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# GlobalArctic

## The New Dynamics of Arctic Governance

Edited by
**Gunnar Rekvig**
**Matthias Finger**

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# Palgrave Research in Peace Studies

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Gunnar Rekvig · Matthias Finger
Editors

# GlobalArctic

## The New Dynamics of Arctic Governance

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# Introduction

*Gunnar Rekvig and Matthias Finger*

We are faced with an Arctic that is remarkably different from the situation when we wrote our last GlobalArctic book (published in 2022). At that time, the security situation was already worsening, but it was not as dangerous as it is today. Today's security dilemma is indeed overshadowing our existential crisis in the face of climate change, which is now coupled with a possible return to nuclear war.

When we launched our GlobalArctic project back in 2014, we made the claim that the Arctic should be looked at as a global region, just as it had during the Cold War, yet with a much broader scope, encompassing ecological, industrial and governance perspectives. Our approach was in fact a critique of the emerging "Arctic as a zone of peace and (sustainable) development" perspective as being somewhat too parochial for a region

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which was not only transformed by global forces, but whose transformation, in turn, affected the globe, whether ecologically, economically, or in terms of geopolitics. In its 24 chapters, the book aimed to demonstrate how the Arctic was global in terms of images and perceptions, in terms of environmental challenges and climate change, in economic terms, and how it therefore also should be global in terms of governance.

To recall, the Cold War Arctic was home to adversarial but also to collaborative activities between the West and the Soviet Union. Both talked to each other in spite of some fundamental differences, notably incompatible ideological political systems. As the Cold War came to an end, the adversarial aspects naturally disappeared and collaboration in the Arctic quite logically ensued. Indigenous peoples were also raised in status. Still, it was a predominantly regional collaboration within a global system that focused on pollution matters. This worked for all the Arctic states but may be somewhat less so for the new actors like China, ROK, Japan, and India. In the meantime, other issues, especially energy and transport, become ever more important, thus bringing private and public enterprises to the Arctic, along with their aspiration to become somehow included in the overall discussion and may be even governance.

With the war in Ukraine, the Arctic became securitized practically overnight. Now, through sanctions and exclusions, the Arctic is becoming something akin to NATO plus or rather versus Russia. The Arctic Council is the "Arctic 8-1". And it is in this current situation that we must re-engage and talk to each other again. It would be useful to revisit some lessons from the Cold War, even though the current constellation is multipolar rather than the bipolarity of the Cold War. The current security situation indeed shares similarities with the Cold War of the 1980s. Both periods are characterized by a power struggle between the then top two international powers, with the second power threatening to surpass the first, and today's system where there are several nuclear powers vying for regional and global power. This has led to an arms race and increased military buildup, resulting in reduced overall security. Additionally, there is a lack of trust between the parties involved, leading to suspicion and the belief that the other side is not to be trusted. The concept of *common security*, from the Palme Commission, is something that could be a potential solution, emphasizing the need for mutual security and cooperation rather than unilateral military buildup. These similarities indicate a precarious and uncertain global security environment.

Recalling the historical aspects of the tensions with the significant military buildup and the Cold War's strategic dynamics. We must emphasize the importance of dialogue and cooperation to enhance mutual security and prevent conflict escalation, reflecting on the lessons learned from past diplomatic efforts like the Palme Commission and the Reykjavik Summit. We must also recognize that the expansionist strategies of NATO and the European Union towards Eastern Europe have had real implications for Russia, as Russia has not been included in this expansion. Coupled with this, we must also explore China's diplomatic and security policies, and thereby suggest that we need a nuanced approach towards its regional ambitions and how that impacts the global security landscape's evolving nature.

Against this backdrop, we have assembled 18 chapters that highlight the various aspects and challenges of the governance of this New GlobalArctic. We have structured these chapters into three sections, ranging from "Arctic governance" to "*Arctic+* governance" to "Global governance of the Arctic".

## Arctic Governance

This section on Arctic governance focuses on traditional Arctic-specific governance issues. As such, it deals with relationships between Arctic states and encompasses topics like U.S.-Russian relations in Alaska, border governance, and regional cooperation (e.g., Barents Euro-Arctic Region).

*Chapter 2. Brandon Boylan*—Alaska in U.S.-Russian Relations from the Alaska Purchase to the Russo-Ukrainian War

The war in Ukraine has resulted in the worst crisis between the United States and Russia since the Cold War. The collapse of their relations has had significant consequences for the international order and various regions around the world. Given its geographic location and history, Alaska is one region of interest. This chapter explores how Alaska has featured in U.S.-Russian relations over time. The 1867 Alaska Purchase led to the United States being both Russia's neighbor and an Arctic state. Since then, Alaska has been an essential component of U.S. foreign policy towards Russia. It featured prominently in military aid transfers to Siberia in World War II, the polar concept in the Cold War, the post-Cold War thaw, post-9/11 counterterrorism in the circumpolar North, and deterrence in the Arctic after Russia's annexation of Crimea but especially

since the outbreak of the Russo-Ukrainian War. In turn, this relationship has produced significant consequences for Alaska. Effects include the militarization and development of Alaska, Alaskan statehood, and more recently, security threats and trade competition. Alaska will likely continue to impact and be impacted by U.S.-Russian relations in the future.

*Chapter 3. Michael Paul*—U.S. Arctic Policy in the Context of Russian Capabilities and Chinese Activities

Unlike his predecessors, U.S. President Joe Biden made several important decisions very early in his term to enable better coordination of U.S. Arctic policy. This includes foremost the 2022 National Strategy for the Arctic Region that was published later than planned as a result of Russia's war of aggression, which destroyed the few remaining hopes for cooperation and made the Arctic a hard security policy issue. Alaska, as the northernmost American state, is naturally at the center of U.S. Arctic policy. But the impending NORAD modernization spans over three regions: continental, Canadian and Alaskan regions. Beyond the threat of new strategic weapons systems, there is also an increasing number of Chinese activities. A Chinese spy balloon flew over Alaska in February 2023 and another joint Russian and Chinese flotilla of 11 ships sailed in August near Alaska and the Aleutian Islands. In the same year, Canadian military found Chinese monitoring buoys in the Arctic. After decades of scant attention, the Arctic is finally becoming the object of a more engaged U.S. security policy.

*Chapter 4. Katharina Koch and Karen Everett*—Arctic Border Governance in a Post-Invasion Era: How Russia's Invasion of Ukraine in 2022 Shifts Arctic Borders

Governance in the Arctic changed in the aftermath of the 2022 Russian invasion of Ukraine. Geopolitical tensions between Russia and the other Arctic states resulted in a re-drawing of Arctic borders in various political and institutional settings. Borders are conceptualized as processes and institutions that emerge and exist in boundary-producing discourses and practices, such as geopolitical conflict. Drawing on news articles and government documents, this chapter seeks to demonstrate how Arctic political borders have changed in relation to Norway and Russia, Finland and Russia, and Canada, Greenland and Denmark, and how institutional borders with the NATO expansion and Arctic Council pause.

The chapter identifies four key aspects which have influenced Arctic borders since the invasion: (1) political, institutional, and cultural borders are interconnected; (2) multilevel governance and cultural aspects of border governance impact shifting borders; (3) physical borders have been reinforced across all Arctic states; and (4) institutional relations have strengthened between western Arctic states while institutional borders with Russia have hardened.

*Chapter 5. Tiziana Melchiorre*—Back to the Past? The Barents Euro-Arctic Region Between the 'Old' and the 'New' Cold War

This chapter analyses the impact of the war in Ukraine of 2022 on governance in the Barents Euro-Arctic Region (BEAR). In order to do so, the investigation links the regional and the international levels by taking into consideration regional cooperation and militarization in the region. These two sectors are geopolitically relevant in the BEAR and in the Arctic more broadly. The analysis shows that the relations among the states in the BEAR are strongly affected by what happens internationally as the regional and the international levels are strictly intertwined. The negative impact that the war in Ukraine is having on the BEAR is an excellent example of this.

*Chapter 6. Florian Vidal*—The Arctic in the Era of Global Change: An International Security Prospective

Russia's full-scale invasion of Ukraine has far-reaching diplomatic, security, and geoeconomic ramifications on the international stage. In that respect, the Arctic region has been particularly affected as the war ended the post-Cold War era. From institutional arrangements to the security landscape, the polar region undergoes unpredictable and hardly controllable cascading effects that lay down the path of a profound transformation of its geostrategic environment. Therefore, this chapter intends to identify the factors and risks that are progressively shaping the polar region while assessing the prospect of a new Cold War. From the need to preserve the Arctic Council's achievements to the uncertainties associated with Russian domestic dynamics, the region seems destined to be divided into two blocs, the Western Arctic and the Eurasian Arctic. Among the scenarios examined, this chapter focuses on the future of the Bering Strait region and Alaska. Once remote from international political and strategic developments, this sub-Arctic region may play an increasing

role in international affairs as a link to the vast Indo-Pacific region. Ultimately, this chapter frames the ongoing trajectory of the Arctic region and its structuring and lasting effects.

*Chapter 7. Lassi Heininen*—From Neutrality and Peacemaking to Military Alignment—Finland's Illusive Geopolitical Imagination

A retrospective overview manifests that Finland has been located between East and West, and its peoples are influenced by Eastern and Western cultures, for example, "Sauna" as genuinely Finnish. While being under Swedish rule for centuries, its independence was created when being a part of the Russian Empire for a century. After being an ally to the Nazi Germany and defeated by the Soviet Union, Finland made a paradigm shift in its foreign and security policy towards peace and disarmament and successfully hosted the CSCE, as a non-alignment country. Conversely, after the Cold War Finland slowly moved towards alignment with Western military structures through a decade-lasting and partly hidden process. As an Arctic state with the Saami Finland has clear interests and policy towards the Arctic, yet the self-identification is rather recent, and a Northern Dimension policy highlighted by the AEPS. While having a firm stance to maintain constructive cooperation in, preferring high geopolitical stability of, the Arctic, and defining itself as an "Arctic expert" that complies with sustainable development, Finland assigns priority to economic activities in the Arctic. It is nonetheless questionable if a militarily aligned Finland has credibility for that, when national interests take over universal values in foreign policy, yet world politics with the climate crisis calls for an opposite approach. Here Finland would be a more credible Arctic stakeholder, as well as responsible member of the global community, if it would propose stricter environmental regulations for resource exploitation.

*Chapter 8. Gunnar Rekvig*—The Nordic Peace and Norway's Crisis Management—Historical Perspectives and Modern Challenges

The Nordic Peace has served as a strong symbol of stability and conflict resilience in international security. This chapter aims to deepen, describe, and interpret the relationships between Nordic Peace and the handling of conflicts and crises. The crises range from classic security policy challenges such as inter-state conflicts, territorial disputes, security dilemmas,

or coercive diplomacy, to gray-zone crises where civil society is threatened by non-military means. The Nordic Peace has provided a foundation for developing crisis management strategies based on principles that have organically emerged over time, such as cooperation, resolutions based on compromise, adhering to judgments from supranational bodies, or neutralizing principles that cause conflicts when in synthesis. This peace paradigm has given Norway conflict resilience, enabling a creative navigation through various conflicts and security challenges since the onset of the Nordic Peace in 1814. These lessons are increasingly important today as we move towards multipolarity.

## Arctic+ Governance

This section on Arctic+ governance expands beyond traditional Arctic states to include non-Arctic actors and focuses on the involvement of non-Arctic countries, particularly China. It explores themes like science diplomacy, economic interests, and engagement with Arctic institutions.

*Chapter 9. Özgenur Aktan*—Science Diplomacy and the People's Republic of China's Relationship with the Nordic Countries in the Arctic Region

The purpose of this study is to examine the involvement of the People's Republic of China and its relationship with the Nordic countries in the Arctic region. In this process, the focus will be directed to the framework of science diplomacy. Considering the role of science diplomacy in terms of international cooperation and peaceful interactions, this study will approach science diplomacy as a component of the Arctic affairs and governance, and as an instrument for national image promotion, renovation and alliance-building, which encompass both state and non-state-centric mechanisms. The idea is that the Arctic region provides propitious themes to apply to science diplomacy and to explore the relationship between the People's Republic of China and the Nordic countries. The role of the Nordic countries in world politics and in the Arctic region compels the People's Republic of China to strengthen its bilateral and multilateral relationship. As a result of this, it is important to comprehend the underlying dimensions and motivations of this relationship, which corresponds to both opportunities and challenges resulting from science diplomacy. Accordingly, this study will reveal the channels

and prominent fields of science diplomacy while looking into the presence of the People's Republic of China and its relationship with the Nordic countries in the Arctic region. Following that, the need to encourage awareness and further cooperation concerning the well-being of the Arctic marine environment will be emphasized at the intersection of science diplomacy and areas of cooperation between the People's Republic of China and the Nordic countries.

*Chapter 10. Hiroyuki Enomoto*—Toward the Governance of Sustainable Arctic Science Cooperation

Geopolitical tensions have stalled research in the Arctic. This report investigates possible actions in scientific cooperation in a problematic situation. Although many research projects were paused, the meteorological operational networks have been continued by WMO. The scientific cooperation plans for the next decade, such as ICARP IV targeting 2025–2035 and the 5th IPY2032/33, are being discussed. The next IPCC AR7 cycle has begun. The mandates are emerging not only for the Arctic but also for global climate concerns. This report seeks a way to realize scientific collaborations in the future through Arctic countries and the association of quite a few countries and organizations in the rest of the world.

