2015a, December 17). *Bol'shaia press-konferentsiia Vladimira Putina* [Video file]. Retrieved from <http://www.kremlin.ru/events/president/news/50971>.
- Putin, V. (2015b, December 3). *Poslanie Prezidenta Federal'nomy Sobraniuu* [Video file]. Retrieved from <http://kremlin.ru/events/president/news/50864/videos>.
- Putin, V. (2015c, September 4). *Pervyi Vostochnyi ekonomicheskii forum* [Video file]. Retrieved from <http://kremlin.ru/events/president/news/50232>.
- Putin, V. (2014a, May 23). *Peterburgskii mezhdunarodnyi ekonomicheskii forum* [Video file]. Retrieved from <http://www.kremlin.ru/news/21080>.
- Putin, V. (2014b, April 22). *Zasedanie Soveta Bezopasnosti po voprosu realizatsii gosudarstvennoi politiki v Arktike* [Video file]. Retrieved from <http://kremlin.ru/events/president/news/20845>.
- Putin, V. (2013, December 12). *Poslanie Prezidenta Federal'nomy Sobraniuu* [Video file]. Retrieved from <http://news.kremlin.ru/news/19825>.
- Putin, V. (2012a, December 12). *Poslanie Prezidenta Federal'nomu Sobraniuu* [Video file]. Retrieved from <http://kremlin.ru/events/president/news/17118>.
- Putin, V. (2012b, February 27). Rossiia i meniaiushchiisia mir. *Moskovskie novosti*. Retrieved from: <http://www.mn.ru/politics/78738>
- Putin, V. (2010, September 22). Rechi V.V. Putina i S.K. Shoigu na I mezhdunarodnom arkticheskom forume [Speech]. Retrieved from <https://www.rgo.ru/ru/page/rechi-vv-putina-i-sk-shoigu-na-i-mezhdunarodnom-arkticheskom-forume>.
- Putin, V. (2005, April 25). Poslanie Prezidenta Federal'nomu Sobraniuu Rossiiskoi Federatsii [Transcript]. *Rossiiskaia gazeta*. Retrieved from <https://rg.ru/2005/04/25/poslanie-text.html>.

- Putz, C. (2016, April 24). Why did Russia's pivot to Asia fail? *The Diplomat*. Retrieved from <http://thediplomat.com/2016/04/why-did-russias-pivot-to-asia-fail/>.
- Raval, A. (2015, June 23). Russia takes over as top oil supplier to China. *Financial Times*. Retrieved from <https://www.ft.com/content/9eda3756-19bc-11e5-8201-cbdb03d71480#axzz4Ba4PjWOj>.
- Revkin, A. C. (2009, September 4). Commercial Arctic passage nearing goal. *The New York Times*. Retrieved from http://dotearth.blogs.nytimes.com/2009/09/04/commercial-arctic-passage-nearing-goal/?_r=5.
- Rogozin: programmy v Arktike v blizhaishie 5 let potrebiut 222 mlrd. rub. (2015, April 14). *TASS*. Retrieved from <http://tass.ru/ekonomika/1901424>.
- Rosatomflot. (2015, December 25). *Dostizheniia v akvatorii Sevmorputi* [Press Release]. Retrieved from <http://www.rosatomflot.ru/index.php?menuid=49&date=2015-12-0&newsid=802>.
- Rossiia obespokoena aktivizatsiei NATO v Arktike (2011, July 6). *RIA Novosti*. Retrieved from https://ria.ru/defense_safety/20110706/397987672.html.
- Ruggie, J. G. (2000). *Constructing the world polity: Essays on international institutionalization*. New York, NY: Routledge.
- Russia completes equipping of six military bases in Arctic—General Staff source (2015, December 7). *TASS*. Retrieved from <http://tass.ru/en/defense/841935>.
- Russia to set up Arctic military command by 2015 (2014, February 17). *Sputnik International*. Retrieved from <http://en.ria.ru/russia/20140217/187620827/Russia-to-Set-Up-Arctic-Military-Command-by-2015.html>.
- Schuman, M. (2015, November 25). China's new Silk Road dream. *Bloomberg Businessweek*. Retrieved from <http://www.bloomberg.com/news/articles/2015-11-25/china-s-new-silk-road-dream>.
- Sergunin, A. , & Konyshev, V. (2015, September 21). Russia and the U.S. in the Arctic: A new confrontation or damage limitation? *Valdai Discussion Club*. Retrieved from <http://valdaiclub.com/opinion/highlights/RussiaandtheUSintheArcticANewConfrontationorDamageLimitation/>.
- Sevunts, L. (2016, May 3). Canada to submit its Arctic continental shelf claim in 2018 (2016, May 3). *Radio Canada International*. Retrieved from <http://www.rcinet.ca/en/2016/05/03/canada-to-submit-its-arctic-continental-shelf-claim-in-2018/>.
- Shiryaevskaya, A. (2013, December 6). Putin frees Russian gas chilled amid permafrost: Energy markets. *Bloomberg*. Retrieved from <http://www.bloomberg.com/news/articles/2013-12-06/putin-frees-russian-gas-chilled-amid-permafrost-energy-markets>.
- Smith, L. C., & Stephenson, S. R. (2013). New trans-Arctic shipping routes navigable by mid-century. *Proceedings of the National Academy of Sciences*, 110(13), 4871–4872 . doi: 10.1073/pnas.1214212110.
- Solski, J. J. (2013). New developments in Russian regulation of navigation on the Northern Sea Route. *Arctic Review on Law and Politics*, 4(1), 90-119.
- Soroka, G. (2016, May 5). Putin's Arctic ambitions: Russia's economic aspirations in the Far North. *Foreign Affairs*. Retrieved from <https://www.foreignaffairs.com/articles/russia-fsu/2016-05-05/putins-arctic-ambitions>.

- Staalesen, A. (2015a, December 1). These are Russia's new icebreakers. *The Independent Barents Observer*. Retrieved from <http://thebarentsobserver.com/en/2015/12/these-are-russias-new-icebreakers>.
- Staalesen, A. (2015b, August 16). Chinese giant mulls more Northern Sea Route shipping. *Barents Observer*. Retrieved from <http://barentsobserver.com/en/arctic/2015/08/chinese-giant-mulls-more-northern-sea-route-shipping-18-08>.
- Staalesen, A. (2015c, January 5). Russian crisis money for Yamal. *Barents Observer*. Retrieved from <http://barentsobserver.com/en/energy/2015/01/russian-crisis-money-yamal-05-01>.
- Starinskaia, G. (2015, March 1). Dvorkovich poobeshchal Kitaiu kontrol' had rossiiskoi nef'tiu. *Vedomosti*. Retrieved from <http://www.vedomosti.ru/newspaper/articles/2015/03/01/neft-techet-v-kitai>.
- Stauffer, P. (ed.) (2008). Circum-Arctic resource appraisal: Estimates of undiscovered oil and gas north of the Arctic Circle. *USGS Fact Sheet 2008-3049*. Retrieved from <https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.
- Stroeve, J., Holland, M.M., Meier, W., Scambos, T. & Serreze, M. , (2007). Arctic sea ice decline: Faster than forecast. *Geophysical Research Letters* 34 (L09501). doi: 10.1029/2007GL029703
- Tarifny na ledokol'nuiu provodku sudov, okazyvaemuiu FGUP «Atomflob» v akvatorii Severnogo morskogo puti (n.d.). Retrieved from http://portnews.ru/upload/basefiles/1088_chtpachrpichfchy%20pnpa%20ppchrpopvpo_pdpkchu%20pppo%20pSpMpP.gif.
- Trade statistics (n.d.). Retrieved September 6, 2016 from <http://www.worldshipping.org/about-the-industry/global-trade/trade-statistics>.
- Treadwell, M. (2015, April 8). Will Arctic nations let Russia control Arctic shipping? Should they? *Harvard International Review*, 36(3). Retrieved from <http://hir.harvard.edu/will-arctic-nations-let-russia-control-arctic-shipping-should-they/>.
- Trenin, D. (2011). *Post-imperium: A Eurasian story*. Washington, D.C.: Carnegie Endowment for International Peace. Retrieved from <http://carnegieendowment.org/pdf/book/post-imperium.pdf>.
- Tulupov, D. (2015, April 3). Uroki zanimatel'noi delimitatsii: kak pravil'no razdelit' arkticheskii shel'f? *Rossiiskii sovet po mezhdunarodnym delam*. Retrieved from http://russiancouncil.ru/inner/?id_4=5583#top-content.
- Tulupov, D. (2013, June 19). Chlenstvo Kitaia v Arkticheskom sovete. *Rossiiskii sovet po mezhdunarodnym delam*. Retrieved from http://russiancouncil.ru/inner/?id_4=1986#top-content.
- What does the Polar Code mean for ship safety? (N.d.). Retrieved from http://www.imo.org/en/MediaCentre/HotTopics/polar/Documents/Polar%20Code%20Ship%20Safety%20-%20Infographic_smaller_.pdf.
- Yamal LNG. (2016a, April 29). *Yamal LNG signed loan agreements with the Export-Import Bank of China and the China Development Bank* [Press release]. Retrieved from <http://yamallng.ru/en/press/news/7540/>.
- Yamal LNG. (2016b, April 11). *Yamal LNG signed loan agreement with Sberbank and Gazprombank* [Press Release]. Retrieved from: <http://yamallng.ru/en/press/news/7541/>.
- Yamal LNG project signs contracts for sale of 96% of LNG it produces (2016c, March 17). *TASS*. Retrieved from <http://tass.ru/en/economy/863064>.

Yamal LNG may begin operations below break-even (2016d, March 14). *The Maritime Executive*. Retrieved from <http://www.maritime-executive.com/article/yamal-lng-may-begin-operations-below-break-even>.

Zabelina, N. (2016, March 1). Iaponiia natselilas' na Severnyi morskoi put'. *Nezavisimaaia gazeta*. Retrieved from http://www.ng.ru/economics/2016-03-01/1_japan.html.

Briefing Note

The Arctic Five versus the Arctic Council

Andreas Kuersten

Introduction

As climate change opens the Arctic to human activity and the region steadily captures more international attention, a rich tapestry of Arctic international governance mechanisms has formed and propagated. From the sub-regional to the pan-Arctic, numerous forums now exist where Arctic and non-Arctic states and other entities interact to address the issues facing the roof of the world, but “[t]he Arctic Council has emerged as perhaps the most important of these” (Nord, 2016: 4).

In recent years, however, another regional body has appeared on the scene: the Arctic Five. Many opine that this loose union of the five Arctic littoral states, that excludes other Arctic states and native organizations, is usurping the Arctic Council’s central position in northern governance. The Arctic Five, through its compression of regional decision making, is also charged with undermining the spirit of cooperation that the Council has helped unfurl across Arctic international relations.

The aforementioned view is widespread, and certainly possesses a degree of truth. But the relationship that has developed and that could develop between the Arctic Five and Arctic Council is more nuanced than popularly put forth. As such, this Briefing Note aims to elaborate on how these two regional associations actually and potentially interact, both negatively *and* positively. While actions by the Arctic Five can detract from the work and regional position of the Arctic Council, the former is not the harbinger of the latter’s demise. Furthermore, these two groups can even complement one another to positively address Arctic issues.

Andreas Kuersten is a law clerk with the United States Court of Appeals for the Armed Forces (CAAF). He previously worked for the U.S. National Oceanic and Atmospheric Administration (NOAA) on Arctic projects and was a fellow with the Arctic Summer College. The views expressed herein are his own and do not represent those of CAAF or the U.S. Government.

What are the Arctic Five and Arctic Council?

To accurately analyze how the Arctic Five and Arctic Council interact, one must understand what they are.

The Arctic Five

The Arctic Five is the grouping of the five Arctic littoral states (Canada, Denmark, Norway, Russia, and the United States of America) in addressing Arctic affairs. It must be emphasized that this association has no independent power or existence apart from the states that comprise it. That is, the Arctic littoral states meet and negotiate among themselves in an ad hoc manner. There is no formal or permanent administrative structure undergirding the grouping, it is simply a moniker for interactions involving the five Arctic littoral states, used to reference the manner in which these countries choose to interact and organize themselves in specific instances. This, however, does not deprive the association of importance. Gatherings of and concerted action on the part of the Arctic littoral states have significant implications for the region.

Although interactions between the Arctic Five states involve steady low-key bilateral and multilateral communication through traditional diplomatic channels, the union manifests itself most prominently when the countries gather at summits to discuss Arctic matters. When Arctic issues emerge that these countries believe must be addressed in unison, the Arctic Five assembles. So far, the three most notable formal gatherings of the group were in: Ilulissat, Greenland (2008); Chelsea, Canada (2010); and Oslo, Norway (2015). The Ilulissat and Oslo gatherings produced non-binding declarations from the littoral states with regard to the international legal regime applicable to the Arctic and the prevention of unregulated fishing in the region, respectively.

The Arctic Council

In contrast to the ad hoc nature of the Arctic Five, and despite it being the product of a non-binding declaration – the 1996 Ottawa Declaration – rather than a treaty, the Arctic Council is a relatively fixed and ordered body that has been referred to as a “quasi-international organization” (Nord, 2016: 34). It labels itself, however, a “high level intergovernmental forum” given that it is not an international organization with independent legal character, but rather a space and framework for state action (Rottem, 2016: 169).

The Council is certainly a forum, as it brings together numerous actors in a hierarchical organization to consider Arctic matters. The apex actors are the eight Member States (the Arctic Five in addition to Iceland, Sweden, and Finland), who make all decisions for the Arctic Council by consensus. Next in line are the Permanent Participants: six indigenous peoples’ organizations representing Arctic natives that have full consultation rights in all Council negotiations and decisions. Below the Permanent Participants are the Observers: non-Arctic states, international organizations, and non-governmental organizations that are approved by the Member States to observe Council operations, and that may participate to limited degrees at the discretion of the Members. These actors meet and interact through the various permanent units and regularly scheduled gatherings of the Arctic Council.

But on top of being a forum, the Council is, perhaps foremost, a research shop. Its core and most consistent activities are conducted through six working groups that research Arctic environmental and development matters. In addition, task forces are also regularly established to investigate

specific issues over set time periods. The research, findings, and reports that these organs produce are what the Member States and others principally rely on to inform their discussions of Arctic issues and formulate policy.

Unlike the Arctic Five, meetings of the Arctic Council have produced binding international agreements acceded to by its members: Agreement on Cooperation and Rescue in the Arctic (2009) and Agreement on Cooperation in Marine Oil Pollution Preparedness and Response in the Arctic (2011). In addition, the text of a third treaty, Agreement on Enhancing Arctic Scientific Cooperation, was agreed to by the Member States this year, and will likely be acceded to in 2017. Council research and negotiations also spurred the adoption of the binding International Code for Ships Operating in Polar Waters (2015) by the International Maritime Organization, which enters into force in 2017.

Finally, mention must be made that the mandate of the Arctic Council is circumscribed: under the auspices of the Ottawa Declaration, it is ostensibly limited to “issues of sustainable development and environmental protection in the Arctic,” and “should not deal with matters related to military security” (Declaration on the Establishment of the Arctic Council, 1996) – although the use of the more permissive “*should* not” rather than the more restrictive “*shall* not” perhaps leaves this area open to future Council treatment. This is in contrast to the Arctic Five, which can theoretically address any topic that its constituent states desire.

Friend or Foe?

Given that both the Arctic Five and Arctic Council are, at their core, associations with overlapping membership congregated for the purpose of addressing Arctic issues, it is not hard to see how the work of one may influence that of the other, negatively or positively.

Arctic Five-Arctic Council Antagonism

The states of the Arctic Five engaged in their first meaningful action in Ilulissat – although some have argued that the group’s true first action was in Oslo in 1973 when the states signed the Agreement on the Conservation of Polar Bears. Since then, it has been widely argued that this assemblage detracts from the work of the Arctic Council and the broader Arctic cooperation that the Council is meant to engender.

Many see undertakings of the Arctic Five as problematic given that this body does not include all of the Member States, Permanent Participants, and Observers of the Arctic Council. Work in the Arctic Five therefore leaves out numerous actors with legitimate Arctic interests, and thwarts the purposeful inclusion of native organizations within Arctic Council decision making. The Arctic Five can therefore function as a workaround to the Arctic Council, allowing its constituent states to avoid having to engage the opinions of the Council’s additional parties. The Ilulissat and Oslo Declarations were both decried by excluded Arctic Council actors and commentators for these reasons (Steinberg et al., 2015: 10) (Nielsson & Magnussen, 2015).

The Arctic Five can also function to narrow issues prior to their emergence in Arctic Council discussions, assert littoral state predominance in an area, and thereby also limit Council actor engagement in Arctic affairs. This can be accomplished by the Arctic littoral states expressing their views and even resolutions of matters through the Arctic Five prior to them meaningfully emerging

in formal Arctic Council discourse. Thus, issues can arrive at the Council in conceptually altered forms, and actors can be influenced by the positions already taken by the Arctic Five.

Arguably, since fisheries management certainly falls within the Arctic Council's mandate to address sustainable development and environmental protection in the region, the Oslo Declaration on unregulated fishing in the Arctic will function in exactly this manner. Now, for better or worse, every discussion of Arctic commercial fishing that might arise in the Council, or anywhere else for that matter, will have the Arctic Five's Oslo Declaration as a starting point.

Arctic Five-Arctic Council Synergy

There is, however, another side to the Arctic Five-Arctic Council relationship, one that largely goes unmentioned: their potential complementarity. Aside from their being in competition as overlapping forums for the addressing of Arctic issues, the two bodies and their unique characteristics can work together to positively contribute to international Arctic governance, more so than they could on their own. In this regard, the relative advantages of the Arctic Five and Arctic Council are paramount.

In terms of the Arctic Five, the limited participation in the association – just the five Arctic littoral states – offers efficiencies in comparison to the Arctic Council *because of* the exclusion of many Arctic stakeholders. Matters can be addressed in a more streamlined fashion not only because of the limited number of actors involved, but also because of the limited *types* of actors involved. Only states participate in the Arctic Five, and the interests of states are more congruous with one another than with those of native or other types of intergovernmental and non-governmental organizations. This efficiency is one of the reasons that the Arctic Five was selected by the littoral states as the forum through which to undertake the work culminating in the Oslo Declaration, despite multilateral discussion of Arctic fishery management beginning in the Arctic Council (Molenaar, 2015: 427-28).

Adding to its efficiencies is the fact that the Arctic Five does not have the Ottawa Declaration ostensibly limiting its ambit; it may address any and all issues that the Arctic littoral states wish.