*Chapter 11. Desmond Molloy*—China's evolving priorities and the North Sea Route: The Long Game

China, conscious of the growing opportunities as a result of the melting ice and opening of the NSR has been present in the Arctic for almost two decades. The NSR offers access to the hydrocarbons in Siberia and an alternative and economic route to European markets. The norms of the Arctic Council "rules-based order" together with China's cozy relationship with Russia offer many advantages to China engaging positively with small Arctic states in exploiting the NSR. How China navigates the projection of its Belt and Road Initiative with small states in its own backyard is considered for comparative purposes. However, with the pausing of the Arctic Council subsequent to Russia's 2014 invasion of Ukraine, one may have expected changes in the dynamics of China's engagement. Sweden and Finland have joined NATO and Russia is driven to reinforce its securitization in maintaining control of the NSR. Small Arctic States are more cautious of China's engagement. While China professes no change in policy, the United States and Canada have belatedly awoken

to the impending threats, and the EU, in recognizing the presence of the raw materials to fuel the green revolution, is realizing the imperative of engagement and investment in the Arctic. However, China maintains a cool and measured response to the changing dynamics. Noting the unpredictability of western economic and security policy, China is playing the long game.

*Chapter 12. Liisa Kauppila and Sanna Kopra*—China in the Arctic Governance System in the New Cold War Era

This chapter argues that China plays an increasingly influential role in the post-February 2022 Arctic governance system, especially in the contexts of environmental, economic, and military governance. Due to the party-state's limited role in the Arctic Council, global institutions are currently the most important platforms for China to contribute to Arctic environmental governance. As for Arctic economic governance, Chinese actors play a crucial role in defining political conditions under which international Arctic economic projects may operate, as its continued operations in the Yamal LNG Project demonstrate. Yet, intensifying great power rivalry makes the ability of Chinese companies to access the region increasingly challenging, restricting the indirect role of Chinese actors in defining regional business practices. Finally, the military governance system has changed significantly in the post-February 2022 Arctic; a process in which China has underlined its in-principle opposition to NATO enlargement. NATO's Arctic expansion certainly diminishes China's room for maneuvre at a regional level, leaving Russia as the only plausible partner for Beijing's Arctic military and paramilitary aspirations. The chapter concludes that in the coming years, China's policy choices, especially concerning its military and economic cooperation with Russia, undoubtedly stand to shape the future of the Arctic governance system.

*Chapter 13. Ekaterina Antsygina and Cornell Overfield*—A Shelf Approval Deconfliction Mechanism for Activities on the Overlapping Extended Continental Shelf Entitlements in the Central Arctic Ocean

The continental shelves beyond 200 nautical miles (ECS) are the final frontiers between national jurisdictions and the global commons. With increased demand for the natural resources found on the shelf and the development of technology to tap them, exploitation will intensify, as will the number of conflicts related to the ECSs. These final frontiers are in

the process of being settled now, and once coastal States establish the outer limits of their ECS and delimit their ECS entitlements with other coastal States, the spatial division of the oceans will be complete.

This chapter discusses the governance of the ECS in the Arctic and argues that the governance of the Central Arctic Ocean's seabed can be made more efficient. The seabed of the Central Arctic Ocean is subject to overlapping "claims" by Canada, Russia, Denmark (via Greenland), and the United States, which might create problems of governance in overlapping entitlements since all of these states can already exercise control over the seabed areas they assert by virtue of the doctrine of inherent rights. This coastal state prerogative creates problems at all stages before a final delineation of the shelf's outer limits and a final delimitation of overlapping entitlements. To minimize the risk of this pending the final delimitation of the Arctic continental shelves, Arctic states should establish a mechanism to authorize activities on overlapping entitlements beyond 200 nautical miles (M). This mechanism should be created as soon as possible among the United States, Canada, Denmark, and Russia (subject to changes in the geopolitical situation).

## Global Governance of the Arctic

This section on Global governance of the Arctic considers the Arctic in a broader global context. It examines how global issues and actors influence Arctic governance and thereby includes topics like the role of global institutions, the impact of great power competition, and future scenarios for Arctic governance.

*Chapter 14. Paul Dziatkowiec*—A Mediator's Perspective: Reflecting on the Obstacles and Opportunities for Renewing Dialogue on the Arctic

This chapter explores the potential role of discreet Track II dialogue in averting the worst consequences for the Arctic region of prevailing geopolitical divisions. These divisions have sharpened since Russia's full-scale invasion of Ukraine, with manifold implications for the Arctic including accelerated militarization and a freeze on many forms of scientific collaboration. Constructive communication and practical collaboration between the Western "Arctic seven" states and Russia on urgent matters has been largely interrupted, which could have significant corollary effects

for the rest of the world, including serious climate change impacts and viruses emerging from permafrost thaw. Moreover, it increases the risk of misunderstandings and military miscalculations in the Arctic, which could escalate into a confrontation that neither side wants. According to the author, the vacuum in high-level diplomacy leaves an important space for unofficial Track II dialogue between well-connected parties on all sides. Historical examples from the Cold War may help identify entry points for dialogue from a mediator's perspective, and to pinpoint areas where some urgent collaboration could—even informally—be restarted, for example through the tools of science diplomacy or the elaboration of modest confidence-building measures to head off an armed escalation.

*Chapter 15. Valery Konyshev, Maria Lagutina, and Alexander Sergunin*—Science Diplomacy as a Form of Arctic Global Governance in the Age of Geopolitical Turbulence

This chapter aims to examine the role of science diplomacy in Arctic global governance. Particularly, the following theoretical approaches are explored: First, there is an interpretation of Arctic science diplomacy (ASD) as a form of enhanced international scientific cooperation that aims to establish long-term and sustainable research partnerships between scholars from different countries. According to the second approach, ASD is a tool of soft power strategy which is used by Arctic players for shaping their positive image and promoting their interests in the region. Third, some politicians and experts view ASD as a form of public diplomacy which, on the one hand, targets not only state but also non-state/civil society institutions in foreign countries and, on the other hand, aims at improving bilateral and multilateral relations in the region. Fourth, given the growing tensions between the Western Arctic countries and Russia some Western policy makers and even academics started to see science diplomacy as an instrument of coercive policy or punishment of Russia (or—more exactly—Russian scholars) for Moscow's special military operation in Ukraine. This approach can hardly be considered as a positive one because it undermines Arctic cooperation rather than supports it. However, there is still a fifth approach which perceives science diplomacy as an instrument of Arctic global governance which, on the one hand, prevents sliding academic communities to the Cold War-type confrontation, and, on the other, preserves and further develops international scientific cooperation on most vital Arctic problems such as climate

change, ice and permafrost dynamics, biodiversity conservation, environmental monitoring, maritime safety, indigenous peoples, and so on. This study also explores which global, regional, and bilateral platforms, venues and institutions are available for ASD implementation both at the inter-state and non-state levels.

*Chapter 16. Monika Szkarłat, Michał Łuszczuk, and Piotr Rakowski*—Enhancing Science Diplomacy for a Better Arctic Governance.

This chapter explores the pivotal role of science diplomacy in the Arctic, addressing its crucial function amidst intricate political and environmental dynamics. It critically assesses the vague contours and inconsistent applications of science diplomacy, advocating for a polycentric governance model to bolster resilience and stability in this strategically important region. By dissecting the multifaceted and multidimensional nature of science diplomacy, the chapter reveals the complexity introduced by its diverse stakeholders, objectives, and methodologies. This analysis is enriched by the integration of traditional knowledge and the emphasis on cooperative-competitive relationships across multiple decision-making levels. The adoption of the polycentric governance framework promises enhanced understanding and management of interdependent systems, fostering innovation and aiding in conflict resolution. The chapter calls for expanded research to refine science diplomacy's effectiveness, particularly through inclusive research strategies that accommodate the unique challenges of the Anthropocene era. Such advancements are posited as essential for improving cooperation and resolving conflicts in the Arctic's dynamic geopolitical landscape.

*Chapter 17. Matthias Finger*—On the BRICS of War: What future for the Governance of the GlobalArctic?

This chapter aims at outlining the future governance of the GlobalArctic. In the first six sections, it discusses the main ingredients of a GlobalArctic which are as many drivers having made the Arctic become global, i.e., global warming, resources exploration and extraction for the global market, transport and infrastructure developments by global companies, digitalization, militarization, and multi-polarization. In its concluding section, the chapter explores the future options of the governance of a by now New GlobalArctic, and concludes that, regrettably, the Arctic is most

likely going to be divided into a NATO and a Russian (BRICS+) Arctic, for which a common governance is unlikely in the foreseeable future, if it does not lead to a war in and over the Arctic's resources.

*Chapter 18. Andrey Krivorotov*—Economy: A New Arctic, Two Sets of Rules

The globalArctic economy has traditionally been heterogeneous due to varied national experiences and only emerged as a holistic region under the liberal globalization. Its profound, politically motivated split took place in the aftermath of the Ukraine crisis, but it represented a logical, although not inevitable, outcome of the intense debates on Arctic futures through the previous decade. The key discussion points included counterbalancing economic and climate goals, regional vs global governance mechanisms, and international Arctic cooperation vs great power rivalry. A new, polarized Arctic is taking shape. Its western half, led by the United States, will be involving NATO and EU to counter China and to promote a green agenda restrictive of economic development, especially within hydrocarbons. Russia will constitute the eastern half, open for cooperation with friendly and neutral non-regional nations like BRICS and SCO, creating powerful synergies between its Arctic resource development and the "pivot to the East". Both sides will compete for third parties' interest, trying to create a more attractive vision of the Arctic and offering better investment terms.

*Chapter 19. Christopher Rossi*—The Rotating Wheel: A New Cycle of Pacific Relations in the Emerging Arctic and the Role of the Middle Powers

This chapter focuses on pelagic opportunities for Asia-Pacific countries in an age of melting Arctic ice. While much attention focuses on the strategic pivot to Asia, a new cycle of Pacific relations indicates that such a turn has implications for the High North as well as for East-West interactions. This chapter addresses problems of contested sovereignty in the coming age of the globalArctic with emphasis on Russia's role as gatekeeper to the problematic Northern Sea Route, China's emerging interests, and the role of middle powers such as South Korea in this increasingly congested space.

# Arctic Governance

# Alaska in U.S.–Russian Relations from the Alaska Purchase to the Russo-Ukrainian War

*Brandon M. Boylan*

## Introduction

Russia's full-scale invasion of Ukraine on February 24, 2022 prompted a swift and strong condemnation from the majority of states in the international community. The West quickly organized economic sanctions in an attempt to punish Russia and cripple its ability to continue the war. Western military and humanitarian aid has poured into Ukraine. The rapid deterioration of relations between the West and Russia has upset not only today's world order but also the governance and security of various regions around the world. Alaska is a growing region of international interest amid these developments owing to its geopolitical location and role in U.S.–Russian relations.

Russia held Alaska as a colonial possession from the eighteenth century until the United States purchased it in 1867. The Russian colonial legacy in Alaska is visible today in the presence of the Alaskan Creole community (descendants of Russian and Alaskan Native peoples); family names; town names, such as Kasilof and Ninilchik on the Kenai Peninsula; and

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churches, such as the Saint Nicholas Orthodox Church and its famous cemetery in Eklutna. The relationship between the United States and Russia is both geographical and historical. With less than three miles separating Chukotka's Big Diomede and Alaska's Little Diomede in the Bering Strait, Russia and the United States are neighbors. Since the Alaska Purchase, the territory and later State would soon project a critical role in U.S.–Russian relations. Over time, the two countries have shared a dynamic and complicated relationship, oscillating between cooperation and conflict, with Alaska frequently at the center. Alaska was critical to both U.S. political and military support of the Soviet Union during World War II and its national defense against it in the Cold War. Between the end of the Cold War and Russia's invasion of Ukraine in 2022, the two countries cooperated in the circumpolar North in the areas of environmental protection and scientific research—despite tensions over Russia's invasion and subsequent annexation of Crimea in 2014. However, since 2022, their relations in the Arctic, like elsewhere in the world, have unraveled, impacting Alaska's development, militarization, and trade.

This chapter's primary goal is to locate the historical and contemporary position of Alaska in U.S.–Russian relations as a context to evaluate the fallout from the Russo-Ukrainian War and its impact on Alaska and its security. Rather than exploring the many facets of U.S.–Russian relations or the history of Alaska, this chapter examines the role of Alaska in the countries' relationship and in turn how their relationship has impacted Alaska. Some have famously underscored Alaska's significance. In 1935, Billy Mitchell, the father of the U.S. Air Force, said to Congress in the context of growing Japanese aggression, "I believe that in the future, whoever holds Alaska will hold the world. I think it's the most strategic place in the world" (Cloe, 1983, p. 64). In a similar vein, in 1946, Lyndon Johnson, then Chair of the Senate Committee on Armed Forces, said, "the security of every American home begins in the snows of Alaska" (Perras, 2003, p. 185). While their statements may be hyperbolic, Alaska's importance to Russia, the United States, and their relations is undeniable.

## Russian America

The history of Alaska in U.S.–Russian relations dates to Russia's colonization of North America in the eighteenth century. Commissioned by Russian Tsar Peter the Great, Danish navigator Vitus Bering sailed to explore the North Pacific for potential expansion of the Russian Empire.

His first voyage in 1728 confirmed the presence of a strait between Asia and America, while his second in 1741 resulted in the European discovery of Alaska and the Aleutian Islands (Frost, 2003). Bering Sea, Strait, and Island are named in his honor.

After Bering's expeditions, Russian *promyshlenniki* (merchants) arrived in the Bering Sea region, namely the Aleutians, to acquire the furs of sea otters and other animals for the lucrative fur trade (Jones, 2014). At the time of Russian contact, approximately eighty thousand Natives were living in Alaska (Langdon, 2002, p. 4). The *promyshlenniki*'s relations with Natives were marked by periodic conflict, and by the end of the eighteenth century, Russian colonialism was particularly brutal. *Promyshlenniki* enserfed Aleut and Kodiak Alutiiq men to hunt and harvest marine life, while ensuring their return by taking their wives and children hostage (Grinëv, 2003, 2021; Lepola, 2010). In 1784, Grigory Shelikov founded the first Russian settlement at Kodiak Island's Three Saints Bay, and the *promyshlenniki* killed hundreds of Alutiiq Natives in the Awa'uq Massacre (Swensen, 2016, p. 36). That same year, Orthodox missionaries arrived on Kodiak Island to Christianize Natives and provide medical and educational services. In 1786, Gerassim Pribilof discovered what would be called the Pribilof Islands, and two years later the Russians forced Aleut hunters and their families to move there and hunt seals (Veltre & McCartney, 2002). By 1800, over 80% of Aleuts had died from violence, infectious disease, and starvation (Langdon, 2002, p. 26). On the other end of the Gulf of Alaska, although Tlingit warriors had destroyed Redoubt Saint Michael (Old Sitka) in 1802, colonizers reestablished control in the Battle of Sitka (1804) and rebuilt Old Sitka as Novo-Arkhangelsk, moving the capital from Kodiak to there in 1808.[1]

Shelikhov and partner Ivan Golikov's fur trading company merged with others to form the United American Company in 1797, which became the Russian American Company (RAC) in 1799. RAC enjoyed a Russian monopoly on fur trading in the North Pacific and governed Alaska with strategies from both Siberia and competitor colonial systems, with the aim of acculturating Natives into the Russian Empire (Vinkovetsky, 2011). Competition between the RAC and Great Britain's Hudson's Bay Company drastically decreased the number of sea otters and other animals, hurting the fur trade. Russia deemed its American colonies too

[1] Juneau replaced Sitka as the capital in 1906.

expensive to maintain and, after its loss in the Crimean War (1853–1856), worried it might have to surrender Alaska to Britain in a future conflict (Farrow, 2016). It thus wanted to sell the territory. For its part, the United States, aspiring to be closer to Asian markets and to control British Columbia, desired to purchase the territory (Farrow, 2016). In 1867, with the U.S. Civil War over, U.S. and Russian representatives negotiated the sale for $7.2 million (nearly $150 million in 2023). While some at the time regarded the purchase as U.S. Secretary of State William Seward's "folly" (and the new territory as President Johnson's "polar bear garden"), it brought the United States and Russia closer together both geographically and politically and has afforded the United States several opportunities since—including a stake in the Arctic region. Many in Russia have since regretted the sale in light of the strategic value Alaska has held for the United States in its relations with Russia (Gershkovich, 2017).

## Alaska in U.S.–Soviet Relations during World War II

In World War II, Alaska's role in the U.S. support of the Soviet Union was central. Under the Lend-Lease Act (1941), the United States provided war supplies to the United Kingdom, China, the Soviet Union, and others in defense of the Allied Powers. The Soviets relied heavily on U.S. assistance to defend against the Germans in Operation Barbarossa, launched in June 1941, the largest land invasion in history (Brimelow, 2022; Weeks, 2010) and at the Eastern Front.

To support the transfer of Lend-Lease aircraft to the Soviet Union, the United States relied on the Northwest Staging Route (Hays Jr, 1996) and Alaska-Siberia Air Route (ALSIB) (Dolitsky, 2016). The Northwest Staging Route was a series of airfields and radio range stations in western Canada and Alaska that connected Great Falls, Montana to Fairbanks, Alaska (March, 2018). The Permanent Joint Board on Defense (PJBD), the primary advisory body on North American military defense, with equal U.S. and Canadian representation, had recommended in 1940 the construction of the route to facilitate the transport of tactical aircraft to northwestern Canada and Alaska (Dziuban, 1990, pp. 201–202). (The route proved to be of immense utility to rush military personnel and supplies to Alaska when Japan bombed Dutch Harbor in June 1942.) When Japan attacked Pearl Harbor in December 1941, the United States

and Canada, on recommendation from the PJBD, also prioritized the construction of a military road to Alaska. Built in 1942, and stretching from Dawson Creek to Delta Junction, the new Alaska Highway followed and supported the Northwest Staging Route and contributed to Alaskan defense (Twichell, 1992) and remains the only road connecting Canada to Alaska to this day. Also in 1942, the United States and Soviet Union opened the Alaska-Siberia Air Route to facilitate the aircraft transfers. Following the Northwest Staging Route, U.S. pilots ferried planes from the continental United States to Fairbanks's Ladd Field where, following the ALSIB, Soviet pilots shuttled them across the Bering Strait, onward to Krasnoyarsk, Siberia.

Except for the end of the Cold War, the United States and Soviet Union had, despite their apparent differences, skepticisms, and mistrusts, the closest ties during World War II in the history of U.S.–Russian/Soviet relations. Alaska's role in the transport of Lend-Lease aircraft to the Soviet Union is a defining feature of this partnership.

## Alaska in U.S.–Soviet Relations during the Cold War

When the Soviet Union turned from U.S. ally to enemy after World War II, Alaska continued to be of strategic military importance, playing an essential role for U.S. defense especially in the early years of the Cold War. In reaction to the Soviet Union's first successful detonation of an atomic bomb in 1949 (years earlier than expected) and progress on intercontinental bombers, U.S. policy makers and military planners developed a comprehensive defense network to detect, intercept, and destroy incoming threats and protect the homeland. Given that the closest geographic proximity between major U.S. and Soviet bases was over the Arctic, Alaska became the United States' front line of defense against a Soviet attack, an idea known as the "polar concept" (Farquhar, 2014).

Essential to U.S. defense in Alaska were the Army and Air Force. Already present in Alaska to support the Soviet Union and defend against Japan, ground and air forces expanded greatly in the 1940s and 1950s. Airpower in particular was essential to President Eisenhower's massive retaliation policy. The Army operated Ladd Field in Fairbanks and Fort Richardson in Anchorage, both established in 1940. Just south of Delta Junction, it also maintained Big Delta Army Airfield, established in 1942 as part of the Northwest Staging Route, later renamed Allen Army

Airfield. In 1948, the Army expanded the site to include a post that was then renamed Fort Greely in 1955. As a result of the National Security Act of 1947, the Department of War became the Department of the Army, and the Army Air Forces reorganized as a separate Air Force and moved under the newly created Department of the Air Force. (The Army, Air Force, and Navy Departments were organized under the new National Military Establishment, two years later renamed the Department of Defense.) The administrative split between the Army and its aerial warfare services impacted Alaska. At Ladd Field, the Air Force established Ladd Air Force Base in 1947. (The Army would take over the base as Fort Wainwright in 1961.) It also established Eielson Air Force Base at "Mile 26," which had been an auxiliary of Ladd Field, in 1948. That same year, Fort Richardson relocated nearby to its current site, and the original site became the Elmendorf Air Force Base in 1948. The three Air Force bases (Ladd, Eielson, and Elmendorf) and Army base (Fort Richardson) served as the core of military defense in Alaska in the Cold War.

Fort Richardson provided ground and air defense, cold weather training, and logistical support (Waddell, 2003, pp. 17–18). Extreme cold weather testing occurred at Fort Greely. Ladd Air Force Base focused on air defense, strategic reconnaissance, logistical support for regional military facilities, and research (Price, 2001; Shaw, 2010), while Strategic Air Command (SAC) bombers were at Eielson Air Force Base. Alaskan Air Command (AAC) at Elmendorf oversaw all Alaskan air defense. Elmendorf has also served as the headquarters for Alaskan Command (ALCOM) since its establishment in 1947[2] and the Alaskan North American Air (later Aerospace) Defense (NORAD) Command Region since 1961. Organized as a unified command to address coordination weaknesses among the military branches evident during Japan's invasion of the Aleutians, Alaskan Command was established in 1947 to direct all Alaskan military operations, while the United States and Canada formed NORAD in 1957 to monitor and defend North America's air space. Always from the Air Force, one person serves as the Commander of ALCOM and the Alaska NORAD Command Region—as well as the 11th Air Force—signifying the priority of airpower to Alaskan defenses.

[2] Alaskan Command was inactivated from 1975 to 1989.

U.S. defense relied heavily on an elaborate threat detection system in Alaska. Initially, the Aircraft Control and Warning (AC&W) System identified Soviet bombers which Air Force fighter jets would intercept. In Alaska, fighter-interceptors at Ladd and Elmendorf waited on constant alert to repel aircraft penetrating Alaskan airspace (Cloe, n.d.; Duong, 2011). By the 1950s, however, detection requirements were already changing. The United States and allies installed the Distant Early Warning (DEW) Line, a series of radar stations across northern Alaska and Canada, and later Greenland and Iceland, to detect Soviet bombers flying over the Arctic region (Government of Canada, 2013; Weir, 2008). Operational in 1957, the DEW Line connected to AC&W and other new radar systems across North America to extend protection in all directions. Since it was further north and could detect incoming threats more quickly, the DEW Line became the primary of the two detection systems.

When the Soviet Union successfully tested its first intercontinental ballistic missile (ICBM) in 1957 (and launched Sputnik that same year), and since the original DEW Line could only detect bombers, NORAD and allies initiated the Ballistic Missile Early Warning System (BMEWS) in 1958, with facilities at Clear Air Force Station in central Alaska and in Greenland and the United Kingdom. At Donnelly Flats, south of Fort Greely, the Air Force also established a Missile Defense and Alarm System (MIDAS) site in 1961; although MIDAS consisted of polar-orbiting satellites that sought to track missiles faster than ground radars, the project failed, owing to cost and technological challenges (Price, 2006).

In the late 1950s, the U.S. Army installed nuclear-armed surface-to-air missile (SAM) Nike Hercules sites in Alaska as a component of its program to target incoming nuclear-armed Soviet bombers. The five sites around Fairbanks and three around Anchorage served as a last line of defense: If Soviet bombers were able to evade U.S. fighters and approach the cities, the SAMs would attempt to bring them down. The goal was to protect the vital airfields from Soviet destruction or takeover. Interestingly, the U.S. government felt at the time that the defense of North America called for the explosion of nuclear bombs over Alaska, if need be. The White Alice Communications System (WACS) connected AC&W and DEW to each other and to Eielson and Elmendorf Air Force Bases as well as BMEWS to NORAD headquarters in Colorado Springs (Reynolds, 1988, p. 6). These systems worked together to notify fighter jets and SAMs of incoming Soviet attacks and protect Alaska and the homeland.

Air attacks were not the only concern at the time. Some feared Soviets would capture Alaska, from which they could mount attacks on the western United States. The Air Force's Office of Special Investigations, with early help from the Federal Bureau of Investigation (FBI), launched Operation Washtub, a program in which volunteers agreed to be armed and trained and remain in Alaska in the event the Soviet Union invaded and occupied the territory (Burns, 2014; Reamer, 2022). Recruits included fishermen, trappers, and bush pilots who would survive on caches, hidden across Alaska and stocked with emergency supplies, and report on Soviet activities (Sherwell, 2014). The "stay behind" agent program, preparing for a "wilderness insurgency" (Person, 2015), lasted from 1950 to 1959.

After a military buildup in Alaska in the 1940s and 1950s, changes in military technology, strategy, and policy led to a relative decline thereafter. The introduction of missiles resulted in a decrease in the number of fighters and bombers needed in Alaska. ICBMs and anti-ballistic missiles (ABMs) could be launched from the continental United States. The U.S. government also reallocated resources to fighting the Vietnam War. Finally, the rise of nuclear-armed submarine-launched ballistic missiles (SLBMs) meant that the Soviets did not have to rely solely on land-based missiles and Arctic routes any longer. During this changing political environment, a rare moment of cooperation between the United States and Soviet Union in the Arctic occurred during President Nixon's détente: the Arctic-5's signing of the Polar Bear Treaty (1973) to conserve polar bear populations.

Although the polar concept had waned, President Reagan's massive investment in defense impacted Alaska. Cold climate military exercises expanded. Exercise Brim Frost ran biennially from 1981 to 1989. The 1989 event brought together approximately 26,000 troops from U.S. and Canadian forces in the largest exercise in the state's history (Friedman, 2019). In addition, the North Warning System replaced the outdated DEW Line in 1988 and continues to serve as the early warning radar system for the atmospheric air defense of North America.

Given the polar concept, Alaska's geopolitical importance to the United States in the early Cold War was unmatched. Alaska's strategic value and the massive U.S. military investment in the territory during World War II and the Cold War contributed heavily to the development of the territory's infrastructure, technology, population, and economy, laying the groundwork for statehood in 1959 (Hummel, 2005).