The Arctic Five's efficiencies of broadness of competence and limited participation were both on display through the Ilulissat Declaration. First, the legal regime applicable to the Arctic generally is not a matter of sustainable development or environmental protection, but rather one of jurisdiction, sovereignty, and dispute resolution. So it is highly debatable whether this matter could have even been brought up through the Arctic Council. Second, the issue arguably only concerns the Arctic littoral states since it principally addresses their overlapping continental shelf claims in the region, claims that only littoral states have. As such, the involvement of other actors would have needlessly bogged down discussion and delayed action.

Finally, the Arctic Five is plausibly more able to equably engage and include non-Arctic states in discussions when need be (Rottem, 2016: 171). Unlike the Arctic Council, the Arctic Five grouping is entirely a matter of discretion, with no formal rules detailing the extent to which various states may be involved or establishing a hierarchical relationship between them. While the Council boasts the broader consistent presence and participation of Arctic and non-Arctic states in its proceedings, non-Member State involvement is completely subjugated to the inclinations of Members, making it a less effective or attractive forum for asserting non-Member State interests. The fact that Arctic

indigenous organizations are privileged in Arctic Council discourse compared to non-Arctic states is also potentially problematic for the latter's involvement: states are the paramount actors and sole deposits of sovereignty in the international system, and they jealously guard their status as sovereign equals above all other types of actors in international relations (Biersteker, 2013).

This relative advantage of the Arctic Five can be seen in action with regard to unregulated fishing in the central Arctic Ocean. While the littoral states delivered the Oslo Declaration on their own, the document specifically recognizes the interests of other states and declares the Arctic Five's intention to work with others "in a broader process" on this issue (Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean, 2015). And this broader process has already begun: other Arctic and non-Arctic states have been brought in for talks that will hopefully lead to a binding regional fisheries management regime (Hoag, 2016) (Zerehi, 2016).

Turning to the Arctic Council, its primary advantage is that it is a stable body that allows for constant dialogue between its participants. Its established structure and administrative scheme, predominantly its research-focused working groups, also allow for ongoing and targeted work that produces a steady stream of Arctic data. These qualities are in contrast to the Arctic Five, which has to organize ad hoc meetings every time it wishes to address an issue, and ad hoc science meetings or other types of collaborations if it wants to render original research.

As noted above, decisions made through the Council also carry more credibility than those arrived at through the Arctic Five because of its broader participation and meaningful inclusion of Arctic native organizations. This point, however, must be caveated: Arctic Council resolutions carry more credibility among *Arctic* states not part of the Arctic Five and Arctic indigenous organizations, but not necessarily more broadly. This is because there is growing disquiet among non-Arctic states regarding the Council because of their distinctly disadvantaged position within the forum (Nord, 2016: 87) (Young, 2012: 282).

The relative advantages of the Arctic Five and Arctic Council potentially mesh in positive ways. While the Council is the more competent and productive producer of Arctic research, the Arctic Five is, as a result of its comparative lack of organizational rules and participants, a potentially more efficient avenue for turning out declarations framing Arctic issues and binding agreements involving non-Arctic states. As such, in certain circumstances, the Arctic Council can produce the actionable data and the Arctic Five can act. In this way, even though the Arctic Council may not be the forum through which determinations on issues are or can be reached, research and discussions from the Council can heavily inform Arctic Five resolutions.

Conversely, actions by the Arctic Five can frame issues prior to their meaningful introduction within the Arctic Council. Although this interaction can adversely narrow concerns as discussed above, it can also serve a positive function by making Arctic littoral state positions clear, thereby streamlining discussions and conclusions through the Council.

The Arctic Five-Arctic Council Relationship

The antagonisms and synergies between the Arctic Five and Arctic Council aside, the two bodies have developed a rather clear relationship primarily determined by the actions of the Arctic Five given its ad hoc and uninhibited nature.

To date, the only declarations to emanate from the Arctic Five are non-binding ones on issues that are either outside of or better handled outside of the Arctic Council's purview, and the positions of which are generally in line with the views of Council participants. The main, and some might argue sole, cause of antipathy from Council participants towards the Arctic Five is the fact that they have been excluded from its decision making processes. But, given the factors noted above, this is currently a more theoretical problem should the Arctic Five states begin producing binding agreements that they seek to impose on others rather than one of practical consequence. The Arctic Five has yet to act in such a manner, and it is unlikely to.

As currently employed by the Arctic littoral states, the Arctic Five has two primary purposes. First, it is a tool to assert its constituents' claim of preeminence, even above other Arctic states, in Arctic affairs and governance. Second, the association is a means to outline and address potentially disruptive issues before they upset the spirit of cooperation that pervades Arctic international relations. This was particularly the case with the Ilulissat Declaration, which was meant, in the face of a "viral and possibly destabilizing conception" of the Arctic as a theater of coming conflict (Kuersten, 2015), to clearly express the littoral states' intention to amicably settle their territorial disagreements through the legal mechanisms established by the United Nations Convention on the Law of Sea.

It is doubtful that the Arctic littoral states will begin producing binding international agreements among themselves through the Arctic Five because the Arctic contains substantial swathes of High Seas and Area (seabed beyond national jurisdiction) where every state has certain rights of travel and exploitation. Given the limited membership of the Arctic Five, the five Arctic littoral states do not want to legally restrict themselves while others remain uninhibited.

The Arctic Five will more than likely continue as a means to frame pressing Arctic issues in non-binding Arctic littoral state terms for their future binding treatment through other avenues, a role that occasionally places certain states above others in addressing Arctic affairs but that is not inherently antithetical to the work of the Arctic Council. Where appropriate, Arctic matters will still find themselves before the Council for their final resolution.

Conclusion

The relationship between the Arctic Five and Arctic Council is not one dimensional. Given the Arctic Council's inherent limitations as a forum for the conduct of international Arctic governance, other associations are needed in this endeavor. Rather than being a completely negative influence on northern international relations, as popularly put forth, the Arctic Five currently plays a unique and at times constructive role in the region. Moreover, it has the potential to contribute further in concert with the Arctic Council. Going forward, the relative strengths and weaknesses of the Arctic Five and Arctic Council will hopefully figure more prominently in assessing these bodies and their potential composite contributions to international Arctic governance.

References

- Biersteker, T.J. (2013). State, Sovereignty, and Territory. In W. Carlsnaes, T. Risse, & B.A. Simmons (Eds.), *Handbook of International Relations* (2nd ed.) (pp. 245-324). London, UK: SAGE Publications Ltd.
- Declaration Concerning the Prevention of Unregulated High Seas Fishing in the Central Arctic Ocean (2015). *Oslo Declaration*. Retrieved from <https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/folkerett/declaration-on-arctic-fisheries-16-july-2015.pdf>.
- Declaration on the Establishment of the Arctic Council (1996). *Ottawa Declaration*. Retrieved from <https://oaarchive.arctic-council.org/handle/11374/85>.
- Hoag, H. (2016). Nations Negotiate Fishing in Arctic High Seas. *Arctic Deeply*. Retrieved from <https://www.newsdeeply.com/arctic/articles/2016/04/28/nations-negotiate-fishing-in-arctic-high-seas>.
- Kuersten, A. (2015). The Arctic Race That Wasn't. *Foreign Affairs*. Retrieved from <https://www.foreignaffairs.com/reviews/2015-08-20/arctic-race-wasnt>.
- Molenaar, E.J. (2015). The Oslo Declaration on High Seas Fishing in the Central Arctic Ocean. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *Arctic Yearbook 2015* (pp. 427-31). Akureyri, Iceland: Northern Research Forum.
- Nielsson, E.T. & Magnusson B.M. (2015). The Arctic Five Strike Again. *The Arctic Journal*. Retrieved from <http://arcticjournal.com/opinion/1732/arctic-five-strike-again>.
- Nord, D.C. (2016). *The Arctic Council: Governance Within the Far North*. New York, NY: Routledge.
- Rottem, S.V. (2016). The Arctic Council in Arctic Governance: The Significance of the Oil Spill Agreement. In L. Jakobson & N. Melvin (Eds.), *The New Arctic Governance* (pp. 147-73). Oxford, UK: Oxford University Press.
- Steinberg, P.E., J. Tasch, & H. Gerhardt (2015). *Contesting the Arctic: Politics and Imaginaries in the Circumpolar North*. London, UK: I.B. Tauris & Co. Ltd.
- Young, O.R. (2012). Listening to the Voices of Non-Arctic Ocean Governance. In O.R. Young, J.D. Kim, & Y.H. Him (Eds.) *The Arctic in World Affairs: A North Pacific Dialogue on Arctic Marine Issues*. Seoul, KR/Honolulu, HI: Korea Maritime Institute & East-West Center.
- Zerehi, S.S. (2016). 10 Nations Gather in Iqaluit for Arctic Fisheries Negotiations. *CBC*. Retrieved from <http://www.cbc.ca/news/canada/north/arctic-fisheries-international-meeting-iquait-1.3666217>.

Briefing Note

The EU's Arctic Future Following the Spring of Statements

Adam Stępień & Andreas Raspotnik

In April 2016, the European Commission and the European Union's (EU) High Representative for Foreign Affairs and Security Policy published their new Joint Communication on "An integrated European Union Policy for the Arctic".¹ In the following June, the Foreign Affairs Council (the Council of the European Union's configuration that brings together the member states' foreign ministers), in turn, issued its Conclusions on the Arctic policy,² endorsing the Commission's priorities and reiterating the EU's strong regional interest.

The authors of this briefing note published analyses of both documents.³ For the Arctic Yearbook 2016, we try to take a step further and consider possible future pathways for the Union's Arctic affairs, including the likely implications of the United Kingdom's (UK) withdrawal from the EU (so-called Brexit).

2016 and a Spring of Statements

While only proposing a strategic outlook, the 2016 Communication built on earlier EU actions and recommended a more focused view of the EU's role in the Arctic. First, emphasis was laid on climate change and related efforts with regard to Arctic research, global climate mitigation and regional adaptation strategies. Second, the European Arctic took centre stage with the EU stressing the need of multidimensional regional economic development, which goes beyond large-scale extractive and transport projects and rather emphasizes support for northern innovation and

Adam Stępień is a Researcher and PhD candidate at the Arctic Centre, University of Lapland. Andreas Raspotnik is a Senior Fellow at the Arctic Institute and received his PhD from the University of Cologne and the University of Edinburgh.

entrepreneurship. Third, enhanced *EUropean* engagement in Arctic international cooperation was highlighted. Accordingly, the Union aims to be regionally visible via its research funding capabilities – its key soft power tool in the Circumpolar North, increased collaboration with local stakeholders and active participation in related forums, especially the Arctic Council.

These are certainly not new or surprising Arctic philosophies. The “EU Arctic Policy” – not unlike Arctic policies of Arctic and non-Arctic states – remains a very diverse set of ideas, trying to reconcile contradictory values and interests.

Perhaps most importantly, the EU’s “integrated policy for the Arctic” continues to encompass exclusively actions of the Union itself, merely taking note of Arctic policies and activities of the EU member states. By summer/autumn 2016, quite a few EU states published Arctic policy statements or pronounced objectives or interests in the Arctic related to their various scientific, economic and diplomatic activities in the region.⁴

The new policy update aims to integrate EU internal and external policies and does not link up the EU policy with member states’ Arctic policies, a deficiency criticized by some actors.⁵ Ideally, while not designed to coordinate member states’ activities, the policy could serve as a blue print that inspires Arctic-related actions within the Union’s member states and beyond.⁶

So far, the Commission positioned the EU as an actor filling the gaps in the existing patchwork of member states’ Arctic-relevant actions and identifying Arctic dimension to various initiatives the Union had already been carrying out. Such an approach is likely to continue in the future.

The Future Policy

In addition to the new Joint Communication and the related Conclusions, the European Parliament (EP) is expected to publish its fourth Resolution on the EU’s Arctic policy in November/December 2016. Although resolutions by the EP have no binding character as such, the expressed opinions do give certain political impulses and – in the Arctic setting – have had an impact on both the Union’s Arctic policy process and its regional credibility. Freer to openly pronounce problematic issues or give expression to concerns of interest groups or civil society actors, the EP’s voice is often more courageous and/or controversial than that of its EU institutional counterparts. Yet, little is currently known about the forthcoming EP Resolution.

Apart from the Parliament’s statement, the EU’s Arctic affairs should enter a quieter phase for the coming three-four years with the latest Joint Communication serving as an authoritative guide for the Commission services for the foreseeable future. Moreover, several ongoing or soon to be launched processes will unfold. First, from 2016, the [EU-Polarnet](#) project will hold stakeholder consultations contributing to its work on the European Polar Research Program. The latter is to be completed by 2019/2020. Second, the Commission plans on carrying out outreach and dialogue activities over the coming three years with conferences to be organized in Brussels and the (European) Arctic. At the same time, dialogue meetings with Arctic indigenous peoples should take place, as before, on an annual basis. The idea of establishing a Brussels-based representation for the Sámi people living in the EU and in the European Economic Area (i.e. Norway) will continue to be considered, although failed attempts in the past years are not particularly encouraging. Third, processes ideally leading to defining overarching investment and research priorities for the European Arctic will be implemented throughout 2017. These include primarily the European

Arctic Stakeholder Forum, bringing together national and regional authorities, and EU decision-makers and involving in some – so far unclear – way a broader spectrum of Arctic stakeholders. As EU regional and development funding is slowly shifting towards investment loans, the European Investment Bank is likely to be involved in this format. In addition, a network of managing authorities of EU programmes operating in the European Arctic will be set up, with the aim to contribute to the work of the aforementioned forum. At this point it is unclear how the envisaged priorities will be framed and how they are to influence the post-2020 EU multiannual financial framework. As a follow up to the forum's work, annual stakeholder conferences are to be organized starting from the end of 2017.

Future Developments

However, regardless a silent EU-Arctic policy phase, several EU and international developments – while not Arctic-specific – can be of relevance for the Circumpolar North in the years to come. For instance, the UN General Assembly has started the negotiation process on the new implementing agreement for the UN Convention on the Law of the Sea regarding protecting biodiversity in the areas beyond national jurisdiction (i.e. in high seas), which is potentially of crucial importance for the Central Arctic Ocean. The EU is likely to take a strong stance on establishing marine protected areas and regulating the utilization of marine genetic resources. Moreover, the Union is currently preparing to ratify the highly Arctic-relevant Minamata Convention on Mercury. Already in February 2016, the Commission adopted a related ratification package with proposals for amending EU legislation. Similarly, the Commission has also proposed a Clean Air Policy Package with legislative changes potentially limiting the EU's air pollution footprint in the long term.

Furthermore, the 2016 Communication showed that the EU has no clear approach towards resource extraction in the Arctic, as the document is largely silent about the issue. The EU policymakers either avoid the topic or try to satisfy – with the language of “responsible” and “sustainable” development – all sides of the debate: regional actors favouring extractives including resource companies, as well as environmentalists or indigenous reindeer herders concerned by impacts. Consequently, no clear EU actions as regards Arctic non-renewable resources should be expected. Moreover, it remains to be seen what economic development trends take hold in the Arctic in general and in Europe's northernmost regions in particular.

Based on the Union's previous Arctic experiences, one can observe a rather cautious approach taken by the Commission and the European External Action Service that nowadays builds on a “soft footprint” strategy. Reading between the lines of the 2016 Communication, this soft approach suggests that Arctic actors should propose and request areas where the EU can support their legitimate efforts, rather than the EU taking the initiative itself.

However, the Arctic – while perhaps not yet a “negative priority”⁷ – is unlikely to be anywhere close to the top of the agenda for the Union in the coming years. Europe continues to struggle with multiple crises, including the influx of migrants and a sluggish economic recovery, currently threatened by the vows of, *inter alia*, the Italian and German banking systems. Politics around the continent are facing challenges from populist, anti-EU parties, and the ‘experiment’ of the UK commencing a process of withdrawal from the EU only adds to these problems.

Brexit: Does it Matter for EU Arctic Affairs?

It is highly unlikely that the Union's priorities in the Arctic would change without the UK. The 2013 UK's Arctic policy document indicated that the EU was not a particularly important element in the country's Arctic deliberations, in contrast to the Finnish, French or German statements. However, lengthy and tedious negotiations leading to the actual withdrawal will consume much of the EU institutions' energy and leave even less space for marginal issues such as the Arctic. More importantly, Brexit will have concrete implications for the EU's Arctic actorness. British polar research (with flagship institutions such as the British Antarctic Survey), economic activities in the region or London's maritime insurance sector have so far constituted a very important part of the EU's northern credentials.

Furthermore, without British financial contribution, significant cuts in the EU budget can be expected, including financing dedicated to regional funding. That may negatively affect the amount of EU money flowing up north. Even without Brexit, the next two years will be a time of struggles by Europe's northernmost regions to retain present levels of EU (and EEA) financing.

However, research funding should be affected to a lesser degree especially as the UK is likely to financially participate in the successor of the Horizon 2020 programme. British institutions have always been crucial partners in EU-funded research projects. A lack of British involvement in EU projects would be against the interests of both UK's and EU's science actors as well as detrimental for the scientific outputs. Although at the moment a certain degree of uncertainty may lead to a more cautious approach towards including Britons in research funding applications,⁸ it would be rather surprising if withdrawal negotiations resulted in limiting British participation in pan-European projects and research infrastructure cooperation in a longer perspective.⁹

Coda

In our Briefing Note last year, we asked if the Union would be able to devise organising ideas for its "Northern Neighbourhood", eventually encompassed in one "integrated policy". We also wondered if the Arctic could have a real and defined significance for the EU beyond declaratory and formal statements only. Much (sea) ice has melted since then, the Union's institutions have published updated versions of its Arctic perspective and the Brexit (debate) has seemingly shaken the EU to its very foundations. European Arctic states – both EU member states and non-member states – and the broader (Arctic) public need to be aware that the Circumpolar North will only remain of peripheral concern for policymakers in Brussels. Yet, periphery does not necessarily need to have only a negative connotation. A peripheral region – within the current governance system set up by the Arctic states – that fosters active cross-border cooperation, i.e. in terms of infrastructure or telecommunication developments, could attract *EUropean* attention. Eventually, the EU Arctic policy could facilitate a win-win situation for both the periphery (the European Arctic) and the centre (Brussels) that goes beyond the previous, tedious debates on Arctic Council Observer status or the banning of seal products.