## Alaska in U.S.–Soviet/Russian Relations after the Cold War

As U.S.–Soviet relations improved in the late 1980s, and the "Ice Curtain" melted, the Arctic transitioned from a military theater to a "zone of peace and fruitful cooperation," as General Secretary Mikhail Gorbachev envisioned in his Murmansk speech in October 1987 (see Young, 2005). Cooperation in the Bering Strait took many forms. In a symbolic effort, American swimmer Lynne Cox braved the frigid waters and swam from Alaska's Little Diomede to Chukotka's Big Diomede in 1987; Alaska Airlines flew passengers on the "Friendship Flight" from Nome to Provideniya in 1988; and for many years beginning in 1991 mushers competed in the Nome-to-Anadyr Hope Race. Often led by Alaskan and Siberian "citizen diplomats" to form strong cultural and business ties at the border (Ramseur, 2017), these events and others celebrated a new era of U.S.–Soviet cooperation.

The two countries also cooperated to address a number of challenges in the region. In 1988, they agreed to collaborate on fisheries research, conservation, and management; establish the Intergovernmental Consultative Committee; and combat illegal, unreported, and unregulated (IUU) fishing activities in the North Pacific and Bering Sea. (The agreement was updated in 2013.) In 1989, they also agreed to work together to address emergency pollution incidents in the Bering and Chukchi Seas, forging a close working relationship between the U.S. Coast Guard and Russian Border Guard. In addition, recognizing that Indigenous communities span the U.S.–Soviet border, they agreed in 1989 to allow qualifying citizens to travel, without visas, to visit relatives across the Bering Strait in designated areas of Alaska and Chukotka. The program took effect in 1991.

In addition to these bilateral agreements, the two states cooperated in a military event that would have been unfathomable a few years earlier. In August 1989, U.S. F-15 Eagle fighters escorted two Soviet MiG-29 fighters and an An-225 cargo aircraft across Alaska to Canada, making a refueling stop at Elmendorf Air Force Base (*The Washington Post*, 1989). Once they arrived at the Canadian border, Canadian CF-18 fighters continued the escort; the aircraft were en route to an air show in Abbotsford, British Columbia (United Press International, 1989). The touchdown at Elmendorf was the first time since World War II that a Soviet plane had landed in Alaska.

The two countries also collaborated in a new regional multilateral arrangement. The eight Arctic states, with three Indigenous organizations, began to cooperate on environmental protection, and in 1991 adopted the Arctic Environmental Protection Strategy (AEPS), laying the foundation for the signing of the Ottawa Declaration which established the Arctic Council, the primary forum addressing environmental and Indigenous issues in the circumpolar North, in 1996. The Aleut International Association, a non-profit advocating for Aleuts in both the United States and Russia, is a Permanent Participant of the Council.[3] The end of the Cold War allowed for the Arctic to be regarded as a distinct region with its own political, economic, and cultural characteristics, worthy of policy and study in its own right. When the United States chaired the Arctic Council for the first time (September 1998 to October 2000), Senior Arctic Officials (SAOs) met in Anchorage in early May 1999 and Fairbanks in late April 2000, while the Ministers concluded the U.S. Chairship in Barrow (now Utqiagvik) in October 2000. Alongside their counterparts from the other states and Permanent Participants, delegates from the Russian government and Russian Association of Indigenous Peoples of the North (RAIPON) attended the meetings.

U.S.–Soviet/Russian cooperation in Alaska and other parts of the circumpolar North in the late 1980s and 1990s was reminiscent of their strategic alliance more than forty years earlier in World War II. The two states also started to take more seriously environmental challenges and Indigenous concerns in the Arctic.

## Alaska in U.S.–Russian Relations after 9/11

U.S.–Russian relations after 9/11 were marked primarily by a continuation of the post-Cold War cooperation but also tension over new U.S. defense initiatives. Despite cooperation in the Global War on Terrorism (GWOT) and President George W. Bush's famous observation that he found President Putin to be "straightforward and trustworthy" and could get a "sense of his soul" after peering into his eye (Mufson, 2015), the

[3] The Arctic Council has six Permanent Participants. The three original members include the Saami Council, Inuit Circumpolar Council (ICC), and Russian Association of Indigenous Peoples of the North (RAIPON), while the Aleut International Association (AIA), Arctic Athabaskan Council (AAB), and Gwich'in Council International (GCI) joined later.

two countries clashed over U.S. missile defense. In 2002, the Bush administration withdrew from the 1972 Anti-Ballistic Missile (ABM) Treaty and announced plans to install the Ground-Based Midcourse Defense (GMD) to counter ICBMs. The administration chose Fort Greely in Alaska and Vandenberg Air Force (now Space Force) Base in California to host interceptor missiles. The U.S. initiative responded to what it perceived as the primary threats at the time—North Korea, Iran, and Iraq (Bush's so-called "axis of evil")—but Russia denounced the U.S. withdrawal from the treaty and the system's construction. Russian bombers enter the U.S. Air Defense Identification Zone (ADIZ), a buffer zone outside U.S. air space to provide early warning of incoming aircraft, frequently near Alaska and less often near California for training missions (*ABC News*, 2015), perhaps in response to the location of the two ABM sites.

Alaska not only received an anti-ballistic missile site at Fort Greely but also an upgraded radar facility at Clear Air Force (now Space Force) Base. The PAVE Phased Array Warning System (PAVE PAWS) is a radar system to detect submarine-launched ballistic missile attacks. The Air Force transferred parts of the defunct system at Eldorado Air Force Station in Texas to Clear to upgrade the Ballistic Missile Early Warning System to the Solid State Phased Array Radar System (SSPARS), which began initial operations in 2001 (GlobalSecurity.org, 2011). SSPARS detects and provides warning of both SLBMs and ICBMs. In 2021, Clear received another upgrade—the Long Range Discrimination Radar (LRDR); after it is operational, it will be able to search, track, and identify multiple objects simultaneously; discriminate among threats, decoys, and debris; and thus better enable interceptors—such as the ones at Fort Greely—to bring down incoming missiles (Ellis, 2021).

Despite Alaska's strengthened role in missile detection and defense, the U.S.–Russian military partnership in the GWOT reached its pinnacle in the circumpolar North by the early 2010s with Exercise Vigilant Eagle. In the series, the Air Forces of the United States and Canada, through NORAD, and Russia simulated terrorist takeovers of civilian aircraft and coordinated a response to improve communications and capacity in the event that such hijackings occurred in reality. Running from 2010 to 2013, each exercise involved a different location—over the Pacific Ocean (2010), Bering Sea (2011), and Alaska and Anadyr (2013). (They conducted a computer simulation in 2012.) The series marked the first time the United States and Russia participated in live-flying events since World War II.

Cooperation increased in the Arctic Council as well. In addition to regular Council initiatives, meetings, and declarations, the eight Arctic states, working under the auspices of the Council, agreed to cooperate on search and rescue in the Arctic in 2011 and marine oil spill prevention and response in 2013. The passage of the legally binding treaties was evidence of stronger and more integrated Arctic governance.

Despite the U.S. missile defense program, with one of the two sites located in Alaska, the United States and Russia mostly continued to cooperate in multilateral arrangements in the Arctic in the name of fighting terrorism and addressing environmental concerns.

## Alaska in U.S.–Russian Relations after Russia's Annexation of Crimea

Russia's invasion and annexation of Crimea in 2014 provoked nearly universal condemnation from the international community and a series of sanctions from the West. With the United States and Russia already at odds over other regions of the world, including Iraq, Georgia, Iran, Libya, and Syria, Russia's actions severely strained U.S.–Russian relations and brought an end to military cooperation in the Vigilant Eagle exercises. The Arctic Security Forces Roundtable (ASFR), a forum founded in 2010 by U.S. European Command (EUCOM) and the Defence Staff Norway to promote military cooperation in the Arctic, also expelled Russia from its meetings.

Before the Crimean incident, the military in Alaska had been concerned primarily with threats coming from North Korea and China. In 2006, North Korea carried out its first underground test of a nuclear weapon; in 2017, it successfully tested its first-ever ICBM, which had the ability to reach Alaska, the closest U.S. state to the country. China's navigation in the Arctic also attracts attention. Chinese Naval ships entered Alaskan waters in September 2015 (Page & Lubold, 2015). Although the passage was "innocent," per the UN Convention on the Law of the Seas (UNCLOS), it was the first time China had entered the waters, and it occurred during President Obama's visit to Alaska. China, declaring itself a "near Arctic state," is economically invested across the circumpolar North. It also has two icebreakers. By comparison, the United States, which unlike China is an Arctic state, currently only has two operational icebreakers, the heavy *Polar Star* and medium *Healy*.

The Crimea conflict made clear the differences between the Russian and U.S. positions in the Arctic. Russia's geopolitical and economic power in the region far surpasses the United States'. The Arctic is essential to Russia. More than half of the Arctic Ocean's coastline is Russian, while approximately half of the Arctic's population lives in Russia. The Russian Arctic accounts for ten percent of Russia's GDP and 20% of Russia's exports (Klimenko, 2020). Russia continues to expand its military in the region and, despite challenges from the West, exercise control over the Northern Sea Route (Zysk & Pincus, 2023). According to one analysis, Russia seeks to achieve three objectives in the Arctic: improving homeland defense; securing its economic position; and projecting power (Conley et al., 2020). While the Arctic has been an important source of Russia's economy and national identity since the tsarist era, few American citizens know that the United States is even an Arctic nation. Only 18% of Americans realize that the United States has territory and people in the Arctic (Hamilton et al., 2017). According to one study, most Americans do not agree that the United States is an Arctic nation with "broad and fundamental" interests in the Arctic (Hamilla, 2018). These views have contributed to the United States' underappreciation of the Arctic and its insufficient role in it.

Nonetheless, U.S. Arctic policy has been evolving more recently. Climate change, increased maritime activity, and expanding Russian and Chinese involvement in the Arctic have prompted the United States to become more active in the region. While the White House has had Arctic policies dating to the Nixon administration, the Department of Defense (DoD) and military branches have only more recently developed strategies: the Coast Guard and DoD in 2013, the Navy in 2014, the Air Force in 2020, and the Army in 2021. Early Arctic military strategies did not identify Russia as a threat, but more recent strategies have expressed concern over Russia as a great power competitor, its military operations in the region, and its control over the Northern Sea Route. In addition to intercepting Russian aircraft in Alaska's ADIZ, Red Flag-Alaska—an Air Force air combat training program taking place several times each year—simulated Russia as the enemy force in 2021 (Dougherty, 2021).

New investments accompany recent military strategies. The DoD established the Ted Stevens Center for Arctic Security Studies in Anchorage in 2021. As the sixth DoD regional studies center, it aims to promote awareness of and support the DoD's goals in the Arctic. Eielson Air Force Base has recently received several dozen F-35 Lighting

II fighter aircraft, an initiative completed in 2022 (354th Fighter Wing Public Affairs, 2022). Alaska is critical to both the Indo-Pacific and Arctic regions, and the F-35s can reach nearly anywhere in the Northern Hemisphere in one mission. As a result of the initiative, Alaska is now home to more advanced (fifth generation) fighters than anywhere else in the world. To address the small and aging icebreaker fleet, the Coast Guard is acquiring at least three heavy icebreakers by the end of the decade, followed by the addition of medium icebreakers. Meanwhile, Nome in western Alaska will host the first deep-water port in the U.S. Arctic to accommodate large cruise ships and military vessels (Boylan & Speight, 2021).

Despite U.S.–Russian military tensions in the Arctic, the two countries continued to cooperate in some political and environmental realms. Russian delegates attended the Arctic Council meetings during the U.S. Chairship (2015–2017) in Anchorage, Fairbanks, and Juneau. The 2017 Ministerial Meeting in Fairbanks brought U.S. Secretary of State Rex Tillerson, Russian Foreign Minister Sergey Lavrov, and the other six foreign ministers together for the signing of the Fairbanks Declaration and the third (and last) agreement negotiated under the auspices of the Arctic Council—on scientific cooperation in the Arctic. In 2018, the United States, Russia, and others signed the Central Arctic Ocean Fisheries Agreement, aiming to prevent unregulated fishing in the international waters of the central Arctic Ocean and facilitate cooperation on scientific research and monitoring in the region (Calderwood & Ann Ulmer, 2023). The U.S. Coast Guard and Russia's Border Service continue to conduct joint patrols in the region and share information in the event of a maritime accident such as an oil spill (Østhagen, 2016). In fact, in 2021, the United States and Russia updated their 1989 agreement to address marine pollution in the Bering and Chukchi Seas (Early, 2021; Schreiber, 2021).

Russia's annexation of Crimea upset U.S.–Russian relations and prompted the United States to reevaluate its position in the Arctic, especially in the security realm. Nonetheless, both sides continued to recognize treaties related to the environment and Indigenous peoples, and the Arctic Council's work continued. In this era, many believed that Arctic governance was robust and immune from the fallout between the two powers (Byers, 2017; Clifford, 2016; Lambach, 2020; Pezard et al., 2017).