Notes

1. European Commission and The High Representative, 'An integrated European Union policy for the Arctic', JOIN(2016)21final (27 April 2016),

https://eeas.europa.eu/arctic_region/docs/160427_joint-communication-an-integrated-european-union-policy-for-the-arctic_en.pdf

2. Council of the European Union, 'Council conclusions on the Arctic', (20 June 2016), <http://data.consilium.europa.eu/doc/document/ST-10400-2016-INIT/en/pdf>
3. Raspotnik, Andreas and Stępień, Adam (21 June 2016), "The EU pledges to actively follow-up on its Arctic commitments" in High North News at <http://www.highnorthnews.com/the-eu-pledges-to-actively-follow-up-on-its-arctic-commitments/>; Stępień, Adam and Raspotnik, Andreas (3 May 2016), "The EU's new Arctic communication: not-so-integrated, not-so-disappointing?" *ArCticles: Arctic Centre Paper* at <http://lauda.ulapland.fi/bitstream/handle/10024/62370/ArCticles-1-2016-EU-Arctic-Policy-Stepien-Raspotnik.pdf>
4. Including Arctic Council members (Denmark, Finland and Sweden), as well as Arctic Council observers such as France, Germany, Italy, the Netherlands and the UK.
5. As expressed by some participants of an outreach seminar organized by the EEAS in Brussels on 2 June 2016.
6. Interview with an EEAS official, conducted by Andreas Raspotnik on 14 June 2016.
7. Interview with a European Commission official, conducted by Adam Stępień, August 2015.
8. Sample, Ian (12 July 2016), "UK scientists dropped from EU projects because of post-Brexit funding fears", *The Guardian*, <https://www.theguardian.com/education/2016/jul/12/uk-scientists-dropped-from-eu-projects-because-of-post-brexit-funding-fears>
9. Yet, the case of excluding Switzerland from various programmes following country's limitations on the free movement of persons could suggest that some problems may occur.

Briefing Note

Is There Scope for Scotland to Develop its Own Arctic Policy and What Would it Look Like?

Erik Kruse

The Arctic is an area receiving a large amount of global attention due to the increasing evidence of climate change all across the region, acting as a harbinger for action to be taken on this global issue. Scotland is inseparably linked to the dynamics of the region, but is concomitant with the politics of the UK, which has been found not to offer of yet, a comprehensive policy approach to the Arctic. Ultimately issues of governance and security are likely to increase in the High North, as will economic opportunities. As a result, there is imminent demand for more comprehensive governance and security in the region, especially as resource extraction continues.

Scotland as part of the UK is a near-Arctic country and will undoubtedly be drawn into future discussions on the concerns facing the region. Many subnational and regional governments have their own Arctic policies. The possibility for Scotland to develop its own Arctic policy is fairly limited, however, in large part due to the constitutional context it currently finds itself in. Although the vote for Britain to leave the European Union, increasing powers through devolution, demand from Arctic states and international institutions for more comprehensive governance, and increasing economic opportunities suggest that a Scottish Arctic policy stating its intent and outlining its specific areas of concern and abilities from the UK is a strong possibility.

Scottish British Divergences

There is an interesting divide in the UK towards action in the Arctic, which became especially apparent in the build up to the 2014 Scottish independence referendum. Convolution of effective approaches in policy building has been manifested due to clashing interests of politicians in

Westminster and in Holyrood. The firm position of the SNP is for increased consideration of challenges facing the High North, with a particular focus on improved cooperation with northern partners and multilateral organisations (Robertson, 2015). This includes the EU, which became a major battleground in discussions ahead of the Scottish independence vote. The pro-independence movement rallied for continued membership, as uncertainties towards Brussels grew in Westminster, fuelled by the Atlanticist wing of the Conservative Party. This unremitting desire by many UK Conservatives to break away from the EU comes with the aim of also increasing cooperation with northern states through bilateral and multilateral partnerships. As Hille stated, “Northernness and Euroscepticism are obviously correlated”, meaning that as well as Scottish nationalists seeing Norway as a model, Atlanticists also do in its staunchly anti-EU stance (2003: 166). Interestingly, the Northern Isles at the northernmost peripheries of the British Isles have expressed unionist desires with the UK, often also citing anti-EU sentiments over the EU Common Fisheries Policy (CFP) (for example, *Shetland Times*, 2014).

The SNP has sought alignment with Scandinavian politics and is reflected in policy such as the International Framework published in 2008 – harking to economic policies of the countries in the “Arc of Prosperity” (Denmark, Finland, Iceland, Ireland, and Norway) (Johnstone, 2012: 115). The Scottish Government also notes its focus “on the Nordic and Baltic region and the High North” (Scottish Government, 2014), showing an affinity to regions closer to its northern sphere of influence.

UK Arctic Policy Framework

This complexity in domestic issues can explain why there has been slow progress in the political arguments around the High North, as well as explaining how Scotland stands out in the desire for increased cooperation through bilateral and multilateral partnerships with organisations interested in the Arctic. Due to a lack of strong or standardised policy towards the Arctic by Westminster, it is apparent that pro-independence actors in Scotland have capitalised on this issue in forwarding arguments for separation and increased devolution (Powell, 2014: 88).

For Scotland within the UK as an observer state, a political dilemma is presented in formulating policy aimed at the Arctic: how and to what extent is the UK able to develop policy which engages with the issues presented, without infringing on the Nuuk criteria? Or, put another way – “how to express a neighbour-like concern and secure national interests...without inciting the irritation of...governments” (Depledge & Dodds, 2014: 27).

In publishing the Arctic Policy Framework 2013 (APF), the UK officially stated its interest in the Arctic and showed a willingness to cooperate with the A8, offering its expertise, experience and equipment (Depledge and Dodds, 2014: 30). It also accentuates the UK’s “unique role among non-Arctic states in supporting development, governance and stewardship of the region” (Mazo, 2015: 248-250). However, as has been extensively noted, the APF was found to be weak and has been criticised for being incomprehensive and failing to address any future UK military or business roles. It has also been criticised for not including the Scottish Parliament in discussions on the policy proposal (Bailes, 2014). Having distinct interests and competence, this signifies there is clearly scope for Scotland to address issues in the High North on its own accord.

What is important to note aside from the content of the APF, is the term ‘framework’ used to describe the publication. This implies a different policy approach than a ‘strategy’ would suggest.

As discussed by Depledge, frameworks tend to be more flexible, changing in reaction to varying circumstances, whereas a strategy is a more rigid “sustained commitment” to a plan of action (2013: 371). A lack of strategy shows the UK is not as engaged with the developments of the region as it could (or should) be, based on its both vulnerable and commanding position in the European North-West, placing much more political, business and diplomatic focus elsewhere in the world (see for example Rogers, 2012: 47, Grímsson, 2013, Cole, 1954). Fear of encroaching on other states’ sovereignty is certainly a factor, as is a fear of motives being misinterpreted by further engagement in the region. Smaller, Northern European states may feel intimidated by a full-blown, militarily powerful UK strategy aimed at the Arctic, as has been argued by Depledge and Dodds, such a document may be found to be too provocative. The reality is, however, that the UK’s commitment is austere, with no targets or efficient review of the approach, showing the overall weakness of the APF (Depledge & Dodds, 2014: 30). Scotland, being a much smaller nation than the collective UK, can generally be expected to place greater political emphasis on more immediate geographical surroundings than a large state would do (Fleming & Gebhard: 2014: 12). This is apparent when considering the cooperation already in place between Scandinavian countries and Scotland. This includes the Northern Periphery Programme and cooperation with Norway on aquaculture and energy such as the Hywind project and the North Sea Network Link (NPA, 2014).

Scotland’s Role

Geostrategic Location

Scotland’s geostrategic location at the north-western tip of Europe offers a lot in terms of security in the High North, giving the UK a unique commanding position overlooking the vast expanses of the north-east Atlantic and North Sea. Its extensive coastline includes many natural ports and the land has large areas of sparsely populated terrain suitable for military planning (Bailes et al., 2013: 12; Spaven: 1983: 9). Depledge and Dodds (2014) also recognize that the UK’s geographical proximity to the North Sea and the Greenland-Iceland-UK Gap (GIUK) would demand that the UK be involvement in any security crisis in the Arctic, as it once was during the Cold War era. Since that time, UK military interests in the High North have somewhat been “displaced by the interests of scientists” in Arctic matters, as a peaceful period in the region has prevailed (Depledge, 2013: 166). Recently however, the period of calm has been questioned as, “the interest shown by the Ministry of Defence [MoD] ... in the Arctic has perhaps not been greater since the end of the Cold War” (Depledge & Dodds, 2012: 74). The military based in Scotland offers many of Britain’s frontline defence capabilities such as the Trident nuclear submarines and three of the Royal Air Force’s five Typhoon combat squadrons (another two Typhoon jet squadrons have been confirmed (Allison, 2015)) (Critchlow, 2014). Until recently, ocean search and rescue (SAR) had been carried out by the military in Scotland, however, these capabilities have been brought to an end following a decision to privatise the service in 2013 (BBC, 2016). As a result, the Sea Kings used by the RAF have been retired in place of new helicopters with reduced passenger capacity, meaning fewer people can be transported from perilous situations at a time. The range of the helicopters is also set to decrease from the current capabilities of the RAF, effectively meaning the distance from the coastline in which SAR operations conducted by the UK will be significantly reduced. This forms part of the budget cuts implemented in Scotland over the last number of years, making it more complicated for the UK to support northern partners with operations like SAR in

the High North (MCA, 2008; Johnson, 2011; Robertson, 2012; Chalmers, 2015). As a result, concerns have been raised about the ability to effectively help if a large ship were to sink off the coast of the UK (Idowu, 2009). With traffic in the Arctic potentially increasing and likely to consist principally of large ships with large crews, reducing the capability of SAR operations appears to be a move in the wrong direction if the UK is to engage with potential problems in the High North.

The UK's prominent status in international relations means that it is more heavily implicated in operations with a wider global reach and is often amongst the first nations to be involved in humanitarian and peace keeping operations (Ritchie, 2011: 357). This can partly explain why there is a lack of active forces based on UK soil, as well as the apparent reliance on Trident as the chief deterrence against attack. However, deterrence is not the sole responsibility of the military which has an important role in providing active support such as SAR in the High North.

Economy

The areas of devolved powers to Holyrood listed in the Scotland Act 1998, includes sectors such as fisheries policy, environment policy and economic development. These are all crucial in noting to understand the extent to which Scotland can capitalise on economic opportunities which may arise due to the changing dynamics of the High North. In discussions on Scotland's independence pre-referendum, there were suggestions that "turning attention to the Arctic could provide the opportunity to pursue radical economic policies that might boost performance" (Sinclair, 1999: 12). Through the devolved areas mentioned this could still be a possibility to consider for Scotland.

Energy

As some states do pursue oil and gas resources in the Arctic, other projects such as ones initiated by Norway have recently been put on hold (Holter, 2015; Seglem, 2014), suggesting that a 'race' for Arctic hydrocarbon resources is not as immediate an issue as perhaps may have been anticipated. This is despite large amounts of oil still being discovered in the Arctic (Gunnarsson, 2013: 38), showing the importance of effects such as global energy market trends on hydrocarbon exploration. Another reason why the idea of a race for resources may not be a reality is that most of the undiscovered oil and gas in the Arctic lies within the jurisdiction of bordering states, meaning disputes over who will grant exploration licenses is unlikely, if at all (EIA, 2012). Coupled with the fact that the hydrocarbon sector is not a devolved matter, the natural progression for Scotland seems to be towards the growing renewable energy sector.

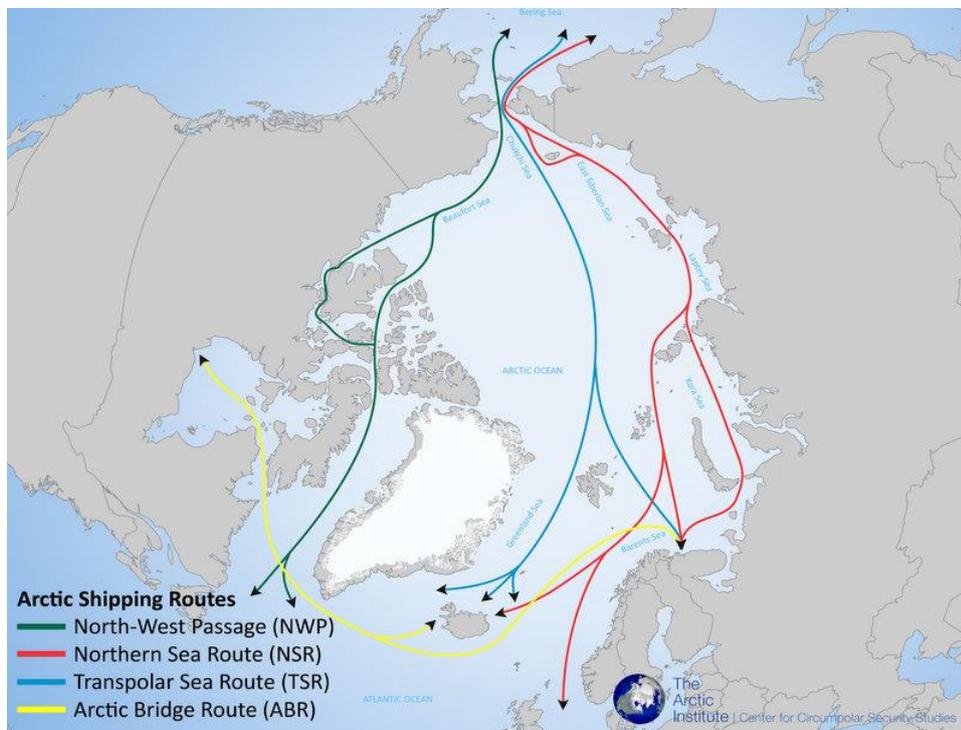
There are examples of Scotland already cooperating with Arctic states in the renewable sector, such as through the groundbreaking floating windfarm project which started construction this summer in a joint venture with Norway (Statoil, 2014).

Transport

Iceland has recognized one of the most pressing issues facing increased navigation in the High North, in that there is a lack of deep ocean ports and repair facilities for shipping containers passing through the area (Østreng et al., 2013). The Finnafjörður project in alliance with Germany provides infrastructural support and is a good example of non-Arctic/Arctic cooperation to benefit from the increasing sea traffic in the High North (Barents Observer, 2015). This suggests that there are

clear possibilities and also that increased cooperation with Arctic countries is an important aspect of capitalising on the economic opportunities presented in the High North.

Along the North-West Passage route, there is only one deep-water port at Nanisivik available, capable of supporting and refuelling large vessels (Kendrick, 2014: 67). The Northern Sea Route is much better equipped with seven ports along Russia's coast able to service, refuel and dock large vessels, which contributes to making it the route with the "highest potential to enable economic activity in the Arctic" (Buixadé Farré et al., 2014: 301). Norway has a number of container ports with one in Narvik in the Arctic Circle able to accommodate some of the largest vessels in the world of Panamax class. Scotland however, only has one container port in Aberdeen and none which can accommodate very large vessels (SeaRates, 2015). This shortage of ports through which to support increased commercial activity in the High North shows there is clear scope for development of services in Scotland as the "UK's gateway to the Arctic" and the closest EU region to the European end of the NSR (Bailes et al., 2013: 9).



Map 1: Humpert and Raspotnik, 2012.

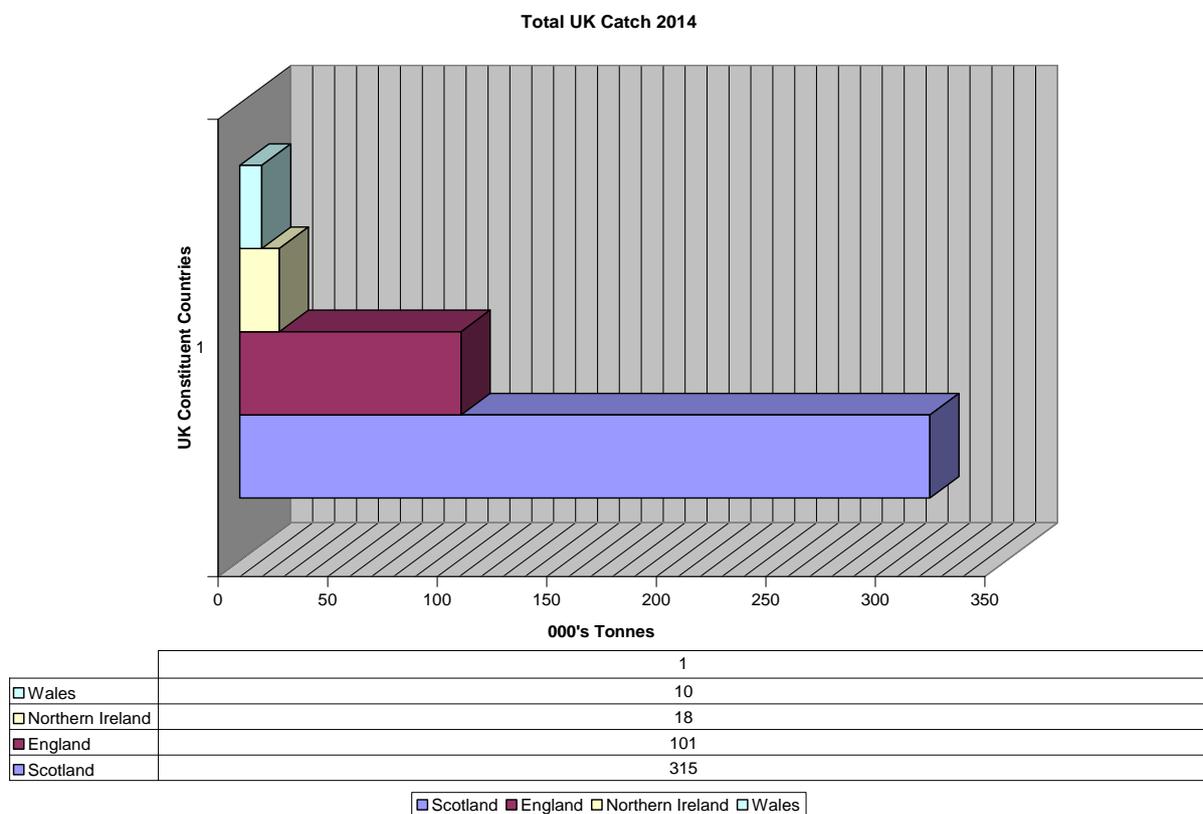
Scotland does not have a major freight shipping fleet of its own, but provision of transit shipping hubs to support Arctic industry is a strong possibility (Johnstone, 2012). Ports in Scotland along the eastern coast could become viable hubs for trade with the Far East through the NSR, accommodating a moderately significant northward demand shift (Souter et al., 2012: 68). Investment on a massive scale would be necessary on mainland Scotland if it were to consider becoming a destination for cargo shipping. Huge road or rail restructuring would need to be extended to the Highlands, which has always been economically underdeveloped and has seen a decline in industry (Danson, 1991; Carter, 1974).

Through investment and cooperation, Scotland and Arctic neighbours could provide many areas of infrastructure needed to be put in place to provide safety, emergency assistance, route reliability,

and environmental protection in the High North to support increased Arctic shipping (Gunnarsson, 2013: 93).

Fishing

As the graph shows, Scotland is by far the largest contributor to the total UK fishing yield and in 2014, Scottish ships brought in 60% of the entire UK catch worth £861 million. This is greatly significant when considering that Scotland constitutes just 8.3% of the UK population, showing the scale and importance of the industry to Scotland (BBC, 2013; UK Government, 2015). Scotland's ports are important hubs for other fishing countries in the North Sea (Johnstone, 2012: 122). So, as well as maintaining an active fleet of its own, increasing the handling potential of ports such as Peterhead and Scrabster, could offer new economic potentials for Scotland. This would require building of major infrastructure and could only become a reality if major investment happens to link these northern Scottish ports to the wider European markets (Johnstone, 2012: 122).



Graph 1: Total UK Catch, 2014.

The Scottish fishing industry appears to have an assured future, as it has been noted that the international demand for seafood is increasing (Moskowitz, 2014), in line with steady increases in Scottish production (Scottish Government, 2015a). This suggests there is a strong case for Scotland actively to overcome the challenges faced by climate change and continue to be an important exporter of seafood and seafood products produced in Scotland.

This industry is greatly helped by Norwegian investment which constitutes a large part of the industry, especially in the more sustainable fish farming industry largely operated in Scotland by the Norwegian company Marine Harvest. This relationship also extends to the exporting of fish,

which contributes a large part to the 251% increase in food and drink exports from Scotland to Norway since 2007 (Scottish Government, 2015b).

Findings

Scotland has distinct interests from the UK and with increasing political autonomy, has been found to have the capacity for stating its intentions abroad – despite limitations due to the constitutional position it is in with the UK. Remaining a sub-national state does not exempt it from the possibility of developing an Arctic policy of its own, as other semi-autonomous regions have already done so. The limitations faced largely extend to issues of hard security, leaving multiple areas such as business, renewable energy and politics open for consideration by the Scottish government. Scotland's location and history brings the UK into the wider European High North – making Scotland in essence a bridge between the UK and the Arctic. Despite not having full state powers and more importantly not being an Arctic state, Scotland nevertheless has potential to exert a certain amount of influence on the economic developments in the Arctic.

As militaristic issues are under Westminster's mandate, Scotland has no ability to make decisions on this matter. Therefore, Scottish policy makers may decide that the best course of action to secure powers would be to readdress the question of independence. Aside from this, the only possibility open to Scotland would be to continue to broach security concerns to the UK government.

Commercial shipping has great potential to increase in the Arctic and High North as climate change continues. Several obstacles remain, but the logistical benefits appear to be significant enough that routes such as the NSR will become increasingly utilised. The only uncertainty remaining to be determined is the potential extent and size of the commercial shipping industry in the Arctic.

Scotland's fishing and fish production is a major asset and to secure a stable future and sustain increasing growth of the industry, support in the northern peripheries should be considered. It can be ascertained through the discussion that Scotland's ports could play a crucial role in supporting an increase in transport and changes to the fishing industries. This would create great economic and social benefit to Scotland – if necessary development in mainland transport is firstly carried out.

The consequences of the climactic changes in the Arctic were principally found to bring possible economic opportunities for Scotland. Although challenges will undoubtedly also be presented, if correct planning and investment is made, economic activities can be supported and undertaken by Scotland in concurrence and in alliance with other Arctic actors.

Indeed it was principally found that it will be crucial for Scotland to act in accordance with Arctic states if it is to capitalise on opportunities and to tackle issues which may present themselves in the High North. To do so, Scotland would do well to develop a comprehensive Arctic policy strategy, stating its aims and interests and showing its commitment to the Arctic region.

*The original version of this article was written prior to the 'Brexit' vote. Some amendments have been attempted but it is noted that a comprehensive discussion is lacking.

References

- Allison, G., (2015). Typhoon Life to Be Extended, Two More Squadrons To Be Created UK. *Defence Journal*. Retrieved from: <https://ukdefencejournal.org.uk/typhoon-life-to-be-extended-two-more-squadrons-to-be-created/>
- Bailes, A.J., B. Þórhallsson, B. and R.L. Johnstone (2013). Scotland as an Independent Small State: Where would it seek shelter? *Stjórnmal og Stjórnslá*. 1(8): 109-131.
- Bailes, A.J. (2014). The UK and the Arctic: Where is Scotland? *Scottish Global Forum*, February (Vol. 2).
- Barents Observer (2015). Germany, Iceland cooperate on new port for Transpolar shipping. Retrieved from: <http://barentsobserver.com/en/arctic/2015/10/germany-iceland-cooperate-new-port-transpolar-shipping-17-10>
- BBC (2013). Scotland in numbers. Retrieved from: <http://www.bbc.co.uk/news/uk-scotland-24866266>
- BBC (2016). Civilian team replaces HMS Gannet search and rescue at Prestwick. Retrieved from: <http://www.bbc.co.uk/news/uk-scotland-glasgow-west-35205477>
- Buixadé Farré, A., S.R. Stephenson, L. Chen, M. Czub, Y. Dai, D. Demchev, Y. Efimov, P. Graczyk, H. Grythe, K. Keil, and N. Kivekäs (2014). Commercial Arctic shipping through the Northeast Passage: routes, resources, governance, technology, and infrastructure. *Polar Geography*. 37(4): 298-324.
- Carter, I. (1974). The Highlands of Scotland as an underdeveloped region. *Sociology and Development*. May: 279-311.
- Chalmers, M. (2015). Steady as She Goes: The Outcome of the 2015 SDSR. *The RUSI Journal*: November.
- Cole, D. H. (1954). *Imperial Military Geography: The Geographical Background of the Defence Problems of the British Commonwealth*. London: Sifton Praed and Co.
- Critchlow, A. (2014). Arctic drilling is inevitable: if we don't find oil in the ice, then Russia will. *The Telegraph*. Retrieved from: <http://www.telegraph.co.uk/finance/newsbysector/energy/11080635/Arctic-drilling-is-inevitable-if-we-dont-find-oil-in-the-ice-then-Russia-will.html>
- Danson, M. (1991). The Scottish economy: the development of underdevelopment? *Planning Outlook*. 34(2): 89-95.
- Depledge, D. and Dodds, K. J. (2012). Testing the northern flank: the UK, Norway and Exercise Cold Response. *The RUSI Journal*. 157(4): 72-78.
- Depledge, D. (2013). What's in a name? A UK Arctic policy framework for 2013. *The Geographical Journal*. 179(4): 369-372.
- Depledge, D. and Dodds, K. J. (2014). 'No "Strategy" Please, We're British' The UK and the Arctic Policy Framework. *The RUSI Journal*. 159(1): 24-31.
- EIA: Energy Information Administration. (2012). Arctic oil and natural gas resources. *US Department of Energy*. Retrieved from: <http://www.eia.gov/todayinenergy/detail.php?id=4650>
- Fleming, C. M. and C. Gebhard. (2014). Scotland, NATO, and transatlantic security. *European Security*. 23(3): 307-325.

- Grímsson, Ó. R. (2013). 'Poles Apart' Conference.' *Poles Apart*. Retrieved from: <http://www.polesapartconference.org.uk/index.php/conference-follow-up>
- Hille, J. (2003). The Northern antipode to European integration, or why everybody expects northern Norwegians to be sceptical of European integration. In F. Möller and S. Pehkonen, S. (eds.). *Encountering the North: Cultural geography, international relations and northern landscapes* (pp. 167-186). Burlington, VT: Palgrave.
- Holter, M. (2015). Statoil Sees More Norway Oil Exploration Cuts Amid Arctic Halt. Bloomberg. Retrieved from: <http://www.bloomberg.com/news/articles/2015-11-23/statoil-sees-more-norway-oil-exploration-cuts-amid-arctic-halt>
- Humpert, M. and A. Raspotnik. (2012). The Future of Arctic Shipping along the Transpolar Sea Route. *The Arctic Institute*. Retrieved from: <http://www.thearcticinstitute.org/2012/11/the-future-of-arctic-shipping-along.html>
- Idowu, S.O. (2009). The United Kingdom of Great Britain and Northern Ireland. In S.O. Idowu and W. Leal Filho. (eds.). *Global Practices of Corporate Social Responsibility*. Berlin: Springer.
- Johnson, S. (2011). Liam Fox: Scottish 'defence footprint' to increase despite RAF Leuchars closure. *The Telegraph*. Retrieved from: <http://www.telegraph.co.uk/news/uknews/scotland/8646134/Liam-Fox-Scottish-defence-footprint-to-increase-despite-RAF-Leuchars-closure.html>
- Johnstone, R.L. (2012). An Arctic Strategy for Scotland. In L. Heininen, H. Exner-Pirot and J. Plouffe (eds). *Arctic Yearbook 2012* (pp. 115-130). Akureyri, Iceland: Northern Research Forum. Retrieved from: <http://arcticyearbook.com/ay2012/#/126/>
- Kendrick, P. (2014). The Polar Invasion: An Examination of Canadian Policy Perspectives Associated with Arctic Governance. [graduate project]. Halifax, NS: Dalhousie University.
- Mazo, J. (2015). Showing the Flag. *Survival*. 57(1): 241-252.
- MCA: Maritime and Coastguard Agency (2008). Search and Rescue Framework for the United Kingdom of Great Britain and Northern Ireland. *Report for the Department for Transport*. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/291770/mca_uksar.pdf
- Moskowitz, P. (2014). U.N.: Record-high global demand for fish threatens oceans. *Al-Jazeera*. Retrieved from: <http://america.aljazeera.com/articles/2014/5/19/aquaculture-fishingreport.html>
- NPA: Northern Periphery and Arctic Programme (2014). *Northern Periphery and Arctic Programme 2014-2020*. EU Regional Development Fund. Retrieved from: <http://www.interreg-npa.eu/>
- Powell, R.C. (2014). Subarctic Backyards? Britain, Scotland, and the Paradoxical Politics of the European High North. *The Northern Review*. (37): 23.
- Ritchie, N. (2011). Rethinking security: a critical analysis of the strategic defence and security review. *International Affairs*. 87(2): 355-376.
- Robertson, A. (2012). Future Maritime Surveillance. (Written evidence to the Defence Committee of the Parliament of the United Kingdom). Retrieved from: <http://www.publications.parliament.uk/pa/cm201213/cmselect/cmdfence/110/110vw09.htm>

- Robertson, A. (2015). SNP Highlights Northern Defence Focus for UK Defence Review. *Angus Robertson MP*. Retrieved from: <http://www.angusrobertson.org/news/SNP-HIGHLIGHTS-NORTHERN-DEFENCE-FOCUS-FOR-UK-DEFENCE-REVIEW/82/>
- Rogers, J. (2012). Geopolitics and the 'Wider North'. *The RUSI Journal*. 157(6): 42-53.
- Scottish Government. (2014). Nordic Baltic Policy Statement. Scottish Government. Retrieved from: <http://www.gov.scot/Resource/0044/00445842.pdf>
- Scottish Government. (2015a). Scottish Fish Farm Production Survey 2014. Retrieved from: <http://www.gov.scot/Publications/2015/09/6580/5>
- Scottish Government. (2015b). Scottish Government and Norway. Retrieved from: <http://news.scotland.gov.uk/content/ziploader.ashx?itemID=7167andtype=1anduserId=1anduserLocale=1>
- SeaRates. (2015). United-Kingdom. *SeaRates*. Retrieved from: <https://www.searates.com/maritime>
- Seglem, E. (2014). Norsk oljerigg måtte stoppe boring i Arktis. *Aftenbladet*. Retrieved from: <http://www.aftenbladet.no/aenergi/Norsk-oljerigg-matte-stoppe-boring-i-Arktis-57527b.html>
- Shetland Times. (2014). Demand for tougher stance on Faroe mackerel quota. Retrieved from: <http://www.shetlandtimes.co.uk/2014/12/09/demand-for-tougher-stance-on-faroe-mackerel-quota>
- Sinclair, D. (1999). Issues Around Scottish Independence. Constitution Unit. *School of Public Policy*. May: 875.
- Souter, G., R. Allen, P. Hinchcliffe. (2012). House of Commons Environmental Audit Committee. Protecting the Arctic. *Second Report of Session 2012-2013*. Volume I.
- Spaven, M. (1983). *Fortress Scotland*. London: Pluto Press.
- Statoil. (2014). Hywind Scotland Pilot Park. Retrieved from: <http://www.statoil.com/en/TechnologyInnovation/NewEnergy/RenewablePowerProduction/Offshore/HywindScotland/Pages/default.aspx?redirectShortUrl=http%3a%2f%2fwww.statoil.com%2fHywindScotland>
- UK Government. (2015). UK Sea Fisheries Statistics 2014. *UK Government*. Retrieved from: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/462753/UK_Sea_Fisheries_Statistics_2014_-_online_version.pdf
- Østreg, W. (2013). The transportation passages of the Arctic Ocean and connecting corridors in southern waters. In W. Østreg, K.M. Eger, B. Fløistad, A. Jørgensen-Dahl, L. Lothe, M. Mejlænder-Larsen, T. Wergeland. (eds.). *Shipping in Arctic Waters*. Berlin: Springer.

Briefing Note

Stirred Water Under the Ice Cap: An Analysis on A5's Stewardship in the Central Arctic Ocean Fisheries Management

Leilei Zou

The Arctic is receiving world-wide attention for its unique and strategic geopolitical position, distinct climate change impact, and abundant natural resources. Most Arctic waters fall under the jurisdiction of Arctic states, as do most Arctic fisheries management. There are uneven fisheries developments across Arctic waters, with productive fishing grounds in the adjacent seas of the Arctic Ocean, but no fishing yet at the Central Arctic Ocean (hereinafter referred to as “CAO”) due to its multi-year ice cap. However, recent years have witnessed a persistence in the Arctic ice loss, and the CAO reached its lowest level of sea ice extent, at 60%, in the summer of 2012, raising the prospect of being a productive fish habitat as a result of climate changes (Balton, 2010; Rayfuse, 2009; Loeng et al., 2005).

With similar geographical advantages and political and economic interests, the five Arctic Ocean Coastal States (Canada, the United States, Russia, Norway, and Denmark in respect of Greenland, hereinafter referred to as “A5”) have developed into a kind of Arctic alliance, asserting their stewardship in Arctic Ocean management via the Illulissat Declaration, a statement released at their meeting in 2008 where they provided their first formal declaration to the international community on joint Arctic Ocean stewardship. With more and more significant impact of climate change in the Arctic, the prospect of CAO fisheries is attracting international attention. Fisheries have been the most important theme for A5 meetings since 2010, and impressively, in February 2014 the A5 made a proposal for the implementation of interim measures to prevent unregulated fishing and released it as a statement to the international community, a further move to demonstrate their stewardship in CAO fisheries management, which caused a worldwide stir. In July 2015, the A5 finalized a declaration for the internal agreement on interim measures amongst themselves. Although there is no inclusion of the more obvious words like “moratorium” or “ban”, the chosen

“interim measures to deter unregulated fishing”¹, as the A5 have described it, have been widely interpreted as a “fishing moratorium or ban” by the media (Levgim, 2015; Myers, 2015; The New York Times, 2015). Five other important distant water fishing states and entities (hereinafter referred to as “the other 5”), namely China, the European Union, Iceland, Japan, and Korea, were invited to attend a “5+5” (the expanded delegation with A5 and the other 5 newly comers) meeting on high seas fisheries in CAO in December 2015 in Washington D.C. Up until now, the “5+5” has had two meetings whereby the A5 have tried to promote their proposal for interim measures amongst the other 5 as well.

A5: Stewards for CAO Fisheries Management

The Arctic used to garner little international attention due to its inaccessibility and isolation. Climate change has brought the Arctic to the broader public’s eyes as a promising resource trove. However, the *UN Convention on the Law of the Sea* (hereinafter referred to as “UNCLOS”) assures the eight Arctic states (A5, together with Sweden, Finland and Iceland, hereinafter referred to as “A8”) of a key and unique role in Arctic waters management because most Arctic waters fall under A8’s sovereignty, sovereignty rights and jurisdiction. Besides, as Member states of the Arctic Council, the most important intergovernmental forum in the Arctic established in 1996, the A8 possess the exclusive right to decide, by consensus, on issues and actions discussed within the forum. In addition, the A8 are developed countries, occupy leading roles in world politics and economics, and are accumulating experience in Arctic management. As such, with advantages in geographical position as well as political and economic advancement, the A8’s assertion of unique stewardship in Arctic management has been significantly enhanced.

As the Arctic Ocean coastal states, the A5 have much in common with their social, political and economic concerns in the Arctic, and have developed an Arctic alliance, making efforts to act as joint stewards in Arctic Ocean management. In 2008, the A5 launched their first alliance meeting in Illulissat, Greenland (although they had also negotiated the Agreement on the Conservation of Polar Bears in 1973), where they recognized themselves as having “a stewardship role in protecting (the Arctic Ocean’s unique ecosystem)” and being in a unique position to address Arctic opportunities and challenges “by virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean”.²

Significant ecological changes are taking place in the Arctic because of the climate change. The most impressive is that global warming is melting Arctic sea-ice. In recent years the sea ice extent has witnessed its lowest record, leaving almost 40% of the CAO open water for some time in the year. The decline in sea-ice extent and volume makes physical fish migration a reality between the sub-Arctic and the CAO. Thus, the promising prospect of CAO fisheries is attracting attention worldwide.

CAO fisheries issues have been the dominant A5 meeting theme since 2010, making attempts and efforts to act as the designer for the CAO fisheries management regime. In 2010, the A5 Foreign Ministers met in Chelsea, Canada to discuss “important stewardship in the region”³ since “Arctic Ocean coastal states have a unique interest and role to play in current and future efforts for the conservation and management of fish stocks in this region”.⁴At an A5 meeting held in Washington DC in 2013, this concept was further enhanced by stating that “It is appropriate for the States

whose exclusive economic zones (hereinafter referred to as “EEZs”) border this high seas area to take the initiative on this matter”.⁵

However, the A5’s CAO management and stewardship is challenged because those state efforts are often viewed as unilateral attempts to control a global seas area. UNCLOS defines the CAO as the high seas where all states enjoy the freedom of fishing with the condition that they are involved in conservation of high seas living resources and cooperation with other states in conservation. States whose interests are potentially affected by A5’s interim measures agreement ought to be the most likely protesters against A5’s assertion as an Arctic steward. Those against the A5’s attempts to act in this way are most possibly the world’s leading distant-water fishing nations as well as those states/actors having easy access to the Arctic Ocean and interest in fishing there. Worth mentioning is that Iceland and Finland and Sweden, also A8 states, have been excluded from the A5 meetings and further denied a presence at interim measures discussions. It should also be noted that the other 5 states and entities are only invited by the A5 to discuss the existing interim measures, which the A5 is trying to impose on them.