## Alaska in U.S.–Russian Relations after Russia's Full-Scale Invasion of Ukraine

Russia's invasion of Ukraine in 2022 quickly led to the collapse of the fragile post-Crimea West-Russia cooperation, with military, political, and economic ramifications for the Arctic and Alaska. Once thought to be relatively immune from conflict in other regions of the world, the Arctic's international order has shifted rapidly, with one commentator calling it the "death of Arctic exceptionalism" (Bennett, 2023).[4] Finland and Sweden have joined NATO and thus seven of the eight Arctic states are now NATO members. Some argue that NATO should develop a clear and comprehensive Arctic policy and pool resources in an Arctic Command or other command structure (Conley & Arts, 2023; Mottola, 2023). Showcasing its new position in Western security in the Arctic, Finland hosted the Arctic Security Forces Roundtable in 2023. Military and political leaders discussed Russia's and China's interests and NATO's role in the region (U.S. European Command Public Affairs, 2023). Meanwhile, some have argued that Denmark and Greenland, already NATO members, should join NORAD to strengthen North American defense (Bohnert & Savitz, 2022). In the wake of the war, the West-Russia division in the Arctic has become reminiscent of the early Cold War.

As Russia looks for new economic agreements owing to Western sanctions—and for new defense opportunities in response to increasing U.S. military investments, the flow of Western military aid to Ukraine, and NATO expansion—it has strengthened its economic and military relations with China. Alaska has been impacted as a result. From 2021 to 2022, Russian-Chinese trade—which includes dual-use technology like semiconductors and drones—increased by 30%, with expectations that it will continue to increase (Gilchrist, 2023). Russia is selling more oil to China, and as more oil tankers navigate through the Bering Strait, the risk of a spill increases; an accident would severely harm coastal communities in Alaska, threatening their subsistence practices (Herz, 2023). Residents in Nome, for example, have expressed worry about what the U.S.–Russian fallout means for them (Loewi, 2022). In addition, Russia and China have conducted joint naval exercises together near Alaska. In September

[4] Elizabeth Buchanan (2023) provides an alternative argument. She contends that Putin's Arctic strategy relies on international cooperation and investment and that Russia wants the Arctic to be a low-conflict region to maximize economic gain.

2022 and again in August 2023, their Navies were seen in a formation near the Aleutians in the Bering Sea. Although the exercises occurred in international waters, they raised concerns in Alaska and the United States.

Russia has provoked Alaska in other ways. In July 2022, State Duma Speaker Vyacheslav Volodin threatened to reclaim Alaska for Russia. While such rhetoric is not new, Russian leaders used similar language in the lead-up to the invasion of Ukraine, and they indicate that Alaska remains a part of Russia's wider geopolitical consciousness. Meanwhile, although the Russian Air Force has been entering the Alaskan Air Defense Identification Zone to test U.S. responses for the past several years, these episodes take on new meaning in light of the war. Russia also launched cruise missiles from nuclear-powered submarines in the Chukchi Sea in September 2022 to assert its dominance over the Northern Sea Route and project power in its Arctic territory (Cordell, 2022).

For its part, the United States has continued its military exercises in and near Alaska, cooperating with Canada and Greenland in Exercise Noble Defender and with the United Kingdom and Australia in Exercise Northern Edge, the first time the exercise included allies (Rosado, 2023). In 2022, the Army reactivated a paratrooper combat division—the 11th Airborne Division. The now-called "Arctic Angels" train in Alaska's cold-climate and high-latitude environment to prepare for Arctic warfare (Swisher, 2022). In 2023, the Air Forces' Red Flag Alaska was oriented specifically for potential conflict with Russia and China (Satam, 2023). Since 2022, Alaska has been the site of mutual antagonism between the United States and Russia.

The Russo-Ukrainian War has not only impacted military security but also environmental and scientific cooperation. The Arctic Council, a forum in which the United States and Russia had continued to collaborate despite the fallout over Russia's Crimea annexation, paused its work shortly after the invasion of Ukraine. (Since Russia was chairing the Council at the time of the invasion, Member States and Permanent Participants refused to attend meetings in Russia.) The Arctic-7 continued to cooperate but in an alternate diplomatic arrangement rather than through the Council with Russia. At the time of this writing, the Norwegian Chairship (2023–2025) is supporting only Working Group projects in which Russia is not involved. Western sanctions have also complicated Western-Russian scientific collaboration on the Arctic's most pressing problems. Owing to funding and data-sharing suspensions, Western scientists do not have access to the Russian Arctic, limiting research on climate change

problems such as permafrost thaw (Konrad, 2023). Many scientists at the University of Alaska, a leader in the United States on Arctic research, are at a loss regarding how to continue their research collaborations with colleagues in Russia. The limited operational functioning of the Arctic Council and pan-Arctic scientific cooperation are jeopardizing our knowledge of climate change, already four times faster in the Arctic than the rest of the world (Rantanen et al., 2022).

The war has also impacted Alaska's economy. Oil prices soared after Russia's invasion until June 2022 before declining to roughly pre-war levels by the end of the year. Since approximately 44% of the State of Alaska's revenue comes from petroleum (Alaska Department of Revenue, 2023),[5] the war-time price surge benefited Alaska's economy significantly, although residents, like others elsewhere, paid higher gasoline prices. Alaska's Congressional delegation used the occasion to continue to push for increased oil exploration and development. Their advocacy, at least in part, seems to have worked. In March 2023, the Biden administration approved the Willow project—ConocoPhillips' controversial oil drilling plan on Alaska's North Slope—despite environmental activists' objections that the project will increase carbon emissions and could jeopardize the local environment and subsistence practices. In addition, the Russo-Ukrainian War has exacerbated an ongoing seafood battle between Russia and Alaska, both large seafood exporters. Alaskans point out that while Russia has banned U.S. seafood imports, the U.S. ban is ineffective: Much of Russia's seafood, because its processing is completed in other countries such as China and then sold as exports from there, is being imported in the United States (Strout, 2023). They argue that a more comprehensive ban would strengthen U.S. sanctions and benefit the Alaskan economy. Oil and seafood are just two issue areas Alaskan policy makers have tried to advance for the betterment of Alaska's economy in the aftermath of Russia's Ukraine invasion.

Alaska has also been impacted by the influx of Ukrainian—and even a couple Russian—refugees. Alaska has received hundreds of Ukrainians since the outbreak of war (Maxwell, 2023). Their arrival has been significant enough to prompt the Alaska Department of Labor and Workforce Development to reopen its Office of Citizenship Assistance to assist

[5] This is the percent of total Unrestricted General Fund (UGF) revenue from petroleum projected for FY 2023. Total UGF revenue from petroleum, not including the Permanent Fund transfer, projected for FY 2023 is 85.

refugees and immigrants in their search for employment in the state (Samuels, 2023). Meanwhile, as hundreds of thousands of Russians are fleeing military conscription, in October 2022 residents of Gambell on Alaska's St. Lawrence Island in the north Bering Sea were shocked to encounter two Russian men arriving on a fishing boat from Chukotka in the hopes of dodging Russia's draft and securing asylum (Grove, 2023). (Now settled in Tacoma, Washington, their plan succeeded.)

One bright spot in the relations between the two countries is the continuation of the agreements made at the end of the Cold War. The United States and Russia continue to co-manage fisheries, prepare responses in the event of environmental emergencies, and coordinate search and rescue at their common border (Rosen, 2022, 2023). Their Coast Guards are thus still in routine contact. Qualified Native inhabitants are also still permitted to cross the border to visit families without visas. Whether these agreements will break down like so many other aspects of U.S.–Russian relations in the post-invasion climate or serve as a modest but important basis for a gradual increase in the normalization of relations remains to be seen. Pan-Arctic cooperation, however, will not likely be fully realized until the end of the Russo-Ukrainian War.

## Conclusion

After Russia benefited from the commercially lucrative marine animal furs in the Aleutians for over one hundred years, the U.S. purchase of Alaska in 1867 made the United States both a neighbor of Russia and an Arctic nation. This would have important consequences for future U.S.–Russian relations and U.S. involvement in Arctic governance and security. The Alaskan Territory was essential to the U.S. ability to transfer Lend-Lease military supplies during World War II from the continental United States to Siberia for Soviet defense. The military's investment in Alaska in World War II provided a foundation to support the U.S. defense against the Soviets in the early Cold War. Following the polar concept, Alaska was at the frontlines of deterring, detecting, and stopping a Soviet attack. In turn, the people, infrastructure, and services the military brought to Alaska contributed to statehood in 1959. Alaska was a symbolic site of the melting of the Ice Curtain and one region in which the United States and Soviet Union could cooperate on environmental issues. Regional cooperation extended to the Arctic Council and post-9/11 counterterrorism. However, conflict increased over the U.S. anti-ballistic missile project and

more significantly after Russia's invasion of Crimea. The Russo-Ukrainian War has ended most of the post-Cold War cooperation, in both bilateral and multilateral arrangements. The bifurcation of the Arctic impacts not only security but also collaboration on environmental issues and scientific research.

Alaska continues to play a part in U.S.–Russian relations, and the fallout between the two countries affects the state in a multitude of ways. After decades of declining U.S. attention to the Arctic and Alaska's role in it, climate change and international relations after the Crimea annexation prompted the United States to elevate its position in the region. Russia's invasion of Ukraine in 2022 not only justified but accelerated the U.S. commitment to the North. Alaska is again the site of a flurry of military activity aimed at deterring and responding to Russian actions in the region. Market competition over commodities like oil and seafood is evident in Alaska today as well. While the future of U.S.–Russian relations is unclear, they will likely continue to remain strained until after the Russo-Ukrainian War. However the relationship progresses, given the increasing importance of the Arctic owing to a quickly changing climate and expanding accessibility, Alaska will continue to be at the center.

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# US Arctic Policy in the Context of Russian Capabilities and Chinese Activities

*Michael Paul*

## The United States as an Arctic State

Spanning 1.7 million square kilometres, Alaska is the largest exclave in the world in terms of surface area. Connecting it to the mainland is still a costly undertaking for the United States of America—albeit to a lesser extent than it once was for the Tsarist Empire. Since the United States acquired what is now the State of Alaska from Tsarist Russia for $7.2 million in 1867, they have been an Arctic state. At 15%, however, only a small part of US territory lies beyond the Arctic Circle (in contrast to Russia with 45%) (English, 2013). This is one of the reasons why most US citizens do not have a close relationship to the Arctic. In a 2019 survey, they continued to mildly disagree with the assertion that the United States is an Arctic nation holding broad and fundamental interests in the region. When US citizens are asked what associations they have with the Arctic,

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they tend not to mention national concerns, but overwhelmingly respond with notions of cold, ice and snow (in 2019, for the first time, slightly more respondents associated the Arctic with climate change than snow) (Hamilla, 2020). US citizens do not feel close to Alaska, which was only admitted as the 49th "Last Frontier State" in January 1959. By the same token, Alaska has been of marginal concern in national security policy. Only oil production has been of eminent political and economic importance since the discovery of Prudhoe Bay Oil Field in 1968, the largest oil deposit in North America. As a matter of fact, oil production provides the bulk of state revenue (Brooks, 2022).

Supporters of an active Arctic policy were therefore largely isolated for a long time. Since 2009, they have tried, albeit unsuccessfully, to get US Congress to approve new icebreakers. Republican Senator Lisa Murkowski from Alaska, who has represented the state since 2002, also made several such attempts. It is mainly thanks to her that in 2015 the Arctic Caucus was established, the first committee in Congress to draw attention to politics in the 49th state.

Other Alaskan political representatives have tried to emphasize the security relevance of their state: "Alaska is America's Arctic guardian" (Corgan, 2020), declared Governor Sean Parnell (2009–14). His successor William Walker pointed out to President Barack Obama on a flight to Anchorage in September 2015 that the Russian military was undergoing its largest build-up since the Cold War (Davis, 2015). The Pentagon, on the other hand, was still arguing in December 2016 that the Arctic remains an area of cooperation, in spite of some "friction" with Russia over sea lanes—the Northern Sea Route (U.S. Department of Defense, 2016).

## Relative Priority to the Arctic in the Trump Administration

The melting of sea ice, the accompanying opening of Arctic Sea lanes and intensifying great power rivalry have changed the perception of the North Polar region. Unlike its predecessors, Donald Trump's administration assigned relative priority to the Arctic region. Secretary of State Mike Pompeo elevated it in May 2019 to a geopolitically significant "arena" in the struggle for power and influence, where a "new era of strategic engagement" was dawning (Pompeo, 2019). This eloquent yet premature exaltation of the Arctic was followed by strategy papers from branches

of the armed forces (U.S. Army, 2021; U.S. Coast Guard, 2019; U.S. Department of the Air Force, 2020; U.S. Navy, 2019) containing many generalities, albeit few concrete measures and no priorities.

It was the 2019 Arctic Strategy of the Department of Defense that deviated significantly from the earlier cooperative approaches, focusing right from the outset—in accordance with the priorities of the 2018 National Defense Strategy—on "China and Russia as the principal challenge to long-term U.S. security and prosperity". The Arctic, it said in Cold War diction, was "a potential vector for an attack on the U.S. home- land" (U.S. Department of Defense, 2019). In addition to Russia, China's armed forces had now become a focus of the threat assessment as well. Due to the extremely fast pace of China's naval build-up compared to other rival states, maritime situational awareness and anti-submarine warfare again received high priority. In the Navy's 2021 Blue Arctic Strategy, "increased Chinese Navy deployments on, below and above Arctic waters" (U.S. Department of the Navy, 2021) were expected.