A5’s Exclusivism in the CAO Fisheries Management

While trying to establish their identity as stewards for the CAO and designers of its governance, the A5 is reluctant to get non-Arctic states involved in Arctic fisheries issues. Chairman’s statement for the 2013 A5 meeting in Washington, U.S. asserted that “Those States (A5) also acknowledge that other States may have an interest in this topic and that they should be included in talks at some point in the future as appropriate.”⁶, which can be interpreted such that A5 is the steward for CAO fisheries management and it is the A5’s privilege of deciding who can be offered the opportunity to participate in constructing the governance regime and when they can be offered that opportunity, in some way depriving other stakeholders of their right and duty in Arctic high seas fisheries management.

The A5’s exclusivism in CAO fisheries issues, combined with their unilateral attempts, contributes to the contradiction between their words and deeds. Firstly, since 2010, they’ve asserted that commercial fishing in the high seas of CAO is unlikely to occur in the near future;^{7,8,9} however, they think it is high time that interim measure were implemented in the spirit of the precautionary approach. Given the absence of urgency to regulate now, a more scientific and considerate measure, other than the internally agreed interim measures, can be negotiated when enough scientific data are available regarding the Arctic marine ecology and its transformation because of the climate change.

Secondly, despite repeating that because of UNCLOS there is no need for a new Arctic Ocean legal regime,¹⁰ the A5 as an alliance continue to push a new interim-measures fisheries agreement and has released their ambitions in a statement to the international community regardless of the fact that defining “precautionary approach” by conducting something like a fishing moratorium is not mandated at large in the law of the sea.

Thirdly, the A5 have made clear at A5 meetings that priority should be given to scientific research and international cooperation;^{11,12,13} however, they are only scheduled to include other states “in talks at some point in the future as appropriate.”¹⁴ Seemingly, A5’s actual philosophy is to get other stakeholders involved in CAO fisheries management only after their preferred regime has taken

shape. The international cooperation advocated for at A5 meetings remains in words only, while monopolization is the hidden philosophy.

Fourthly, A5's attitude toward the establishment of Arctic Regional Fisheries Management Organization (hereinafter referred to as "RFMO") also reveals their philosophy. When the CAO warms up enough to be an ideal fish habitat, straddling fish stocks and highly migratory fish stocks, those occurring both within the EEZs or both within the EEZ and in an area beyond and adjacent to the zone, will be of the most concern for fisheries management (Hollowed, 2013; Weidemann, 2014). As for the management of those fish stocks, UNCLOS recommends that the coastal states and fishing states should "seek, either directly or through appropriate subregional or regional organizations, to agree upon the measures necessary for the conservation of these stocks in the adjacent area",¹⁵ and the United Nations Fish Stock Agreement (hereinafter referred to as "FSA") reaffirms the importance of RFMO in high seas fisheries management. It is evident that both the international law of the sea and fisheries management regulations attach great importance to RFMO's role as a coordinator. A5 meetings also echo the significant function of RFMO, while they see no need at present to establish a competent RFMO for CAO.^{16,17} The A5's contradiction between admittance of the RFMO's importance and denial of its timely establishment for the CAO reveals the intention to fulfill their claim by designing the fisheries regime before a RFMO is established, to take the initiative in CAO fisheries management.

A5's Stewardship and International Law

At the global level, the most important fisheries laws and regulations are UNCLOS, FSA, CCRF (FAO Code of Conduct for Responsible Fisheries), and PSM (FAO Agreement on Port State Measures to Prevent, Deter and Eliminate Illegal, Unreported and Unregulated Fishing). Since this Briefing Note tries to explore the legitimacy of coastal states in the Central Arctic high seas where commercial fisheries have not yet occurred, UNCLOS and FSA, two key international fisheries-related and fisheries laws concerning rights and duties of coastal states and fishing states, will be the major reference for my analysis. However, the CCRF and PSA, which more concern rights and duties of flag states and port states as well as harvesting and post harvesting issues, will not be addressed here. Besides, although future CAO fisheries are also likely to involve anadromous fish stocks and sedentary species inhabiting continental shelf, this Note only targets straddling fish stocks and highly migratory fish stocks, not only because they are the most important for commercial fisheries but also because it simplifies the analysis to focus on UNCLOS and FSA.

"Freedom of Fishing" in "Freedom of the High Seas"

Both UNCLOS and FSA apply to waters all over the world, and the Arctic Ocean despite its unique geographical position and ecological system is no exception. Under the provisions of UNCLOS, the A5 enjoy undisputed sovereign rights for fisheries management inside their Arctic EEZs, while all states enjoy the "freedom of fishing"¹⁸ at high seas subject to such conditions as international cooperation and involvement of conservation and management. Articles 116-119 of UNCLOS further confirm and clarify states' fishing rights as well as duties in conservation and international cooperation.^{19,20,21,22} A close examination into the UNCLOS provisions reveals the conditional "freedom of fishing" for all states at the high seas, with key conditions like involvement in conservation and participation in international cooperation, especially the cooperation between coastal states and fishing states. UNCLOS does entitle coastal states to key and unique roles in high

seas fisheries management, but does it mean that coastal states enjoy a monopoly on stewardship in management? It is not necessarily the case. A detailed analysis follows.

Coastal States' Role in High Seas Fisheries Management

As for the straddling fish stocks and highly migratory fish stocks occurring both within the EEZs and in the area beyond and adjacent to the zones, there have been long-standing conflicts between coastal states and fishing states (Zhao, 1997; Zhao, 2009; Li, 2012; Bailey, 1997). The conflicts originate from the increasing demands and over-exploited status of many fisheries resources. The conflicts focus on coastal states' efforts to extend their fisheries management jurisdiction to high seas and fishing states' defense for high seas fishing freedom. With a close study into the UNCLOS and FSA, this paper will analyze the legitimacy of A5's stewardship in CAO fisheries management.

Coastal States' Role in High Seas Fisheries Management Defined by UNCLOS

The conditional freedom of fishing in the high seas doesn't mean that the freedom is to be restricted by coastal states' fisheries management jurisdiction extension to high seas, in that UNCLOS provides no provision concerning the entitlement of coastal states to this jurisdiction. However, UNCLOS does provide vague and ambiguous wording concerning high seas fisheries management, the consequence of which is that different stakeholders will have different interpretations of UNCLOS provisions to their favor. UNCLOS is a compromise agreement among different stakeholders at a particular time, and designed to mitigate sea conflicts, thus suffering the defect of lacking in implementing details and leaving room for different interpretations. With an analysis of UNCLOS-defined roles of coastal states, fishing states and RFMOs in high seas fisheries management, I explore whether UNCLOS entitles the A5 to stewardship in the CAO.

Article 63(2) states that "where the same stock or stocks of associated species occur both within the EEZ and in an area beyond and adjacent to the zone, the coastal State and the States fishing for such stocks in the adjacent area shall seek, either directly or through appropriate subregional or regional organizations, to agree upon the measures necessary for the conservation of these stocks in the adjacent area."

Article 64(1) states that "the coastal State and other States whose nationals fish in the region for the highly migratory species...shall cooperate directly or through appropriate international organizations... In regions for which no appropriate international organization exists, the coastal State and other States...shall cooperate to establish such an organization and participate in its work."

The above provisions contribute to the conclusion that coastal states should actively seek the cooperation with fishing states in the management and conservation of straddling fish stocks and highly migratory fish stocks at the high seas, RFMOs is the platform where cooperation should be coordinated, and coastal states and fishing states should cooperate to establish the competent RFMOs if there has been no one yet.

Articles 116-119 clarify the rights and duties of coastal states, fishing states and RFMOs. Article 116 confirms the fishing freedom of all States in the high seas on condition of fulfilling their duties. Article 117 clarifies the conservation duties of coastal states and fishing states for high seas fisheries resources. Article 118 further emphasizes the role of RFMOs in conducting high seas fisheries

management cooperation between coastal states and fishing states. What needs further consideration is Article 119(2) which states that "...statistics, and other data...should be contributed and exchanged..., through competent international organizations..., with participation by all States concerned." Thus the involvement of all stakeholders in high seas fisheries research is highly encouraged in UNCLOS. Article 119(3) states that "States concerned shall ensure that conservation measures and their implementation do not discriminate in form or in fact against the fishermen of any State", implying that coastal states don't enjoy privilege in high seas fisheries management. Coastal states have undisputable sovereign rights in their EEZs for the management of straddling fish stocks and highly migratory fish stocks, but their sovereign rights don't extend to high seas as these fish stocks migrate to high seas. It is understandable that coastal states find themselves in a unique role in conserving and managing those fish stocks occurring both within their EEZ and in an areas beyond and adjacent to the zone, while it is more feasible that coastal states seek cooperation with fishing states to facilitate the efficient and effective conservation and management for a win-win result.

To sum up, with a view to conserving high seas fisheries resources to a sustainable development level, UNCLOS entitles coastal states and fishing states to equal rights and duties in fisheries management, and encourages international cooperation coordinated by RFMOs. Coastal states are not defined by UNCLOS to adopt a stewardship role in high seas fisheries management.

Coastal States' Role in High Seas Fisheries Management Defined by FSA

Failing to provide concrete instruments for implementation of conservation and management for straddling fish stocks and highly migratory fish stocks, UNCLOS is later supplemented by FSA, the fisheries regulations that give feasible and constructive instructions on conducting conservation and management measures as well as facilitating international cooperation. Four key features of FSA are looked into further bellow.

Firstly, there is no denying that FSA entitles the coastal states to a unique role in conservation and management of straddling fish stocks and highly migratory fish stocks. As Article 7(1) defines the precondition for the "compatibility of conservation and management measures" as "without prejudice to the sovereign rights of coastal States for the purpose of exploring and exploiting, conserving and managing the living marine resources within areas under national jurisdiction as provided for in the Convention, and the right of all States for their nationals to engage in fishing on the high seas in accordance with the Convention", FSA tries to strike a balance between coastal states and fishing states and refrain them away from the potential fisheries conflicts. However, Article 7(2) follows by stating that "Conservation and management measures established for the high seas and those adopted for areas under national jurisdiction shall be compatible in order to ensure conservation and management of the straddling fish stocks and highly migratory fish stocks in their entirety. To this end, coastal States and States fishing on the high seas have a duty to cooperate for the purpose of achieving compatible measures in respect of such fish stocks." The compatibility between EEZ and high seas conservation and management measures provides coastal states with the possibility of interfering with high seas fisheries in the name of maintaining an entirety for conservation and management between EEZs and high seas. The precondition for their interfering with high seas fisheries is that measures established for EEZs and high seas should be compatible, which means, in the case of CAO, that A5 should adopt the compatible measures at EEZs with those in the Arctic high seas. A study into A5's respective Arctic fisheries

management reveals that the fisheries moratorium, like that which the A5 are trying to achieve in the CAO, is not a universally acknowledged policy conducted within their own Arctic EEZs.

Among A5 states, the U.S. is the most active Arctic fisheries moratorium advocator. Its Arctic fisheries management plan was approved in 2009 to prohibit any expansion of commercial fisheries in its Arctic EEZ. In addition, the U.S. is trying to initiate an A5 discussion on a consistent Arctic fisheries moratorium policy, but is seemingly receiving little recognition from other Arctic counterparts except Canada, which developed a similar policy for Beaufort Sea.²³ Most Arctic states adopt a more balanced approach between conservation and exploitation for their Arctic fisheries opportunities, a practical approach which attaches equal importance to long-term sustainability and fisheries economic prosperity. Russia and Norway are the most likely beneficiaries because their Arctic EEZs will receive most fishes migrating northward when the Arctic sea ice melts away (Hollowed, Planque&Loeng, 2013), thus they may be reluctant to identify themselves with Arctic fisheries moratorium advocators. The mismatch between most A5 states' Arctic EEZs and high seas fisheries policies arouses other stakeholder's questioning of the A5's motivation for their proposed fisheries moratorium in the CAO.

As the FSA advocates, high seas and EEZs should adopt compatible measures, which calls for cooperation between coastal states and fishing states. A case in point of conflict between two stakeholders was the conservation of pollock resources in the Central Bering Sea in the 1990s. For the sake of fisheries sustainability in their EEZs, the U.S. and Russia, the two Bering Sea coastal states, proposed a fisheries moratorium policy in the high seas of the Central Bering Sea; however, neither of them adopted the "compatible" measure in their own EEZs, discouraging the fishing states from recognizing their moratorium proposal and giving up fishing there, and thus contributing to the final corruption of pollock resources in the Central Bering Sea. A fishing moratorium policy is currently still in effect to recover the pollock resources there. Incompatibility between EEZs and high seas policies, together with the delayed conservative measure, leads to a lose-lose situation at the Central Bering Sea. Thus the precondition for coastal states' unique role in high seas fisheries management is their willingness to adopt a compatible measure between their EEZs and high seas as well as their willingness to cooperate internationally.

Secondly, FSA attaches great importance to the precautionary approach in managing and conserving straddling and highly migratory fish stocks, which is highlighted in its Article 6 "Application of the Precautionary Approach".²⁴ The precautionary approach gives priority to the adoption of timely measures to conserve fisheries resources before damage is caused. Does it mean that the precautionary approach provides grounds for the A5's proposal for a fishing moratorium as the interim measures at CAO? The third feature of FSA seems capable of removing this ground.

The third feature of FSA is the importance of "the best scientific information" for decision-making.²⁵ It is true that FSA recommends a more cautious measure in absence of adequate scientific information; however, for new and exploratory fisheries, the conserving and managing measures are dynamic by nature, which means measures need constant updating on the basis of the accumulated scientific information. Scientific information can be enhanced by collecting and sharing among an extensive body of stakeholders, including coastal states, fishing states and relevant regional or international organizations.²⁶ Currently the prospects for CAO fisheries remain unclear (Koivurova, 2009; Hollowed, 2013), and both the A5 and Arctic Council unanimously recognize the information gap, advocate coordinated scientific research which will throw light on

the fisheries dynamics at CAO, and see the need for inclusion of non-A5 states in the coordinated research. Without either sufficient scientific data or the involvement of other stakeholders in the decision-making, the interim measures proposal put forward by the A5 seems a hasty decision, if not improper.

Fourthly, the FSA highly prioritizes the positive role of RFMOs in coordinating high seas fisheries management. Acting as an implementation agreement for UNCLOS concerning the conservation and management of straddling and highly migratory fish stocks, the FSA provides detailed and constructive instructions on how to facilitate international cooperation via RFMOs. Articles 8-14 are concerned about the functions and operations of RFMOs. More impressive, as FSA defines, RFMOs are so accessible that not only coastal states and fishing states but also states having a real interest in the fisheries concerned may become members of such organization,²⁷ and “Compatibility of Conservation and Management Measures” calls for balanced duties from both coastal states and fishing states in conserving and managing straddling and highly migratory fish stocks in the high seas.²⁸ It has so far been established as the convention that worldwide high seas fisheries are managed by various competent RFMOs. It is true that coastal states are the members for those RFMOs, and more than often they are also the key decision-makers within RFMOs; however, it is more universally acknowledged that both coastal states and fishing states should undertake the common and same duties and rights in high seas fisheries conservation and management coordinated by RFMOs. There is no reason for the Arctic Ocean to be an exception, and neither is there any reason that its fisheries management will be an exception to the universally-accepted “code”.

With four features analyzed above, the FSA is well established to advocate for high seas fisheries management enlightened with scientific information, facilitated by international cooperation, and coordinated by RFMOs. In spite of the fact that the extension of jurisdiction from coastal states over high seas fisheries is not safeguarded, or even mentioned by the FSA, it is not a novelty. There have been two rushes for jurisdictional extension from coastal states in the history of fisheries management. Most coastal states extended their sovereignty rights over fisheries to EEZs right after the UNCLOS was concluded in 1982 and then came into force in 1994. The extension is authorized by UNCLOS with a view to a better marine fisheries management. However, now confronted with the serious situation of an exhaustion of fisheries resources, to better maintain the sustainability of fisheries developments the coastal states have been making efforts to extend their jurisdiction to high seas fisheries, a unilateral position into the grey belt aiming for better management, but not legally protected. Thus A5’s agreement on interim measures at CAO is an effort for their jurisdictional extension to the high seas, which is advocated for by neither UNCLOS nor by the FSA.

Conclusions

The prospect of commercial fisheries in the Central Arctic Ocean is desirable. However, CAO fisheries management is confronted with challenges. International agreements such as UNCLOS and FSA are applicable to the Arctic, but not tailored to the Arctic, and what’s more, so far no existing competent RFMO can take up management duties (Zou, 2014; Jefferson, 2010; Molenaar, 2009). It is of great urgency that a robust fisheries management regime should be established for the CAO before commercial fisheries are expanded and fights for fisheries interests are on the way.

The interim measures proposal, A5's unilateral efforts to take up the stewardship for Arctic fisheries management, lacks legal support and rationality.

A5 is trying to impose its interim measures agreement on the international community. Worries also arise over A5's subtle and far-reaching attempts to extend its stewardship to other areas by taking up stewardship for CAO fisheries management as a niche. Considering that commercial fisheries haven't yet occurred at CAO, it is the best timing now for all the stakeholders to sit around the table and come to a rational and lawful agreement on fisheries management. Lessons have been learnt that high seas fisheries management should be coordinated among all the stakeholders and the fisheries management regime should be ready before the damage is done.

International cooperation coordinated by RFMOs and allowing for international involvement in policy-making process is not only mandated in international law but also a valuable experience from high seas fisheries management worldwide (Byers, 2013; Rayfuse, 2009). It is agreed without any dispute that coastal states are playing a key role in coordinating the establishment and operation of RFMOs due to their geographical advantage, convenience in conducting monitoring, surveillance and control of fisheries activities in the high seas, and more direct and instant impact of high seas measures on EEZ fisheries conservation and management. However, the key to recognition from the international community for coastal states' uniqueness in high seas fisheries management lies in coastal states' willingness to cooperate internationally, and their capability of coordinating cooperation. Besides, the role of distant-water fishing states in high seas fisheries management is also increasingly recognized. Most of them have accumulated much fisheries management experience. More than likely, they are well-equipped for distant-water fisheries scientific research. The involvement of distant-water fishing states in the construction of high seas fisheries management regime will provide a mechanism where the potential conflict between them and coastal states will be attended to, and provisions of international laws will be more likely to be observed by distant-water fishing states as insiders.

The dynamics between coastal states and other stakeholders in CAO fisheries management is in no case a zero-sum game where two players are in a conflicting situation, instead, it should be a positive-sum game where two players are in a win-win situation.