As early as September 2015, Chinese warships have crossed the waters off Alaska, and Beijing's naval forces have repeatedly passed through the waters of the northernmost US state—sometimes in conjunction with Russian Navy ships. In September 2022, once again a USCG vessel unexpectedly spotted seven Russian and Chinese warships—one of which was the newest 055 Nanchang guided-missile destroyer—navigating in the Bering Sea within the US Exclusive Economic Zone (Schreiber, 2022a, 2022b). USCG Vice Admiral Kevin Lunday later explained it was important that USCGC Kimball had been present (Grady, 2023)—which can be seen as an admission that the USCG does not have enough ships available to protect US sovereignty in the Arctic Ocean. There are considerable gaps in the region's reconnaissance capabilities: "Things start to get pretty dark once you get up higher than 72 degrees north" (Larter, 2020), former USCG Commandant Admiral Paul Zukunft remarked to a virtual audience in September 2020.

## The Biden Administration's Arctic Policy

President Biden was confronted with a long series of domestic and foreign policy problems at the beginning of his term. Some therefore feared that US Arctic policy would once again gather dust in a corner at the State Department (Moore, 2021). At the Pentagon, the North Polar region is yet another underfunded area of responsibility competing with the

Indo-Pacific as a flashpoint in Sino-American rivalry. Unlike many martial documents of the Trump era, the 2020 US naval strategy also took a more relaxed tone towards the Arctic compared to other areas of the world (USMC, USN, USCG, 2020).

Unlike his predecessors, Biden made decisions very early on to allow for better coordination of Arctic policy: In September 2021, the administration reactivated the Arctic Executive Steering Committee (AESC) under the leadership of David Balton, and anchored it in the White House. It also appointed six people to the US Arctic Research Commission (USARC), chaired by Arctic expert Mike Sfraga, who was also nominated by Biden to be the first ambassadorial-ranking Arctic coordinator (White House, 2021b). Major General (ret.) Randy "Church" Kee has been Senior Advisor for Arctic Security Affairs since 2021 and heads the new Ted Stevens Center for Arctic Security Studies in Anchorage. In September 2022, an Arctic division was established at the Pentagon, headed by Iris Ferguson. Like Pompeo, Ferguson sees the Arctic as a "potential gateway to the homeland and a potential arena for great power competition" (Rosen, 2022).

## Alaska and Russia's War of Aggression

Equally bizarre and revealing of the state of US–Russian relations is the idea, voiced by an advisor to Putin, of demanding the "return" (Frankfurter Rundschau, 2022) of Alaska as compensation for damage caused by sanctions against Russia and its war against Ukraine. First of all, mixing up cause and effect is significant—Russia itself must pay for the costs of its war of aggression. In addition, Alaska was not "seized" by the United States in 1867. At that time, the sale of Russian America was a very rational decision from the point of view of the Russian actors involved and was in line with the minimal interest that the remote colony attracted in its capital St Petersburg: from the perspective of the imperial centre, Russian involvement in the North Pacific had become more and more of a liability. The Russian state's "model of rule based on expansion, exploitation and subjugation" (Kindler, 2022) had reached its limits, whereby the Tsarist Empire could neither supply nor defend its Arctic colony.

Washington has long shown a similar disinterest with regard to Alaska in general and Arctic assets such as icebreakers in particular. Now, however, it wants to become more involved in the North Polar region, a change in tact driven at least partly by Russia's war. The attack on Ukraine

has had many counterproductive consequences for Moscow, including a strengthening of the EU and NATO and an expansion of the Alliance to include Finland and presumably also Sweden, two formerly militarily neutral Arctic states. In Washington, the war forced President Biden to fundamentally revise his Russia policy: at the beginning of his term, Biden had sought a more stable relationship with Russia in order to be able to focus more on China as a key strategic competitor. To Putin's delight, at their meeting in Geneva in June 2021, Biden called Russia and the United States "two great powers" (Troianovski, 2021), revising Obama's earlier demotion of Russia to a regional power (while at the same time abandoning great power rivalry as a guiding principle). They also talked about circumpolar areas in which the two Arctic countries could work together, despite diverging significantly on other policy issues. Such cooperative prospects were encouraged by the vague hope that, since Russia had received recognition as an equal power, Putin would moderate his foreign policy behaviour. Clearly, such a shift did not materialize.

As a result of the war of aggression, cooperation between Russia and the United States in the Arctic has come to an almost complete standstill, except for when necessary between the USCG and the Russian Border Guard on both sides of the Bering Strait and with regard to the maintenance of treaty obligations arising from, among other things, the Air and Maritime Search and Rescue Agreement and the Fisheries Agreement in the Central Arctic Ocean.

## The 2022 US Arctic Strategy

Despite tensions with Russia, the new National Arctic Strategy of October 2022 invokes the vision of a peaceful, stable and prosperous Arctic, whose destiny will be managed cooperatively (The White House, 2022). Without underestimating the security risks, the North Polar region indeed remains one in which the situation is peaceful compared to other parts of the world. In this sense, the United States is following a dual strategy: on the one hand, it is determined to contain aggressive behaviour by Russia and China; and, on the other hand, it wants to maintain stability—also and especially in the Arctic—in order to be able to return to cooperation at a later date (Cf. Herbst et al., 2022). The war of aggression, however, makes it almost impossible for Washington to separate Moscow's policy in the Arctic from the war in Europe. The Arctic Zone of the Russian Federation (AZRF) is also a controversial subject of interest in China and

Russia's friendship of convenience, as the topics of conversation during Xi Jinping's visit to Moscow showed: China wants more access to energy and the Northern Sea Route in the Arctic Zone.

While the interim version of the US National Security Strategy of March 2021 (White House, 2021a) did not mention the Arctic at all, the region has since become a national priority. This makes it easier to address corresponding planning processes and their funding—even though the Arctic ranks last in the aforementioned document in terms of security priorities, behind the Indo-Pacific, Europe, the Middle East and Africa (White House, 2021, 2023; Cf. Bouffard, 2023).

The four pillars of the Arctic Strategy are (1) security, (2) climate change and environmental protection, (3) sustainable economic development and (4) international cooperation and governance. However, in the very first "security" strategic objective, aiming "to improve our understanding of the operational environment in the Arctic", the United States places itself behind Russia and even China, the latter of which is not only advancing research in the Arctic but may soon even possess more icebreakers than the United States. And while the strategy paper addresses climate change extensively, the larger Arctic space beyond Alaska is roundly ignored and US presence is only to be made "as required"—a rather short-sighted approach in an area where presence equals influence. The USCG Strategy published in October 2022 (U.S. Coast Guard, 2022) also remains vague.

In line with the National Security Strategy, the Arctic Strategy states that Russia's war in Ukraine has increased geopolitical tensions in the Arctic and created new risks of unintended conflict (The White House, 2022). Still, the security strategy remains cautious about concrete US presence in the Arctic (White House, 2023). The US defence strategy is also reluctant on this point, while maintaining greater focus on the Indo-Pacific (DOD, 2022; Cf. Wall & Wegge, 2023). The Arctic Strategy postulates in general terms: "We will deter threats to the US homeland and our allies by enhancing the capabilities required to defend our interests in the Arctic, while coordinating shared approaches with allies and partners and mitigating risks of unintended escalation" (The White House, 2022). Investments in reconnaissance, maritime domain awareness and icebreakers are mentioned as means to this end. If escalation can be avoided, and if certain conditions are met, it may even be possible for the United States to resume cooperation with Russia (The White House, 2022).

The Biden administration is setting important priorities in the area of climate change by strengthening the resilience of indigenous peoples and reducing climate-damaging emissions. Accordingly, it wants to diversify Alaska's energy sector and initiate an energy transition. At the same time, however, it recognizes that the economy in the northernmost American state remains dependent on the extraction of fossil fuels (The White House, 2022).

In the context of international cooperation and governance, the Arctic Council is to be maintained as a multilateral forum. However, the Biden administration is open to new bilateral and multilateral partnerships to advance scientific cooperation and promote other US interests in the Arctic (The White House, 2022).

In surprisingly brief terms, the Arctic Strategy also addresses the need for scientific research to better understand climate change in the Arctic (The White House, 2022). While the United States remains the world's pre-eminent science power, the question of how much is spent on Arctic research remains a mystery even to John Farrell, Director of USARC (estimates range from $400 million to over $1 billion) (Schreiber, 2022a, 2022b; USARC, 2023). Starting in 2023, Russia is expected to drift autonomously through the Arctic Ocean on a navigable platform with a research team of up to 34 people, establishing a nearly permanent presence in the Central Arctic. The US commitment to the Arctic remains small in comparison to Russia's engagement. However, presence means influence—in the Arctic, this is even more true than in other regions where environmental conditions are less challenging. And while circumpolar research cooperation has been stopped because of Russia's war, China is filling the gaps left in Arctic research.

The 2022 Arctic Strategy ignores important geostrategic changes, as Heather Conley has remarked (Rosen, 2022). The Arctic is only treated as a territory neighbouring Alaska, i.e. as a domestic issue, involving the extraction of natural resources in the state and policies towards indigenous peoples, and not as an international issue. The deficiencies of this approach become most obvious when looking at the embarrassing lack of icebreakers.

## A Single Icebreaker for the Arctic

A manifestation of the lacking concern for the Arctic is that the USCG has only two icebreakers, although the shortage was long foreseeable and debated in the Senate as early as 2009 (Emmerson, 2011). The heavy icebreaker USCGC Polar Star is mostly used in Antarctica to support McMurdo Station and has long since exceeded its operational lifetime (the Polar Sea, which was decommissioned in 2010, now serves only to provide for spare parts). The icebreaker USCGC Healy has been in service since 1999, mostly in the Arctic, and has been to the North Pole three times, most recently in 2022 (DeGeorge, 2022).

Only icebreakers can ensure a permanent presence in the Arctic. The mission of the USCG's icebreakers is to: conduct and support scientific research in the polar regions; preserve and protect US sovereignty and national interests through presence in US territorial waters; monitor maritime traffic and perform other coastguard duties (such as search and rescue, law enforcement and marine resource protection).

The first new icebreaker is scheduled to be delivered to the USCG in 2028 (Congressional Research Service, 2023). The programme includes three heavy vessels (Polar Security Cutters PSCs) and three medium vessels (Arctic Security Cutters, ASCs), of which only the first two PSCs are fully funded. The cost of the PSC programme amounts to $2.7 billion. A three-ship icebreaker fleet would in a couple of years put the United States on the same level as China (its third icebreaker is expected to be delivered in 2025), but still significantly behind Russia (40), and also short of Canada (9), Finland (8) and Sweden (4). By including the total number of ice-classed research and patrol boats, Russia has 57 ships, ahead of Canada (18), Finland (10) and Denmark (7). On that measure, the United States, including three National Science Foundation (NSF) vessels, is currently tied with Sweden (5), and is ahead of Norway (2), China (2) and Germany (1) (Gronholt-Pedersen, 2022; Tingstad et al., 2020).

While NATO depends predominantly on US capabilities in the Euro-Atlantic area, in the Arctic the United States relies on icebreakers from European allies. This is reflected in the Arctic Strategy, which proclaims the goal of maximizing "unity of effort" (The White House, 2022) with allies and partners. In fact, however, these efforts form the basis of a minimum Arctic presence for the United States.

As a national agency, the NSF has three research vessels with icebreaking capability for American-led Arctic research, each of which is supported by *Healy* in operations. Due to the growing importance of the Arctic and competition for attentions and funds with activities in the Antarctic, the question of whether icebreakers should be leased or purchased in the short term and whether more (PSCs or ASCs) ships are planned for the long term is being discussed; USCG Admiral Karl Schultz has prioritized the goal of a fleet of nine icebreakers (six PSCs and three ASCs); (Congressional Research Service, 2023) however, it is unclear whether the new Trump administration will go along with this proposal.

In December 2022, the Senate gave its approval to an omnibus spending bill of about $500 million for 130 individual measures that benefit Alaska. While Senator Murkowski was pleased with it, her counterpart Dan Sullivan voted against the spending bill, among other things because the purchase of the icebreaker *Aiviq* was not included which would offer an alternative perspective (Ruskin, 2022).

## The Arctic No Longer Offers Protection

Washington's comparatively relaxed attitude towards the Arctic is rooted in the geographical position of the United States which gives it a natural advantage over countries like China and Russia, both of which share their borders with numerous neighbouring states. The Atlantic and the Pacific give the United States a security buffer that only an equal competitor on the opposite coast of the Atlantic or Pacific can realistically threaten. Arctic security issues have therefore rarely mattered to the United States since the end of the Cold War. In a 2014 US Navy report, military security was not even mentioned in the strategic goals for the North Polar region to be achieved by 2030 (U.S. Navy, 2014). In the 2017 National Security Strategy, the region was mentioned only once in passing and not even listed in the 2018 Defense Strategy (DoD, 2017; The White House, 2017).