Acknowledgments

The work associated with this paper is funded by "Studies on Construction of CAO Fisheries Management Regime and China's Response" sponsored by "The Humanities and Social Science Project of the Ministry of Education of P. R. China" (15YJAGJW007), and "Research Project on Polar Legislation System" under "Project for Antarctic and Arctic Environment Investigation and Assessment" sponsored by State Oceanic Administration of China (CHINARE2015-04-05-04).

Notes

1. Chairman's Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Arctic Fisheries held at Oslo, Norway, 16 July 2015. Available at: <https://www.regjeringen.no/globalassets/departementene/ud/vedlegg/folkerett/declaration-on-arctic-fisheries-16-july-2015.pdf>

2. The Ilulissat Declaration, issued by the Five Arctic Ocean Coastal States at Arctic Ocean Conference held at Ilulissat, Greenland, 27-29 May 2008. Available at: http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf. Visit on 5 March 2015. Excerpts: “By virtue of their sovereignty, sovereign rights and jurisdiction in large areas of the Arctic Ocean the five coastal states are in unique position to address these possibilities and challenges.” “The five states have a stewardship role in protecting.”
3. The Chairman’s Summary, issued by the Arctic Ocean Foreign Ministers’ Meeting held at Chelsea, Canada, 29 March 2010. Available at: http://www.mid.ru/brp_4.nsf/0/5E2FEF2614D7AE2BC32576F600592DE5. Visit on 5 March 2015. Excerpt: “Arctic Ocean coastal states have an important stewardship role in the region.”
4. The Chairman’s Summary, issued by the Arctic Ocean Foreign Ministers’ Meeting held at Chelsea, Canada, 29 March 2010. Available at: http://www.mid.ru/brp_4.nsf/0/5E2FEF2614D7AE2BC32576F600592DE5. Visit on 5 March 2015. Excerpt: “Arctic Ocean coastal states have a unique interest and role to play in current and future efforts for the conservation and management of fish stocks in this region.”
5. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Future Arctic Fisheries held at Washington, U.S., 29 April-1 May 2013. Available at <http://www.state.gov/e/oes/rls/pr/2013/209176.htm>. Visit on 5 March 2015. Excerpt: “It is appropriate for the States whose exclusive economic zones border this high seas area to take the initiative on this matter.”
6. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Arctic Fisheries held at Washington, U.S., 29 April-1 May 2013. Available at <http://www.state.gov/e/oes/rls/pr/2013/209176.htm>. Visit on 5 March 2015. Excerpt: “Those States also acknowledge that other States may have an interest in this topic and that they should be included in talks at some point in the future as appropriate.”
7. Chairman’s Summary, issued by the Arctic Ocean Foreign Ministers’ Meeting held at Chelsea, Canada, 29 March 2010. Available at: http://www.mid.ru/brp_4.nsf/0/5E2FEF2614D7AE2BC32576F600592DE5. Visit on 5 March 2015. Excerpt: “Large-scale commercial fishing in most of the Arctic Ocean is not imminent.”
8. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Future Arctic Fisheries held at Washington, U.S., 29 April-1 May 2013. Available at <http://www.state.gov/e/oes/rls/pr/2013/209176.htm>. Visit on 5 March 2015. Excerpt: “commercial fishing in the high seas area of the central Arctic Ocean is unlikely to occur in the near future.”
9. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Arctic Fisheries held at Nuuk, Greenland, 24-26 February 2014. Available at <http://www.pewtrusts.org/~media/Assets/2014/09/ArcticNationsAgreetoWorkonInternationalFisheries-Accord.pdf?la=en>. Visit on 5 March 2015. Excerpt: “commercial fishing in the high seas area of the central Arctic Ocean is unlikely to occur in the near

future.”

10. The Ilulissat Declaration, issued by the Five Arctic Ocean Coastal States at Arctic Ocean Conference held at Ilulissat, Greenland, 27-29 May 2008. Available at: http://www.oceanlaw.org/downloads/arctic/Ilulissat_Declaration.pdf. Visit on 5 March 2015. Excerpt: “the law of the sea provides for important rights and obligations concerning ..., and other uses of the sea.” “... no need to develop a new comprehensive international legal regime to govern the Arctic Ocean.”
11. The Chairman’s Summary, issued by the Arctic Ocean Foreign Ministers’ Meeting held at Chelsea, Canada, 29 March 2010. Available at: http://www.mid.ru/brp_4.nsf/0/5E2FEF2614D7AE2BC32576F600592DE5. Visit on 5 March 2015. “While large-scale commercial fishing in most of the Arctic Ocean is not imminent, we discussed the need for further scientific research into the state and nature of fish stocks and their ecosystems in order to assess emerging trends and their implications.”
12. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Future Arctic Fisheries held at Washington, U.S., 29 April-1 May 2013. Available at <http://www.state.gov/e/oes/rls/pr/2013/209176.htm>. Visit on 5 March 2015. Excerpts: “There was general recognition of the desirability of improving scientific understanding of the Arctic marine environment, in part to determine whether fish stocks might in the future occur in the high seas area of the central Arctic Ocean that could be harvested in commercial fisheries and the possible impacts of such fisheries on the ecosystem in question.”
13. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Arctic Fisheries held at Nuuk, Greenland, 24-26 February 2014. Available at <http://www.pewtrusts.org/~media/Assets/2014/09/ArcticNationsAgreetoWorkonInternationalFisheries-Accord.pdf?la=en>. Visit on 5 March 2015. Excerpt: “to continue to promote scientific research, and to integrate scientific knowledge with traditional and local knowledge, with the aim of improving understanding of the living marine resources of the Arctic Ocean and the ecosystems in which they occur.”
14. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Future Arctic Fisheries held at Washington, U.S., 29 April-1 May 2013. Available at <http://www.state.gov/e/oes/rls/pr/2013/209176.htm>. Visit on 5 March 2015. “Those States also acknowledge that other States may have an interest in this topic and that they should be included in talks at some point in the future as appropriate.”
15. The United Nations Convention on the Law of the Sea, Article 63 “Stocks occurring within the exclusive economic zones of two or more coastal States or both within the exclusive economic zone and in an area beyond and adjacent to it”.
16. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Future Arctic Fisheries held at Washington, U.S., 29 April-1 May 2013. Available at <http://www.state.gov/e/oes/rls/pr/2013/209176.htm>. Visit on 5 March 2015. Excerpt: “At present, there is no need to establish any additional RFMO or RFMO(s) for this area.”
17. Chairman’s Statement, issued by the Five Arctic Ocean Coastal States at Meeting on Arctic

Fisheries held at Nuuk, Greenland, 24-26 February 2014. Available at <http://www.pewtrusts.org/~media/Assets/2014/09/ArcticNationsAgreetoWorkonInternationalFisheries-Accord.pdf?la=en>. Visit on 5 March 2015. Excerpt: “no need at present to develop any additional regional fisheries management organization (RFMO) or arrangement for this area.”

18. The United Nations Convention on the Law of the Sea, Article 87(1)/e Freedom of the high seas is exercised under the conditions laid down by this Convention and by other rules of international law. It comprises, inter alia, both for coastal and land-locked States: “freedom of fishing, subject to the conditions laid down in section 2”.
19. The United Nations Convention on the Law of the Sea, Article 116 “Right to fish on the high seas”.
20. The United Nations Convention on the Law of the Sea, Article 117 “Duty of States to adopt with respect to their nationals measures for the conservation of the living resources of the high seas”.
21. The United Nations Convention on the Law of the Sea, Article 118 “Cooperation of States in the conservation and management of living resources”.
22. The United Nations Convention on the Law of the Sea, Article 119 “Conservation of the living resources of the high seas”.
23. Minister Aglukkaq Announces the Signature of the Beaufort Sea Integrated Fisheries Management. Available at <http://news.gc.ca/web/article-en.do?nid=894639>. Visit on 6 March 2015.
24. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Article 6 “Application of the Precautionary Approach”.
25. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Article 6(3).
26. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Article 5 “General Principles”.
27. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Article 8(3).
28. Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 Relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks. Article 7 “Compatibility of Conservation and Management Measures”.

References

- Bailey, J. L. (1997). States, Stocks, and Sovereignty: High Seas Fishing and the Expansion of State Sovereignty. *Conflict and the Environment, NATO ASI Series, Vol 33*: 215-234.
- Balton, D. A. (2010) Considering Future Arctic Fisheries. In Nordquist, M. H., Moore, J. N., and Heidar, T. H. (Ed.), *Changes in the Arctic Environment and the Law of the Sea* (pp. 401-408). Boston: MartinusNijhoff Publishers.
- Byers, M. (2013). *International Law and the Arctic*. Cambridge University Press, 2013.
- Editorial Board. (2015) "No Fishing" at the North Pole. *The New York Times*. Retrieved from: <http://www.nytimes.com/2015/07/22/opinion/no-fishing-at-the-north-pole.html? r=0>
- Hollowed, A. B., Planque, B., and Loeng, H. (2013). Potential Movement of Fish and Shellfish Stocks from the Sub-Arctic to the Arctic Ocean. *Fisheries Oceanography*, 22(5):355-370.
- Jefferson, J. (2010). Climate Change and the Arctic: Adapting to Changes in Fisheries Stocks and Governance Regimes. *Ecology Law Quarterly*, 37:917-977.
- Koivurova, T., Molenaar, E. J., and Vanderzwaag, D. L. (2009). Canada, the EU, and Arctic Ocean Governance: a Tangled and Shifting Seascape and Future Directions. *Journal of Transnational Law and Policy*, 18(2):248-287.
- Levgim, A. C. (2015). Will the Plan for Fishing Moratorium in High Sea Portion of Central Arctic Ocean be Realized? *The New York Times*. Retrieved from: <http://cn.nytimes.com/opinion/20151126/c26arctic/>
- Li, Y. (2012). Extension of fisheries jurisdiction of coastal states. *Social Scientists*, 187(11): 16-19.
- Loeng, H., et al. (2005) Chapter 9: Marine Systems. In Berner, J. et al. (Ed.), *Arctic Climate Impact Assessment --- Scientific Report* (pp.454-538). New York: Cambridge University Press.
- Molenaar, E. (2009). Arctic Fisheries Conservation and Management: Initial Steps of Reform of the International Legal Framework. *The Yearbook of Polar Law*, 1:427-464.
- Myers, S. L. (2015). Sea Warming Leads to Ban on Fishing in the Arctic. *The New York Times*. Retrieved from: <http://www.nytimes.com/2015/07/17/world/europe/sea-warming-leads-to-ban-on-fishing-in-the-arctic.html? r=0>
- Rayfuse, R. (2009). Warm Waters and Cold Shoulders: Jostling for Jurisdiction in Polar Oceans. *The Yearbook of Polar Law*, 1:465-476.
- Weidemann, L. (2014). *International Governance of the Arctic Marine Environment with Particular Emphasis on High Seas Fisheries*. Switzerland: Springer.
- Zhao, S. (1997). The Creation of the International Tribunal for the Law of the Sea--- My Personal Experience and Feelings. *Peking University Law Journal*, 53(5): 515-521.
- Zhao, W. (2009). *Extension of fisheries jurisdiction of coastal states* [D]. Beijing: China University of Political science and Law.
- Zou, L. (2014). *A Contrastive Study of Antarctic and Arctic Fisheries Management Regime and Chinese Polar Fisheries Policy* [D]. Shanghai: Shanghai Ocean University.

Briefing Note

Arctic Council's Impact on Arctic Shipping

Ilker Basaran

As the most proactive international body in the region, the Arctic Council aims to help provide safe, secure, environmentally sound, and sustainable shipping in the Arctic Ocean. The Arctic Council, as a soft law institution does not have authority to adopt legally binding resolutions for shipping – this capacity primarily rests with the International Maritime Organization (hereinafter IMO) –, however, the Council has an extraordinary decision shaping function, which it uses through strong cooperation. The Arctic Council's cooperation with the IMO has already proved itself to be fruitful, however, there is a long list of issues that require attention. The Arctic Council's cooperative approach therefore warrants an investigation and further analysis in order to understand the future direction of the Arctic Council's impact on Arctic shipping.

The IMO's Unique Role

It is widely accepted that the IMO is a “competent international organization” in connection with the adoption of international shipping rules and standards in matters concerning maritime safety, efficiency of navigation, and prevention and control of marine pollution from vessels and by dumping (U.N. Division for Ocean Affairs and Law of the Sea, 1996).

The IMO's new mission statement declared in 2011 states that:

“The mission of the IMO, as a United Nations specialized agency, is to promote safe, secure, environmentally sound, efficient and sustainable shipping through cooperation. This will be accomplished by adopting the highest practicable standards of maritime safety and security, efficiency of navigation and prevention and control of pollution from ships, as well as through consideration of the related

legal matters and effective implementation of IMO's instruments with a view to their universal and uniform application." (IMO Mission Statement, 2011)

As we see from the article, the cooperation is the key for the IMO to achieve its mandate of establishing common international ground rules for the safety and protection of the marine environment.

The Arctic Council

The Arctic Council's constitutive instrument defines its mandate as:

".. to promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous peoples and other Arctic inhabitants on common Arctic issues, in particular issues of sustainable development and environmental protection in the Arctic" (The Arctic Council, 1996)

As indicated above, the Council also highlights "cooperation" as its priority. And it mainly focuses on environmental protection and sustainable development within the confines of issues common to the Arctic region.

Traditionally, the Arctic Council fulfills its role through scientific research, in particular monitoring and assessment. The Arctic Council working groups produce reports that use impact assessment, trend analysis and modeling to take measure of the Arctic region (Axworthy, Koivurova & Hasanat 2012). They create tables, charts, maps and graphs to help both in articulating and calculating the present and also tracing the possible futures (Axworthy, Koivurova & Hasanat 2012).

The AMSA Report

There are two working groups most relevant to our discussion here. These are the Protection of Arctic Marine Environment (hereinafter PAME) and, to a lesser extent, Emergency, Prevention, Preparedness and Response (hereinafter EPPR).

The PAME, as a follow-on effort to the Arctic Council's 2004 Arctic Climate Impact Assessment (ACIA) and Arctic Marine Strategic Plan (AMSP), released its Arctic Marine Shipping Assessment (AMSA) report in 2009.

More than 200 experts, led by Canada, Finland, and the United States, involved in creation of this report. With the 96 findings, divided under three main themes – Enhancing Arctic Marine Safety, Protecting Arctic People and the Environment, and Building Arctic Marine Infrastructure - and 17 recommendations, the AMSA report is considered as the Arctic Council's biggest contribution to the cooperative solution efforts. It is also safe to say that the AMSA report constitutes the foundation of the cooperation between the IMO and the Arctic Council.

Through the AMSA report, the Arctic Council highlights the importance of the IMO and calls for the Arctic states to:

"...to cooperatively support of the effort at the International Maritime Organization to strengthen, harmonize and regularly update international standards for vessels operating in the Arctic." (Arctic Council 2009)

This is a clear message that the matters related to the Arctic maritime safety, security and environmental protection should be resolved through cooperating with the IMO.

Cooperative Work Completed

The IMO Polar Code

Under the Arctic Shipping Rules and Standards sub-theme, the AMSA report listed a key finding that:

“there is a general lack of uniform, mandatory, and non-discriminatory Arctic shipping regulations and mariner (ice navigator) standards for the Arctic Ocean, and the IMO has not developed or adopted specially tailored (and mandatory) standards for vessels operating in the Arctic. Further, it elaborated that none of the current IMO conventions such as MARPOL have yet been adjusted and adopted for Arctic marine operations, especially those operations in ice covered waters”.

Based on this finding, the AMSA recommended to start working towards the implementation phase.

Two implementation efforts, highlighted in the report, are:

- Support the updating and the mandatory application of relevant parts of the Guidelines for Ships Operating in Arctic Ice-covered Waters (Arctic Guidelines); and,
- Drawing from IMO instruments, in particular the Arctic Guidelines, augment global IMO ship safety and pollution prevention conventions with specific mandatory requirements or other provisions for ship construction, design, equipment, crewing, training and operations, aimed at safety and protection of the Arctic environment (Arctic Council, 2015)

Subsequently, a collective understanding about the necessity of a mandatory instrument has gained the much-needed momentum. Thereafter, Arctic states, being more active at the IMO meetings, started to work toward the creation of this mandatory instrument, namely the International Code of Ships Operating in Polar Waters (hereinafter the Polar Code).

In this process, the PAME working group also monitored the IMO’s development of the Mandatory Polar Code, and, through its Records of Decision, encouraged member governments to intensify their collaboration with respect to finalization of the Polar Code (Arctic Council, 2015). It also supported and encouraged the Arctic states to meet in advance of IMO committee and sub-committee meetings of relevance to the Polar Code. As a result, the Polar Code is created.

The Polar Code is due to enter-into-force on January 1, 2017.

The SAR Agreement

Under the Search and Rescue (SAR) sub-theme, the AMSA report recommended that:

“the Arctic states decides to support developing and implementing a comprehensive, multi-national Arctic Search and Rescue (SAR) instrument, including aeronautical and maritime SAR among the eight Arctic nations and, if appropriate, with other interested parties in recognition of the remoteness and limited resources in the region” (Arctic Council, 2015).

The Arctic Council, pursuant to the International Convention on Maritime Search and Rescue,

1979, and the Chicago Convention on International Civil Aviation, 1944, adopted the Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic in 2011. This was the first ever legally binding agreement negotiated under the auspices of the Arctic Council.

It is important to note that the 1979 SAR convention developed under the IMO during a time when the United Nations Conventions on the Law of the Seas (hereinafter UNCLOS) was still under negotiation (Molenaar, 2012). IMO's Marine Science Committee divided the world into 13 maritime SAR areas in the early 1980s with the Arctic Ocean designated as area number 13 (Molenaar, 2012).

The objective of this agreement is "to strengthen aeronautical and maritime search and rescue cooperation and coordination in the Arctic." Each of the Arctic states undertook to "promote the establishment, operation and maintenance of an adequate and effective search and rescue capability within its area."

The agreement in detail fosters the conduct of joint Arctic SAR exercises and training, lists information on the Arctic states' rescue coordination centers, and addresses the issue of requests to enter the territory of a Party for SAR operations. The Arctic SAR agreement entered into force on 19 January 2013 following ratification by each of the eight Arctic signatory states.

Oil Pollution Preparedness and Response Agreement

In its key Marine Environmental Protection sub-theme, the AMSA report stated that:

"the release of oil in the Arctic marine environment, either through accidental release or illegal discharge, is the most significant threat from shipping activities."

And again, in its recommendation section under the theme of Oil Spill Prevention, the AMSA report indicated that:

"the Arctic states decide to enhance the mutual cooperation in the field of oil spill prevention and, in collaboration with industry, support research and technology transfer to prevent release of oil into Arctic waters, since prevention of oil spills is the highest priority in the Arctic for environmental protection."