However, increasing Russian activities made it necessary for the US Navy's 6th Fleet to show its presence in the High North in October 2018 as a display of force, for the first time since 1991. The NATO exercise Trident Juncture was the largest military manoeuvre since the Cold War: 50,000 servicemen and women, 65 ships and 250 aircraft took

part, including the aircraft carrier USS Harry S. Truman, which deviated from its route to the Arabian Gulf specifically for this exercise. The US forces thus demonstrated their dynamic force employment concept, which is intended to make a virtue out of the lack of available vessels (Ellehuus, 2020; US Department of Defense, 2018; U.S. Department of the Navy, 2021; Zysk, 2021). Also with Russia in mind, the 2nd Fleet, whose attention during the Cold War was focused on Soviet naval forces in the North Atlantic, was reactivated in August 2018 (Ong, 2021; Werner, 2019). Following exercises in the Norwegian Sea, the 6th Fleet operated once again in the Barents Sea in May 2020 with four Arleigh Burke-class destroyers and a British frigate (U.S. Naval Forces Europe-Africa/U.S. 6th Fleet Public Affairs, 2020). Since then, the US Navy has maintained a continuous presence in the High North in line with its new "Blue Arctic" (U.S. Department of the Navy, 2021) Strategy to improve its ability to operate under the new conditions of rapidly melting sea ice and progressively usable sea routes.

The increased presence is the result of a changed situation and threat perception: "The Arctic is no longer a fortress wall, and our oceans are no longer protective moats; they are now avenues of approach for advanced conventional weapons", said retired US Gen. Terrence O'Shaugnessy during testimony in March 2020 before the Senate Armed Services Committee (Monga & Vieira, 2021). The Arctic Strategy of the US Air Force (USAF) now locates the Arctic at the intersection of two spaces important to US forces, namely North America (U.S. Northern Command) and the Indo-Pacific (U.S. Indo-Pacific Command). Therefore, according to the USAF's first Arctic Strategy, most of the latest generation fighter aircraft are to be stationed there. With 54 F-35s located at the Joint Base Elmendorf-Richardson and Eielson Air Force Base in Alaska, they represent the world's greatest cluster of these fighter aircraft (Alaska Public Media, 2022; U.S. Air Force, 2020).

As the northernmost base outside the United States, Pituffik Space Base (formerly Thule Air Base) in northern Greenland is home to one of the largest satellite ground stations for space surveillance and missile early warning. This is because missiles from China or Russia can reach targets in the United States most quickly when they fly over the Arctic Ocean. Russian submarines carrying nuclear-armed ballistic missiles are also relatively safe from detection under the ice sheet. This is another reason why US submarines have been training to hunt enemy submarines in the Arctic Ocean as part of ICEX (Ice Exercise) (U.S. Department

of the Navy, 2021). In March 2018, the US Navy held another joint manoeuvre together with the British Navy after a ten-year break: The highlight of the exercise were the submarines USS Connecticut, USS Hartford and HMS Trenchant breaking through the surface of the ice and providing spectacular images. Three years later, three Russian nuclear submarines succeeded for the first time in rising through the one-and-a-half metre thick ice at a similarly photogenic distance of a few hundred metres (Reuters, 2021)—a reflection of the geopolitical competition in the Arctic Ocean.

The importance of the Arctic for the United States has grown. Yet, the North Polar region only attained the rank of a national priority since the publication of the new National Security and Arctic Strategy documents in 2022. This will make it possible to overcome bureaucratic hurdles in the future that previously made it difficult to allocate funds. There is indeed a great need to catch up.

The North Warning System (NWS) is part of the North American Aerospace Defense (NORAD), which is also responsible for early warning of ballistic missile attack. Both are outdated with respect to modern cruise missiles and new hypersonic weapons systems. North America has become vulnerable and lacks now the detection, denial and defeat capabilities to deal with the new strategic threat environment. As a result, as Andrea Charron and James Fergusson have stated, "a rethink of what continental defence entails, often mistakenly conceptualized as NORAD modernization (and more specifically, only NWS renewal), has emerged as a priority for both Canada and the U.S" (Charron & Fergusson, 2022). The impending task spans over a wide area—continental NORAD region (CONR), Canadian NORAD region (CANR) and Alaskan NORAD region (ANAR)—and has a much wider context that now includes all six domains (land, sea, air, space, cyber and information) (Charron & Fergusson, 2022). Besides the sharing of costs, the question of cooperation in missile defence is controversial (Chase & Fife, 2022; Fergusson, 2022).

In the Arctic Ocean, for the past two decades, consideration has been given to building a port that would provide a permanent presence for the Coast Guard and Navy in Alaska. The coastal town of Nome, located off the Bering Sea, was selected in 2020 for a new deep-water basin (Mason, 2021; Thiessen, 2023). The USCG currently has little presence in the Bering Strait, although shipping traffic has more than doubled from 262 transits annually in 2009 to 509 transits in 2022 (Thiessen, 2023; Von

Ah, 2022). The naval air station on the Aleutian island of Adak, deactivated in 1997, would also be suitable for maritime surveillance of the Bering Sea, but the US Navy has so far shied away from the costs of reactivating it (Eckstein, 2021).

## Conclusions

The United States and Russia reached an agreement to regulate shipping traffic in the Bering Strait and the Bering Sea as recently as 2018. After that, incidents of Russian fighter jets being intercepted in the airspace over Alaska have become more frequent and Russian naval vessels entered the US Exclusive Economic Zone during an exercise in August 2020, harassing fishing boats like the Blue North. In the aftermath, Alaska's Governor Mike Dunleavy emphasized the urgency of protecting US waters to President Biden (Baker, 2020; Rossomando, 2021). Sino-Russian manoeuvres off Alaska with seven naval ships in September 2022 and eleven ships in August 2023 have heightened sensitivity about security in the northernmost American state once again (Mahadzir, 2023). The joint Russian and Chinese naval patrols are part of a broader strategic competition in the Arctic, which is increasingly becoming contested territory.

After decades of scant attention, is "America's Arctic Moment" coming? A study with this title was published in 2020 by Heather Conley in which a list was included of efforts a new administration would have to undertake if it wanted to seize the opportunity for renewal (Conley & Melino, 2020). A look at US Arctic strategy papers and policy, however, gives the impression that the proactive handling of hard security issues in the Arctic is still too vague and, against the backdrop of developments elsewhere, such as in the Indo-Pacific, not considered urgent enough (Bouffard, 2023). Washington continues to maintain deterrence and defence capabilities in the Arctic and to compensate for deficits, also through cooperation with allies. Presence in the High North remains a joint task of European allies including, in future, the German Navy to protect NATO's northern flank (Caldon, 2023; German Navy objectices for 2035 and beyond, 2023); as for the Central Arctic, this still has to be determined one day, when the United States acquires solid reconnaissance, means of operation suitable for the High Arctic, and more than two icebreakers. Under Biden, the United States has started rebuilding

and restrengthening its presence in the Arctic. More needs to be done in reaction to Arctic military capabilities of Russia and growing civil-military activities of China.

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# Arctic Border Governance in a Post-invasion Era: How Russia's Invasion of Ukraine in 2022 Shifts Arctic Borders

*Katharina Koch and Karen Everett*

## Introduction

Since the end of the Cold War, the Arctic has been of increasing geopolitical importance due to climate change, economic interests, competing claims for access to resources, navigation rights, and territorial control. These events are often framed in discourses of Arctic exceptionalism vs. spillover of geopolitical conflicts, such as the Ukraine crisis in 2014 (Exner-Pirot & Murray, 2017; Heininen, 2019; Käpylä & Mikkola, 2019; Lackenbauer & Huebert, 2014; Rahbek-Clemmensen, 2017). Since the Russian invasion of Ukraine in February 2022, scholars have highlighted several challenges for Arctic border governance resulting from the

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renewed geopolitical tension between Russia and the other Arctic states[1] (Koivurova & Shibata, 2023).

A wide discussion on borders and their transformations emerged after the collapse of the Soviet Union, considering the implications of globalization and related international trade and the development of new surveillance technologies (Brunet-Jailly, 2005; Kolosov & Sebentsov, 2015; Prokkola, 2013). Border scholars seek to enhance our understanding of the dynamics that influence bordering processes and their diverging scalar forms and functions. Borders and border regions represent contested spaces of opposing interests between economics and security that challenge not only the flows of people and goods but also the control of sovereign states over territory (Rumford, 2012).

The Arctic can be conceptualized as such a contested space. Nicol and Chater (2021b) even argue that "the state of Arctic borders is a bellwether for the future of larger geopolitical processes and security relationships" (p. 1). Our goal is to identify how Arctic border governance has been influenced by the invasion of Ukraine in 2022. We follow Paasi's definition of borders by conceptualizing political borders as "processes and institutions that emerge and exist in boundary-producing practices and discourses" (Paasi, 2011, p. 113). Borders are in constant flux and political transformations "may cause some borders become [*sic*] lower or *softer* fairly rapidly, while some others become *harder*" (Paasi, 2011, p. 14). Based on this theoretical perspective, our argument is that Arctic borders have undergone a transformation since the Russian invasion of Ukraine, resulting in both a hardening of existing and the establishment of new borders. To answer our research question and to analyse the impact of the invasion on Arctic borders, we examine both political (state) and institutional (e.g., Arctic Council) borders.

Political borders include land borders that facilitate or hinder cross-border flows as well as maritime borders associated with exclusive economic zones and the continental shelf; both are equally important (Heininen & Zebich-Knos, 2011). Governance decisions about borders are made by states and often guided by (geo)political practices and discourses, emphasizing the relational character of borders. In addition, since February 2022, we have witnessed the re-drawing of Arctic borders

[1] The eight Arctic Council member states are Canada, the Kingdom of Denmark, Finland, Iceland, Norway, The Russian Federation, Sweden, and the United States (Arctic Council, 2023b).

in various institutional settings. For example, the Arctic Council paused its work in March 2022 and resumed it with limited activity, excluding Russia, in June 2022. Furthermore, Finland and Sweden sought membership in the North Atlantic Treaty Organization (NATO), which expanded NATO borders eastwards towards Russia.

This chapter seeks to describe and understand how Arctic border governance has changed since February 2022 and the implications of the war on Arctic borders. We examine the interlinkages of political borders vis-a-vis Finland–Russia, Norway–Russia, and Canada–Greenland–Denmark and institutional borders with the NATO expansion and Arctic Council pause. We next introduce our methodology, beginning with a conceptualization of borders by focusing on both the multilevel governmental characteristics of Arctic border governance and the role of cross-border mobility. We then present our research method followed by an analysis of our five case studies. The discussion considers the changes in Arctic border governance since the Russian invasion of Ukraine. We conclude by arguing that science diplomacy, as a bottom-up approach, could help resume relations between Russia and the other Arctic states. We also identify key next steps for research while considering the geopolitical complexities that have unfolded in the Arctic since the invasion.

## Methodology

### *Arctic Border Governance*

The study of borders has attracted a diverse body of scholarship throughout the social sciences and humanities with the common goal of enhancing our understanding of the processes and dynamics that transform and affect borders (Newman, 2006; Paasi, 2005; Parker et al., 2009). For example, Popescu (2008) investigated contemporary de- and re-bordering mechanisms and how they constitute, but are also constituted, by territorial integration, state transformation, transnational integration, and re- and de-territorialization. Therefore, bordering practices and discourses are subject to a wide array of mechanisms and processes that "call into question the cloth and stitching of the Westphalian quilt of political geography - national identity and boundaries" (Johnson, 2009, p. 177).

Throughout the post-structural turn in the 1960s and 1970s, the theorization of borders, in other words, what is understood to constitute a border has changed from border marks/landscapes towards institutions, practices, and discourses (Berg & van Houtum, 2003; Newman, 2006; Paasi, 1999). Balibar (2003) developed the "borders are everywhere" discourse which implies that borders are "no longer entirely situated at the outer limits of territories; they are dispersed a little everywhere, wherever the movement information, people, and things are happening and is controlled" (p. 1). As such, borders and border regions are contested spaces, which must satisfy opposing interests, such as balancing economic actors' demands for the free movement of capital, labour, and goods with public demands for border security. The functions and purposes of borders are never straightforward; they act as "instruments of state and territorial control, markers of identity and discourse manifesting themselves in legislation, diplomacy and academic or scholarly languages" (Paasi, 2005, p. 666). This observation provides us with a first idea of the complexity of borders and shifts our attention towards the various "boundary-drawing practices and discourses" (O'Tuathail & Dalby, 1998, p. 3) that may influence individual borders and borderlands, including in the Arctic.

Both the 2014 Crimean Crisis and the Russian invasion of Ukraine in February 2022 have shifted the scholarly focus not only towards the increasingly volatile geopolitical situation of borders in Eastern Europe but also towards the resulting geopolitical dynamics in the Arctic (Koivurova & Shibata, 2023; Rahbek-Clemmensen, 2017). In addition, throughout the last decade, Arctic borders have received increasing attention due to the rapid thaw of sea ice and the potential opening of natural resources and navigational opportunities for Arctic shipping (Nicol & Chater, 2021b). Furthermore, new geopolitical actors, in particular China (Barnes et al., 2021), have emerged in the Arctic, underlining the region's economic potential but also its strategic role in a geopolitical environment demarcated by a global system which, unlike during the Cold War, is no longer exclusively characterized by an East–West divide due to global market dynamics (Higgott & Reich, 2022). However, the dividing lines that are being reinforced in the Arctic context resemble the Cold War division with Western allies closing ranks against Russia, for example in the context of the Arctic Council which we discuss in the context of Arctic multi-level governance (MLG) in the next section.