Accordingly, as a response to this call, the Marine Oil Pollution Preparedness and Response Cooperation Agreement is adopted under the EPPR working group at the Kiruna Ministerial meeting in May 2013. And the ratification process of this agreement was completed in March 2016.

This instrument is inspired by various conventions and principles, including the UNCLOS, the 1990 International Convention on Oil Pollution Preparedness, Response and Cooperation (OPPRC), the 1969 International Convention Relating to Intervention on the High Seas in Cases of Oil Pollution Casualties (INTERVENTION 1969), and "polluter pays" principle.

This agreement mainly focuses on Arctic oil spills and addresses a range of practical issues, including requirement of a national 24-hour system for response, facilitation of cross-border transfer of resources, notification of the parties, monitor spills, conduct of exercises and training, joint reviews of responses to Arctic spills, and a set of operational guidelines in an appendix (Brigham, 2013).

Cooperative Work Ahead

The Arctic Council and IMO are expected to work cooperatively on a number of additional key Arctic issues in the coming years.

Some of the immediate issues might be listed as:

- Designation of MARPOL Special Areas. The Arctic Council and its working groups, especially PAME, is expected to conduct assessments and develop plans for future special area designations in order to help IMO take concrete measures.
- Protection of the Marine Mammals. Ship strikes, noise, and disturbance are some of the threat that the marine mammals will face in future Arctic. Close cooperation in this issue will also yield effective solutions. Arctic states are expected to propose routing alternatives for this matter.
- Ballast Water. Protection from invasive (exotic) species is another subject matter. AMSA report urges an assessment of the risks posed by ballast water carried invasive species and the taking of measures within national jurisdiction.
- Monitoring and Arctic Traffic Domain Awareness. Use of data from IMO mandatory Automatic Identification System Transponders and the application of IMO's requirement for the Long Range Identification and Tracking of Ships.
- Heavy Fuel Oil. The Polar Code is heavily criticized for not including a provision that would ban the heavy fuel oil use in the Arctic ocean. Due to Russian dissent, the needed consensus on this topic haven't been reached, however, further development is expected.
- Non SOLAS Vessels. Polar Code is applicable to tankers, bulk carriers and cruise ships, vessels 500 gross tons, therefore, fishing boats, yachts and smaller adventure vessels are out of its coverage. IMO has plans on expanding coverage and Arctic Council would take further role on this issue as facilitator.
- Additional issues, such as, sewage, grey water, ice navigator training, and passenger ship safety measures are also in the agenda for solution through cooperative work.

The Council's Future Role

As we see from the above list, most of the navigational problems in the Arctic Ocean are still on the table waiting to be discussed and resolved. In this process however the Council's position has a vital importance. The Council simply can not effort to act as a private club and isolate itself from the other traditionally maritime nations, who also indicated its interest in the region. It needs to be stronger, therefore, it needs to be more inclusive in its effort to have a unified stand for common navigational problems in the Arctic Ocean. Currently, the Arctic Council's non-Arctic observer states, members of the IMO, are only given very limited, symbolic or diplomatic, role to play, but in reality, especially when we consider about the activities involving both Arctic Natural Resources and Central Arctic Ocean Shipping, these states should also be regarded as stakeholders. Therefore, their timely inclusion seems to be inevitable if we claim to have a uniform, non-discriminatory set of rules and regulations in a global level. Lastly, inclusive approach would also foster regional stability and security by facilitating united global approach in tackling future Arctic problems.

Conclusion

As I indicated in this article, we have all witnessed the Arctic Council's impact on decision making process. This is an ideal approach to find solutions to regional navigational problems because the IMO has very little in its power to offer unless coastal states -and interested parties- are willing to make an effort to come up with solutions. Considering the long list of problems and difficulty in resolving them, I think the Arctic Council has to go through a transformation. Only stronger and more inclusive Council can overcome the current and upcoming navigational problems in the region. The IMO might have power to have legally binding resolutions for shipping, but it is the Arctic Council's duty to be more effective and proactive.

References

- IMO Mission Statement. (29 November 2013). Strategic Plan for the Organization (for the six-year period 2014-2019). *IMO Assembly Resolution A.1060 (28)*.
- Arctic Council. (1996). Ottawa Declaration: Declaration on the Establishment of the Arctic Council.
- Axworthy, T. S., T. Koivurova, and W. Hasanat (2012). The Arctic Council: Its Place in the Future of Arctic Governance. Munk-Gordon Arctic Security Program. Toronto: Munk School of Global Affairs.
- Brigham, L. (2010). The Arctic Council's Arctic Marine Shipping Assessment. In M. H. Nordquist, J. N. Moore, and T. H. Heidar (eds). *Changes in the Arctic Environment and The Law of The Sea*. Center for Oceans Law and Policy, Martinus Nijhoff Publishers.
- United Nations Division for Ocean Affairs and the Law of the Sea (DOALOS). (1996). Competent or Relevant International Organizations under the United Nations Convention on the Law of the Sea, *Law of the Sea Bulletin*. 31: 79–95. Retrieved from: http://www.un.org/depts/los/convention_agreements/texts/unclos/part13.htm
- Arctic Council. (2009). Arctic Council Arctic Marine Shipping Assessment Report. Retrieved from: http://www.pmel.noaa.gov/arctic-zone/detect/documents/AMSA_2009_Report_2nd_print.pdf
- Arctic Council. (2015). Status on Implementation of the AMSA 2009 Report Recommendations. Retrieved from: <https://oaarchive.arctic-council.org/bitstream/handle/11374/415/AMSA%20Recommendations%20Report.pdf?sequence=1&isAllowed=y>
- Molenaar, E. J. (2012). Current and Prospective Roles of the Arctic Council System within the Context of the Law of the Sea. *The International Journal of Marine and Coastal Law*. 27(3): 553-595.
- Brigham, L. (2013). International Cooperation in Arctic Marine Transportation, Safety and Environmental Protection. Future Arctic Marine Shipping, East-West Center. Retrieved from: <http://ewcbookstore.org/arctic/2013arctic-04envprotection.pdf>

Commentary

Crystal Serenity – A New Chapter in Arctic Shipping or Just “Doing It Right”?

David (Duke) Snider

Perhaps one of the most newsworthy Arctic shipping related events in 2016 is the Northwest Passage voyage of Crystal Cruise’s MV Crystal Serenity. In the lead up to this momentous voyage, declarations of doom and gloom, warnings of imminent disaster and expectations of a turn for the worse in Arctic shipping seemed to gain the most attention in online blogs and chat rooms and eventually more traditional press outlets. Little was said in support of the voyage...a voyage that has been planned well in advance and executed flawlessly. The Internet misinformation game had taken hold and as each misrepresentation, misquote and error of fact was requoted and rebroadcast on various websites; many who were otherwise unknowing of the reality of the situation came to see the voyage as a threat to the environment, a threat to the cultures of the people of the north, and seemingly just a bad thing all around.

In fact, the voyage was none of those things.

It was not poorly planned, it was not an assault on the environment, it was not a risky venture in dangerous ice-covered seas and it was not an unwanted intrusion on the communities along the route.

Crystal Cruises has set a very high standard for Arctic shipping risk assessment, planning and execution of what many had considered dangerous and risky voyages. The old images of the Arctic as an environment rife with danger is no longer valid. True, tremendous challenges still face those

who venture into the Arctic, but the waters of the Arctic have become less onerous and now far from deadly, unless those who venture there do so without adequate preparation.

Not only has much changed in the Arctic in recent years, but much has also changed in how we conduct the business of ships and cargo around the world's oceans. Safety is paramount; protection of the environment, cargo, ship and personnel, whether crew or passenger, is the standard.

Planning for *Crystal Serenity's* voyage began several years before the voyage. From the very first, senior *Crystal Cruises* operational management consulted knowledgeable Arctic expedition operators and shipping experts on the concept to determine whether or not it was even feasible with the ship that was intended to complete the voyage. The ship selected was the light ice class *Crystal Serenity*, larger than any previous cruise ship to transit the Northwest Passage. It was determined that a voyage along what is known as the "southern" route, via Amundsen Gulf, Coronation Gulf, Queen Maud Gulf and Peel Sound to Lancaster Sound was possible. Contrary to some comment on the internet, the entire route is well surveyed to modern standards, regularly travelled, and safe for ships the size of *Crystal Serenity*. In fact, the route is more open, and less navigationally challenging than the Inside Passages of British Columbia and Alaska that see many larger cruise ships ply those waters every summer.

Global climate change has not only enabled this particular voyage, it has contributed to the increased safety of any ships operating in the Arctic. The window of least summer in ice has been slowly increasing in length. Regions previously ice-choked are now more commonly open. The window for *Crystal Serenity's* voyage was carefully selected for the period of summer when sea ice would be at its least and the route virtually ice free.

To cover all eventualities, in addition to the experienced bridge team, two highly experienced Ice Navigators were onboard the ship throughout the voyage. *Crystal* added another level of safety as it engaged the very capable icebreaker *RSS Ernest Shackleton* to accompany *Crystal Serenity*. The *Shackleton* acted as ice as a support ship and ice escort, if required. In many ways, this is a step up from the concept of the "buddy system" routinely used by cruise ships operating in Antarctic waters, ensuring support is always close at hand when two cruise ships operate together.

The *Shackleton* carried containers brimming with additional survival equipment and rations, helicopters for routine and emergency response, as well as oil pollution response equipment and expedition grade rigid hull inflatable boats. Like the *Crystal Serenity*, *Shackleton* also embarked two Ice Navigators. As part of the risk management planning process, the bridge teams of both ships and the specialist Ice Navigators all met well prior to the voyage to run through full mission bridge simulations of the voyage at the marine simulation training centre in St. John's, Canada. This allowed the teams to iron out any possible wrinkles in the already well-developed passage plan and ensured the teams worked well together. Mass evacuation and search and rescue response exercises were also conducted with representative of United States Coast Guard, Canadian Coast Guard, Royal Canadian Air Force, *Crystal Cruises* and many other American and Canadian agencies in the spring prior to the voyage.

Throughout the two year planning process, *Crystal Cruises* worked closely with American, Canadian and Danish (Greenlandic) authorities, agencies and civilian organizations to ensure the voyage was feasible, within all regulations and guidelines and would result in as positive an impact on the environment and communities as possible. Local outreach to each community on the route

was paramount. CBC reported during the voyage how artisans and communities along the way encouraged the ship to stop, seeing controlled visits by passengers as a boon to their community. Unlike predictions of unwanted inundations of small Arctic communities by hundreds of passengers at a time, the visit plans were worked out with each community in advance and ensured that numbers ashore were at all time less than 150 and were well controlled.



This voyage will pass in history as the first large cruise ship to navigate the Northwest Passage. But it should not be covered in negative hype. The Northwest Passage was impassable and dangerous to sailing ships in the 1800s, not to modern, well-equipped and well-crewed vessels today. Challenges certainly still do exist, but diligent planning can eliminate or mitigate any of the risks. Throughout the planning and execution, this

voyage was safe. Others that follow, if they take the same care as Crystal Cruises has done, will be as successful.

The Arctic remains a challenge to shipping, due to its remote and ill served geography, its environmental sensitivity and its challenging ice conditions. With in-depth planning, preparation and execution, Arctic voyages can be safely completed. MV Crystal Serenity has proven that.

Commentary

Transdisciplinary Dialogue on Board between Eurasia and America: The 6th International Meeting of the State-Members of the Arctic Council, State-Observers to the AC & Foreign Scientific Community

Lassi Heininen

The 6th International Meeting of the State-Members of the Arctic Council, State-Observers to the AC and Foreign Scientific Community took place on 29 August – 2 September 2016 on board the Russian icebreaker *50 Years of Victory (50 Let Pobedy)* from the Bering Sea to the Eastern Siberian



Sea through the Bering Strait. The meeting was organized by the Russian Security Council and hosted by Nikolai Patrushev, Secretary of the Security Council, and Russian Hero Artur Chilingarov. The meeting was very international, accommodating official representatives of all the Arctic Member states and four Asian Observer states of the Arctic Council (i.e. China, India, Singapore and South Korea) as well as several ambassadors, a few deputies and several other officials. We academics from

the Arctic states and those Asian countries consisted of the Foreign Scientific Community of the meeting. In addition, the business community was represented by two Russian companies, Rosneft and Atomflot.



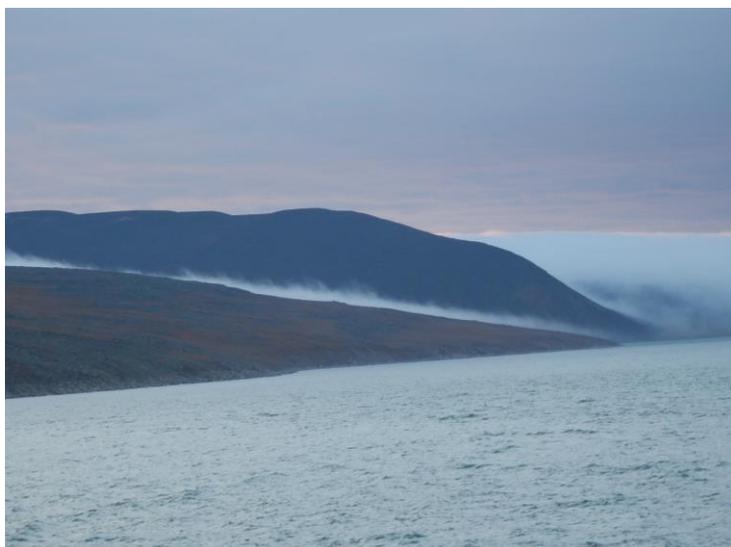
The first session of the meeting on board was dedicated to political, economic and cultural cooperation, as well as security, of the Arctic. This session accommodated a few academic presentations, including mine, and several presentations by representatives of the Arctic states. The second session, devoted to legal, economic, technologic and logistics aspects of Arctic maritime transport, included several Russian experts presenting and sharing their information and expertise on the fields, which is significant. There was also a demonstration on the Bering Sea of how the ice-class tanker, *Navigator Albanov* is able to operate in Arctic seas in problematic situations, particularly in conditions of an oil spill. The last session, with less presentations, was on scientific cooperation, ecological security and tourism in the Arctic.

The sessions consisted of several short presentations and reports, after the organizers managed to shorten the time of each presentation down to 10 minutes. The participation of the meeting was based on the idea of ‘transdisciplinarity’ by representatives from the major stakeholders – politics, business and academia. This is the main precondition for the interplay between science and politics, and business. The aim was partly achieved, since there was much new information, the dialogue was interdisciplinary, and there was also time allocated to comments and questions. Interestingly, the setting – state representatives were sitting around a separate table in the middle of the room – as well as the procedure were like in the official meetings of the Arctic Council and its working groups.



I introduced the theme of the 1st session, and was also asked to moderate two parts of it including 13 presentations by several state representatives. In my presentation, I analyzed the current political situation of the Arctic, and concentrated on how we have managed to maintain the high geopolitical stability of the Arctic, in spite of the fact that there are regional conflicts and wars in

other parts of the world, where also Arctic states are parties. Since the stability is not inevitable, but manmade, my aim was on the one hand to point out that the Arctic states, including Russia and the U.S., have consciously been keeping the Arctic, and Arctic issues, out of crises and by that way maintained the region's high stability, and this is never passive but needs actors and their political will. On the other hand, I asked how to go further, as well as how to deepen international and interregional cooperation, in order to make a peaceful change.



The state representatives agreed on the most important issue, that the high geopolitical stability of the Arctic should be maintained, and they emphasized its strategic importance. I didn't, however, manage to encourage the representatives to go beyond the current situation and brainstorm new ideas how to create new measures for confidence-building, make Arctic structures more resilient with flexible rules, and rethink security premises and paradigms. No

wonder, since this is not easy but a challenging, as well as sensitive, issue, with some thinking that the current situation is not ripe for that kind of brainstorming or rethinking.

Politically the meeting was a success, since this was the first time since the beginning of the Ukrainian war and the Russian annexation of Crimea that all the Arctic states were officially represented in these meetings in Russia. Academically it was a real field trip, particularly for a political scientist, due to the fact that the interplay between science and politics was not only said to be important, but also implemented. Further, it was a rather unique experience, since everything happened on board the nuclear icebreaker *50 Years of Victory* between Anadyr and Pevek in the Chukotka Autonomous District, the Russian Far East.

An impressive finding of the gathering was the high level expertise of Russian experts, and how carefully they described and follow the rules of UNCLOS. Maybe those of us in other Arctic states should slowly start to acknowledge this, and that Russia maintains a special expertise on the Arctic Ocean, northern sea routes and maritime safety. Actually, this is not surprising, when taking into consideration for how long the Russians have been constantly



present in these cold waters and done research in the Arctic, starting from the ice-stations by Admiral Papanin.

Also, the demonstration of the tanker, as well as the search and rescue exercises as a part of the program of the meetings in 2014 in Naryan-Mar and the Pechora Sea, and in 2015 in Archangelsk, gave valuable information on the state of maritime safety in Russia and by Russian officials. Maritime safety – or as it was put on the chimney of the tanker “SCF (Security comes first)” – is much the priority in international Arctic cooperation, hence the Arctic is all about the Arctic Ocean. This brings me to think how unwise were the earlier decisions by other Arctic states not to send experts on the field(s) of search and rescue to the previous years’ meetings in 2014 and in 2015 (see my commentary in the [Arctic Yearbook 2015](#)). Even if the seven Arctic states, due to political reasons, do not want to send high-level representatives to these meetings, they could do much better, act more boldly, and send their experts there to observe these exercises.

I’m not naïve to be able to take into consideration that this was a political decision (according to the sanction by the U.S. and the EU), and that in politics boycotts used to happen every now and then. I, however, think that if maritime safety, which is a good example of a functional field, is so



fundamental, as the Arctic states and Observer countries are saying, then they should be willing and able to go beyond political tension and narrow-minded national interests, and cooperate at the expert-level; particularly when there is the legally-binding SAR agreement, which all the Arctic states have signed and are committed to. This is also a confidence-building-measure to share information and knowledge between the Arctic states and their officials, as well as others who are in charge of maritime safety. There is no a danger of being misused, or hijacked, by Russia or anybody else, even if Arctic states would send their experts to observe these exercises, as we could see in this very international meeting where Ambassadors and other state representatives were present.

The conventional wisdom, which is wise, it to keep some important issues, fields and areas – for example, nuclear arms control, pollution, climate change, research, space – out of fundamental disagreement and separate them from the larger conflictual relations between parties. This is to minimize damage, not put all the eggs into the same basket, and make sure that we will not put the humankind at stake. This wisdom, also called ‘Arctic exceptionalism’, has already been used in the Arctic, as mentioned earlier, and also the EU’s policies go accordingly, by keeping Arctic cooperation as a ‘protected’ area out of political crises.

Finally, the interesting discussions and the agreement on the importance of Arctic exceptionalism was made possible and encouraged by the good atmosphere of the meeting. This is in a way ironic, when taking into consideration the image and perception of the Russian Security Council in the West. It is not unusual that in the meetings of the Arctic Council and its Working Groups there is a nice atmosphere, but that the same happens in the gatherings organized by the Russian Security Council is less known internationally. This was partly because the 2016 meeting took place on board the strongest icebreaker in the world – she is very impressive, as I experienced already in October 2013, when we brought the [Olympic flame to the North Pole](#) – but mostly this was due to common interests. Although, texts construct geopolitics and popularized geopolitics is more than written text, as we have seen in several illustrations of the Arctic by international media, I do not want to speculate how this could be interpreted. More importantly this is much the core of international politics and diplomacy, that we need confidence and trust between parties, even if we will not agree on everything. This can be promoted and enhanced by confidence-building, and correspondingly, it requires a good atmosphere. In the case of the Arctic this is supported by the fact that Arctic cooperation with its scientific, environmental and political achievements, as well as due to the global interests towards the Arctic region, has been beneficial for all the Arctic states, as well as indigenous peoples and other inhabitants of the region.

All in all, this international gathering on board was exciting and fruitful in all respects, and therefore its reporting might interest those who are closely following Arctic politics and cooperation.



Commentary

An Arctic Forum for Security Co-Operation?

Benjamin Schaller

This year marks the 20th anniversary of the Arctic Council, which probably became the most important multilateral forum for Arctic policymaking and a most interesting case study for scholars of international relations. For two decades, it has served as a cooperative and constructive forum covering various issues of economic, environmental and human security, explicitly excluding the military security dimension.

Today, 20 years after the founding of the Arctic Council, one has to acknowledge that the international security environment has significantly changed. Russia's illegal annexation of Crimea and increasing show of force toward its neighbours have destroyed a significant amount of the trust that was carefully built up after the end of the Cold War. This is, unfortunately, also true for Russia's relations with its Arctic neighbours. Nevertheless, there is still considerable reluctance to touch upon the issue of military security in the High North. For the moment, the Arctic might still just be content with its rather 'selective security approach'. However, the continuous deterioration of Western-Russian relations calls into question the hope that negative spillover effects will not affect the good regional co-operation too much.

It appears that this has also sound the bell for another round in the ongoing debate among scholars and policymakers over the need for an Arctic forum addressing issues of military security. What strikes one in this debate is that those in support of such a forum seem trapped in a recurring logic

Benjamin Schaller is a PhD-candidate and research fellow at the Centre for Peace Studies at the Arctic University of Norway in Tromsø and a member of the Research School on Peace & Conflict, a collaboration between the Peace Research Institute in Oslo (PRIO), the University of Oslo (UiO) and the Norwegian University of Science and Technology (NTNU).

of geopolitical games over power and influence, while their opponents (usually arguing from a more regional perspective) seem to follow the line of 'don't fix what isn't broken'.

As both sides focus too strongly on rebutting each other's arguments, they miss out on how both perspectives could actually complement each other, overlooking that they are more or less two sides of the same coin.

An alternative could be to draw from the 40 years of experience of the Organization for Security and Co-Operation in Europe (OSCE). At the end of the Cold War, the OSCE's comprehensive security approach (politico-military, economic and environmental, human security), was able to overcome the military block-to-block-confrontation by increasing mutual transparency and trust as well as by establishing co-operative understanding of European security. This is not to argue for a duplication of the structure or discussions at the OSCE, but for a critical reflection on its comprehensive security approach. From it, at least two important lessons for the discussion over an Arctic security forum can be drawn:

The first one is that stability and good co-operation in multilateral forums is not so much a question of whether the forum has a comprehensive or selective approach to security, but much more a question of the overall political climate.

So far, one of the main arguments of those opposed to an Arctic security forum has been that because the work of the Arctic Council only focuses on non-military issues of mutual interest, the Arctic states have little appetite for spoiling the existing co-operation in the region by discussing controversial issues of military security.

Drawing from the example of e.g. the NATO-Russia Council, they continue their argument by stating that forums dedicated to dealing with military security are usually the first ones that are suspended after a crisis has emerged. Thus they argue that by keeping the Arctic Council free from issues of military security, the regional good co-operation can be preserved and the Council can even serve as a platform for a substantial dialogue to overcome the dividing lines of the crisis.

As appealing as this might sound, it disregards two important things:

First, while one might admit that forums solely focusing on non-military issues seem indeed less prone to paralysis or even suspension, they also rarely serve as a platform for those decision makers primarily involved with the handling or resolution of this crisis. In contrast, organizations with a comprehensive security approach, like the OSCE, bring exactly these people together. In times of crisis, they might indeed seem more paralyzed when looking only at their actual policy output, but they continue to provide a valuable platform for frank and open dialogue, an extremely important component for reducing the risk of dangerous misperceptions and unintended escalation dynamics in crisis.

Second, it would also be wrong to overestimate the impact that co-operation on non-military security can have on tensions in the military security realm (and to be fair, also not vice versa). For example, looking at the outcomes of the last OSCE Ministerial Council meetings, it becomes evident that as soon as military tensions grow too strong, they start to overshadow other policy fields and any (even very close) co-operation in other areas will come under significant stress. Whether or not co-operation prevails will be more a question of whether mutual interest is strong enough (e.g. strong economic interests) or not in the main focus of political attention.

The second and probably most important lesson to be taken from the experiences of the OSCE is that addressing issues of military security does not always have to be a sign of increasing military tensions or weakness, but can just as well be a means to reinforce good and close co-operation between states in times of political and military *détente*.

Another argument that is regularly articulated by opponents of an Arctic security forum is that there is simply no need to discuss issues of military security in the High North (and will not be for decades to come). One can easily sign up to the argument that, despite contrary reports (in particular by mainstream media), the levels of militarization in the Arctic are still far below that of other regions and that there is also little potential for the outbreak of armed conflict in the harsh Arctic environment.

However, it would also be wrong to conclude that the Arctic is entirely immune to geopolitical spillover effects. Let us take the example of the deterioration of NATO-Russia relations. Over the last years, the intensity of air and submarine patrols in the Arctic has again reached Cold War levels and the frequency and scale of military exercises in the region has increased considerably. While this is part of the generally increasing military tit-for-tat and nothing exceptional for the Arctic, it still seems reasonable that these issues should also be addressed from a regional perspective.

The problem is that those who typically call for an Arctic security forum are often too quick to jump over the question of what specific issues should be on its agenda and that simply duplicating discussions elsewhere, ignoring the specific regional security environment, does not seem to provide significant added-value to the debate. Let us take the example of the increasing amount of air and submarine patrols. While these activities undoubtedly carry a potential risk of military incidents and unintended escalation, it is difficult to discern what makes those in the Arctic different or more dangerous from those in, for example, the Baltic Sea region so that they should be addressed from a regional instead of a supra-regional angle. Thus, it is one thing to meet the increasing military activities in the Arctic with scepticism and to recognize the lack of a dedicated forum to address these issues.

What is, however, more challenging is to identify those issues that are so crucial for regional security that they should not solely be addressed in supra-regional fora which include much more international actors and are often criticised for being paralyzed or suspended when a crisis has emerged. It would, for example, be quite useful, if all Arctic states held regular meetings on how the level of transparency over larger military exercises, military planning and troop deployments to the region could be increased. Such discussions would not only complement those under the auspices of the OSCE, but also help prevent dangerous misinterpretations and by doing so contribute to reinforcing the good level of regional co-operation in the Arctic.

To conclude, instead of mainly focusing on rebutting each other's arguments – for and against an Arctic security forum – it might be worthwhile to join forces and to explore whether there is the chance for a more co-operative approach to military security in the High North.

As long as spillover effects remain manageable, co-operation in other policy areas continue and the issues discussed are tailored to the regional needs and requirements of the Arctic, an Arctic Forum for Security Co-operation could be useful for preserving regional co-operation and potentially contribute to restoring generally stressed political and military relations.

Epilogue

Commentary

Dressing Up: Arctic Council at 20

Klaus Dodds

Let me start with an image. An image that I thought was rather odd. There was a meeting of Senior Arctic Officials (SAOs) at Fairbanks Alaska in March 2016.



Klaus Dodds is Professor of Geopolitics, Department of Geography, Royal Holloway, University of London, United Kingdom.

Source: Arctic Council. Arctic Council Photo Archives. Retrieved from: <http://www.arctic-council.org/index.php/en/learn-more/photos>.

As part of their deliberations a dinner was organized at the Fountainhead Antique Auto Museum. On the official website of the Arctic Council, it is noted that, “Many delegates took the opportunity to dress up in period outfits and pose on one of the cars. This photo features Canadian delegates [with the Canadian SAO Susan Harper in the driver’s seat]”. I have never really understood the appeal of dressing up as an adult, even though there is a long-standing British tradition of polar explorers doing so in the Antarctic.

While I appreciate the museum invites this sort of activity, it is interesting to think about what might be at stake. Ultimately it is about dressing up in ‘white clothing’ rather say donning gear more associated with native Alaskans. Otherwise that would have been potentially embarrassing or at the very least awkward. But then as I went further into the photo collection, I noticed another image with the caption, “This photo features a few of the Indigenous Permanent Participant delegates”. Everyone appeared to have taken up the opportunity to dress up. Well nearly everyone, there was no dressing up to be done by state observers because it was not that kind of meeting.

Why focus on dressing up? Let me be clear I am using this episode as a way of exploring something of wider import rather than passing a judgement about that evening in March 2016 *per se*.

Dressing up as a cultural practice is potentially significant because it offers insights into how people imagine themselves, and a prevailing consumptive/visual culture, while revealing geographies of dressing up – where to do it and where not to. Dressing up can also be constitutive of identity and group politics – some do it and some do not. Some are invited to participate and others are not. But the choice of clothing, especially when looking backwards, is revealing. Donning Victorian or Edwardian era clothing in an antique motor museum, which celebrates the role of cars and roads in the ‘opening up’ of Alaska to white American industrial and resource-led development is an intriguing choice. So it might have been a bit of fun at the time but it strikes me as odd that those attached to a progressive-body, the Arctic Council, celebrating its 20th anniversary would wish to do that. Maybe the dinner was a good one. But did it convey at that moment a forward-looking vision for the Arctic and all its residents?

The practice of dressing up could be helpful in thinking about the Arctic Council and the futures that it might face and even anticipate. Over the last twenty years, it has developed an impressive array of activities ranging from SAO meetings, a permanent secretariat, and the scientific and technical work of working groups and task forces dedicated to the ‘dressing up’ of the Arctic region – assembling a region in a manner emphasising science, environment, international co-operation, economic opportunities, and crucially the long-standing autonomy and rights of indigenous peoples.

But one of the things that dressing up as a practice can do however is unleash the role of play and the imagination. Maybe looking ahead, future Arctic Council meetings should include other opportunities to dress up – and in doing so take a moment to reflect on the colonial and gendered histories and experiences of the Arctic, and how future ‘Arctics’ might be ‘dressed up’? Will AC representatives dress up in SAR costumes next year and pose next to equipment used to manage the aftermath of a disaster involving oil spillage? Silly? Inappropriate? Or perhaps it represents a

future that we don't really want to contemplate; an Arctic characterised by the worse case scenario and the worst kind of clothing.

When the representatives of the Permanent Participants attend meetings and workshops dressed in traditional clothing such as the Sami gákti, it performs an important cultural and political statement regarding indigenous occupation of the Arctic and indigenous culture.

When Canadian indigenous representatives wear sealskin waistcoats, the choice of attire reminds others not only of the vital importance of subsistence hunting (and the role of seal in providing food and clothing) but also the harm that is done by seal exports bans by others. 'Dressing up' as a political practice, is anything but a joke. It serves as a visual and affective reminder that whatever future faces the Arctic, there are people and organizations determined to fight for their rights, their land, their autonomy, and their very existence in the light of challenges that at their worst could be existential in the future.

So forgive me if I do not offer you lots of bold statements about the Arctic Council and its future. Whatever future is involved and invoked, there will surely be some 'dressing up' somewhere and by someone.

A Tribute to Alyson Bailes

Lassi Heininen



Alyson J.K. Bailes – 6 April 1949–29 April 2016

Dear Alyson, I played this song “Hold the Heathen Hammer High” by the band *Tyr* for you, since this is music that you liked and liked to listen. The Faroes heavy metal music is a good example and indicator of how open-minded you were and how broad were your interests, also crossing the borders of your profession and expertise. Being a Finn I don’t want to use superlatives or praise a person’s merits too much – you knew this well after living for a few years in Finland and learning the language – only would like to say that you were a unique person, even ‘extraordinary’ (the word which a few who knew you are using). I was happy to be your friend, that we enjoyed each other’s company and had a fruitful cooperation for years.

I’m honoured to have this tribute to You.

Text prepared and read by Lassi Heininen, Editor of the Arctic Yearbook, on October 5th, 2016 during the 9th Polar Law Symposium in Akureyri, Iceland. Alyson Bailes was a Member of the Arctic Yearbook’s Editorial Board. We extend our condolences to family and friends of our friend and colleague, Alyson.

The Faroes heavy metal music is an example to show, even manifest, that Alyson Bailes was a character that you cannot put into a box. She was simply too bright (intelligent) and curious for that. Alyson Judith Kirtley Bailes was born on the 6th of April 1949 and died at the age of 67 of cancer on the 29th of April 2016. She had a rich life and a long, successful career.

It began in 1969, when Alyson joined the Foreign Office of the UK as a junior diplomat. After serving in several positions there, she later became the British Ambassador to Finland for about 30 years. She was not, however, looking for higher rank in diplomacy for its own sake and was curious and eager to do something else. As a surprise to many of her colleagues she jumped out of diplomatic circles and became the director of the Stockholm International Peace Research Institute (SIPRI) in 2002. The last 10 years or so she lived in Iceland and was teaching at the University of Iceland, and also a few times here at the University of Akureyri (UNAK). At the same time, she served as member in several boards of many academic institutions across Europe.

We were friends and colleagues.

Strange enough, I only met Alyson after her years of serving in Finland as Ambassador. I met her for the first time in 2007 in Reykjavik, a few months after she had moved to Iceland. Since then we cooperated until her health had already been dramatically weakened. I annually lectured on environmental politics and security in her course “Non-State Actors and Non-Military Security” which had a broad approach. She lectured on security institutions and non-state actors in my module “International Cooperation, Geopolitics, Security” at the Polar Law MA study program at UNAK.

She also invited me to become a speaker or panelist in several conferences, seminars, workshops she organized in Reykjavik. Correspondingly, she attended a few Northern Research Forum (NRF) open assemblies. I also invited her to become a member of the Editorial Board of the Arctic Yearbook, and she had already contributed to the Yearbook before.

I recall the first seminar on business and security in the North she invited me to as a speaker, alongside several senior scholars and former policy-makers. I had introductory remarks on “The Way Ahead: Challenges and Options in the Arctic.” I noticed that a part of the audience was not so happy with my talk because I hadn’t emphasized the role of NATO in the region. Alyson defended me by saying that Lassi meant that in addition to NATO, new non-military problems and challenges in the Arctic (pollution, climate change) are emphasized. Well, I didn’t really mean that; I had only emphasized new challenges. And Alyson guessed that, while acting as a middleman to get the two sides to agree – she had good skills for that.

Our cooperation was cumulative by nature, being much based on the theory of ‘functionalism’ (by David Mitrany) to start slowly aiming to build trust, and with more confidence the further you can go. After one year at UNAK, she asked me if I would consider, as I did, supervising an Icelandic PhD candidate, one of her former MA students. The paradox here is that, although there was no doubt she was highly qualified for being a supervisor, she didn’t have the formal mandate to do so. I later began supervising other PhD candidates that were Alyson’s students, and another, and another – and the first of those will defend her doctoral dissertation in December.

Alyson did this first of all for her students. She really liked her students: they were like her children (she didn’t have her own). I saw this several times, and was always impressed. It was touching to see how much she did for her students.

When it comes to substance areas – I don't talk about theories, she didn't emphasize, maybe not even believed in, any one theory, though diplomacy is all about the unified state system and 'real politik'. She was an expert on security studies, particularly security- and military-policy, and foreign policy. Even more she became one of the best experts on small states and small state policies, because she liked the Nordic countries – she lived in Finland, Sweden and Iceland the last 15 years of her life. As well she much liked Scotland, where she bought her latest flat a few years before she passed away. In the last years, she was much talking about the flat and its renovation, and looking forward to living there.

When we met for the first time she was not really interested in the Arctic and did not do Arctic studies. After a few years, however, Alyson became interested in Arctic geopolitics – I think I might be partly guilty for that! Though she was one of the newcomers on the field, she did it her way, which much shows her high skills and experiences: she didn't copy but applied her expertise on security and small states studies into Arctic security studies and those of Arctic geopolitics. Our joint book *Strategy Papers on the Arctic or High North: A Comparative Study and Analysis* is a nice example of that. Unfortunately, her time ended before we were able to finalize one more joint publication.

Those of you who did not know Alyson personally might think that she was first of all a hard worker. Well, she was a hard worker, but she also knew how to enjoy life and did that with style. Heavy metal music is already mentioned. She also sang in a chorus and studied foreign languages. She much liked travelling, not only for business but also for pleasure. Or, she used to combine the two things, when travelling she used to have a couple of extra days before or after a conference/seminar/workshop and rented a car to explore. For organizers she was a much-liked speaker both giving an excellent presentation and often covering a big part of her travelling costs by herself.

She had her own car in Reykjavik, and often when she picked me up from a hotel she apologized that the car was messy – indeed, it was full of scraps of food due to her latest excursion to some part of Iceland.

Well, she liked good food and wines. Our habit in those years was to have a joint lunch or dinner together, when I visited Reykjavik, with good food and wines, and good conversations. We hardly ate in the same restaurant twice, she wanted to test a new restaurant if only possible (in Reykjavik there were, and are, several new restaurants all the time). I much enjoyed myself having these restaurant tours with Alyson, and now miss these nice moments and her generous mind, her brilliance and good sense of humor.

Dear Alyson, have a peaceful rest!

We, who were lucky enough to know you, miss you. Your death, though we were prepared for that, was a big loss to us and the academic community. As tons of messages by your friends after your death show and manifest, we have nice memories and warm thoughts about you. We also know that you did more than anybody can expect for politics and academia, and to make the world a better place to live.

You are with us in our memories.



ARCTIC PORTAL