*Multi-level Governance in the Arctic*

Originally a concept developed by Marks (1993) after the ratification of the Maastricht Treaty in 1992 which established new governmental structures by dividing the European Union (EU) institutional framework into intergovernmental and supra-national areas, MLG developed into a concept to help unveil political tensions between different levels of government. Within the Arctic governance framework, Stokke (2021) stresses the distinctive institutional complexity that underpins Arctic governance, setting it apart from the foundation of the EU, which is rooted in economic and political integration. In contrast, Arctic institutional structures, such as the Arctic Council, are shaped by diverse interactions between governmental and institutional tiers, encompassing global maritime law, regional intricacies, in particular related to Indigenous communities, and disputes over maritime boundaries (Stokke, 2021), such as the Northwest Passage (NWP) (Stokke, 2013). Arctic border governance thus hinges on the interplay between global and regional institutions' sway and the multifaceted ways states and other stakeholders pursue their objectives within networks of institutions, again such as the Arctic Council (Keil & Knecht, 2017; Stokke, 2011; York et al., 2022).

State borders in the Arctic are primarily defined by territorial claims and disputes among Arctic countries. Some of these states have settled overlapping maritime claims in the Arctic region throughout the last decades (Østhagen & Schofield, 2021b), however, some disagreements remain, for example regarding the NWP (Lalonde, 2020). Moreover, the land border dispute for Hans Island between Canada and Greenland (Denmark) was the last remaining territorial land dispute (Byers, 2009), until its settlement in 2022.

The United Nations Convention on the Law of the Sea (UNCLOS) is a crucial international agreement that establishes the legal framework for maritime boundaries and the exploitation of resources in the Arctic Ocean and the North Atlantic Ocean (Young, 2016). While not an area of focus in this chapter, it is important to note that the Arctic is characterized by overlapping maritime territorial claims among Arctic states, particularly concerning the extent of their exclusive economic zones (EEZs) and continental shelves (Østhagen & Schofield, 2021a, 2021b; Schofield & Østhagen, 2023). The authors show that unresolved disputes can create tensions and complicate border governance; however, the ambiguity in interpreting certain provisions of UNCLOS, for example, the criteria

for establishing extended continental shelves, adds complexity to Arctic border governance (Østhagen & Schofield, 2021a).

In addition to state borders, institutional borders also play a significant role in the Arctic. For example, the Arctic Council comprises the eight Arctic states and six Indigenous organizations, five of them representing Indigenous Peoples across state borders.[2] The Arctic Council serves as a platform for cooperation and dialogue on various issues, including environmental protection, sustainable development, and scientific research. The establishment of the Arctic Council "is an explicit acknowledgment that operational hazards in the Arctic traverse and envelop political borders" (Stephenson, 2018, p. 185). In summary, the Arctic region is characterized by a unique geopolitical landscape, with multiple states claiming territory and asserting their interests regarding natural resources and transportation routes in the region (Bruun & Medby, 2014; Huebert, 2019). At the same time, there are various institutional frameworks that play a crucial role in shaping and managing Arctic borders and cross-border cooperation (CBC), including the Arctic Council and UNCLOS, underlining the multi-level governmental character of (border) governance in the Arctic. In the next section, we address the role of cross-border mobility in the Arctic which underlines the importance of mobility, connectivity, and cooperation across and beyond the Arctic.

*Cross-Border Mobility in the Arctic*

Arctic cross-border mobility pertains to the movement of people, goods, and services across national boundaries, encompassing both land and maritime divisions. The process of globalization has exerted a significant impact on the flow of commodities, financial assets, and individuals across the extensive northern circumpolar region. Nicol and Everett (2021) emphasize that the economic interconnections between Arctic nations and those beyond are progressively deepening, potentially surpassing even the relationships among the Arctic countries themselves. This phenomenon is highlighted in the context of the ongoing conflict in Ukraine, which has ramifications for mobility and connectivity in the

[2] The six Indigenous organizations are the Aleut International Association (AIA), Arctic Athabaskan Council (AAC), Gwich'in Council International (GCI); Inuit Circumpolar Council (ICC), Russian Association of Indigenous Peoples of the North (RAIPON), and the Saami Council.

Arctic. In addition, the manifestation of internationalization in northern economies is unmistakable. However, Nicol and Everett (2021) underscore that this phenomenon is closely interwoven with economic bonds that extend beyond the geographical confines of the Arctic region, for example, China has become an important geopolitical actor in the Arctic through substantial and large-scale infrastructure investments across several countries, including Russia's and Canada's Arctic regions (Barnes et al., 2021; Kauppila & Kopra, 2022).

Furthermore, despite their strong historical connections and shared economic interests, many Indigenous cultures that span international borders in the Arctic region have experienced division (Boos et al., 2019; Dorough, 2019; Nicol & Chater, 2021a). Traditional territorial boundaries among northern Indigenous Peoples and cultures, such as the Inuit, were not delineated in the same manner as they are today, which is characterized by processes rooted in colonial origins such as "state-negotiated land claims, reserves, and self-governing structures" (Nicol & Chater, 2021a, p. 61). Instead, Indigenous traditional territorial boundaries were self-determined and intimately tied to relationships with the land. The contemporary Arctic borders we see today are a result of colonization, a legacy spanning centuries.

To add complexity, the Arctic is marked by its challenging climate, extensive distances between settlements, and distinct geographical characteristics, such as the presence of permafrost, all of which can present practical obstacles to the ease of movement and transportation (Ford et al., 2021). This is especially prominent in the North American Arctic but also across the European and Russian Arctic. For example, initiatives like the EU's Kolarctic program aim to enhance transportation infrastructure such as roads and rail connections across the European Arctic. The Kolarctic program spans northern portions of Norway, Sweden, and Finland, along with portions of the northwestern provinces in Russia (Kolarctic CBC, n.d.). Yet the suspension of formally funded CBC projects by the EU has halted progress in such endeavours. In addition, cross-border travel particularly in the European Arctic and subarctic was affected by the Russian invasion of Ukraine as Finland began the construction of a border fence (Finnish Border Guard, 2023a) and Norway enhanced security measures at the shared border with Russia (Ministry of Justice & Public Security, 2022). The next section explains our research case selection and method of analysis.

### *Research Method*

The invasion of Ukraine by Russia in February 2022 had significant implications for Arctic border governance and changes are unfolding in real-time. Given this, our analysis of the changing border dynamics in the Arctic region draws on both news articles and relevant government and other organisational documents, and where possible, existing academic literature, consulted between mid 2023 and early 2024. Analysing these resources provides us with insights into the responses of Arctic states, regional organizations, and international actors to the evolving geopolitical situation and its impact on Arctic borders. To better understand how Arctic border governance has been influenced by the war, we provide five case studies examining some of the changing border dynamics in the Arctic. The cases illustrate dynamic geopolitical processes that differentiate between political and institutional borders.

Focusing on political borders, we first examine the cross-border flows between Finland and Russia, including implications of the war on EU-funded Finnish-Russian CBC which was suspended across key programs, including the Kolarctic program (European Commission, 2022). Second, we examine the change in cross-border flows of people between Norway and Russia, including the implications of the invasion for the 60 km visa-free zone between Sør-Varanger (Norway) and the Pechenga region (Russia). Third, we consider the resolution of the Hans Island, Lincoln Sea, and Labrador Sea border disputes between Canada and Denmark (through Greenland) which established a land border between Canada and Denmark (and thus the EU) (Global Affairs Canada, 2022d).

From an institutional perspective, we focus on the NATO expansion of Finland which shifted NATO's borders towards Russia, after the ratification of Finland's accession by all members (NATO Parliamentary Assembly, n.d.). Finally, we consider the Arctic Council which activities were suspended between March and June 2022 under the Russian chairmanship, resuming in a limited capacity in May 2023 when Norway took over the chairship (Arctic Council, 2023c; U.S. Department of State, 2022).

## Implications of the War in Ukraine for Arctic Border Governance After February 2022

### *Political Border Governance*

#### *The Suspension of Finnish-Russian Cross-Border Cooperation and the Construction of a Border Fence*

The collapse of the Soviet Union in 1991 transformed the Finnish-Russian border governance regime, resulting in the application of both Finland and Sweden for EU membership in 1992 and 1991, respectively. Finnish-Russian bilateral CBC was formally established within the Neighbourhood Area Cooperation Framework of 1992 which regulated Finnish-Russian cross-border activities. With Finland's accession to the EU in 1995, Finnish-Russian CBC was included in the INTERREG[3] and TACIS (Technical Aid to the Commonwealth of Independent States) programs (Koch & Vainikka, 2019).

Finnish EU membership and accession to the Schengen area in 2001 transformed the geopolitical character of the Finnish-Russian border by expanding its function from a state to an EU external border. The management of the EU external borders is a shared responsibility of all member states and the EU, including relevant EU institutions and agencies, such as Frontex (European Commission, n.d.). A separate European Neighbourhood Policy (ENP) aims to foster stability, security, and prosperity in the EU's neighbourhood, focusing on regional CBC at the external borders in the East and South of the EU (European External Action Service, 2021).

Between 2007 and February 2022, Finnish-Russian CBC was delivered by the European Neighbourhood and Partnership Programs (ENPI 2007–2014) and the European Neighbourhood Instrument (ENI 2014–2020). The ENI CBC is an EU-led financing tool providing EU institutions in Brussels with major decision-making responsibilities towards individual cooperation programs. Until the suspension of cooperation activities in March 2022, three distinct CBC programs covered the Finnish-Russian border which has a length of approximately 1,340 km

[3] Interreg Europe is an interregional cooperation program, co-funded by the EU. It aims to reduce disparities within the EU by supporting projects that enhance levels of development, growth the quality of life. The current program runs from 2021 to 2027 and has a budget of € 379 million (INTERREG Europe, 2023).

(from North to South: Kolarctic; Karelia; South-East Finland–Russia program areas) (see Fig. 1).

The Finnish-Russian border is generally recognized by the other EU member states as a frontrunner for effective Schengen and EU external border management due to its advanced surveillance methods and the stable collaboration between Finnish and Russian border guards even throughout the Cold War (Prokkola, 2013). Nevertheless, EU-funded Finnish-Russian CBC, until its suspension, intended to address various challenges that persist in the program regions, mostly related to the socio-economic disparities between East and West that limit economic opportunities for border region residents, environmental protection of the Arctic and sub-Arctic boreal forest and effective border management

**Fig. 1** Finnish-Russian ENI CBC Programs, Core Regions, 2014–2021. Finnish-Russian CBC programs have been suspended as of March 2022. (*Source* Map created by authors. Data from ArcGIS Hub [2022], Eurostat [2021], Hijmans et al. (2015). ENI CBC core regions in accordance with Karelia CBC (n.d); Kolarctic CBC (n.d); South-East Finland–Russia CBC (n.d.). The following software was used: Esri, ArcGIS Pro, version 2.9.0)

(Koch, 2018). Particularly the Arctic municipalities in Lapland, covered by the Kolarctic CBC program, are sparsely populated which poses challenges for both transportation and infrastructure development, as well as a lack of socio-economic opportunities for residents living in rural areas. Table 1 presents the socio-economic indicators for each program.

**Table 1** Finnish-Russian ENI CBC—2014–2021

| | *Karelia* | *Kolarctic* | *South-East Finland–Russia* |
|---|---|---|---|
| Countries | Finland, Russia | Finland, Norway, Russia, Sweden | Finland, Russia |
| Core Regions | FI: Kainuu, Oulu Region, North Karelia<br>RU: Republic of Karelia | FI: Lapland<br>NO: Finnmark, Troms, Nordland<br>RU: Arkhangelsk, Murmansk, Nenets<br>SW: Norrbotten | FI: Kymenlaakso, South Karelia, South Savo<br>RU: Leningrad region & City of St. Petersburg |
| Population | 1.2 million | 2.9 million | 7.5 million |
| Land Area | 263,667 $km^2$ | 1.2 million $km^2$ | 117,538 $km^2$ |
| Budget (including technical assistance) | EUR 43 million | EUR 66 million | EUR 77 million |
| Thematic Objectives | 1. Business and SME Development<br>2. Environmental protection & climate change mitigation<br>3. Border management & security<br>4. Promotion of local culture and preservation of historical heritage | 1. Business and SME Development<br>2. Environmental protection & climate change mitigation<br>3. Improvement of accessibility to the region & sustainable transport and communication networks<br>4. Border management & security | 1. Business & SME Development<br>2. Environmental protection & climate change protection<br>3. Border management & security<br>4. Education, research, technological development & innovation |
| Joint Management Authority Location | Oulu (FI) | Rovaniemi (FI) | Lappeenranta (FI) |

*Source* keep.eu (2021, 2023a, 2023b)

Cooperation between Finland and Russia increased since the collapse of the Soviet Union and the EU aimed to establish a CBC framework based on partnership. However, scholars argue that, despite the EU's efforts to promote equity within the CBC governance frameworks, cooperation activities maintained an assistance-style character with the objective of ensuring regional stability and security in the shared neighbourhood (Haukkala, 2008; Koch, 2018). As a result, the governance structure of the CBC frameworks caused friction between the EU and Russia in the past, as Russia did not want to be merely recognized as a *neighbour* but rather as a *partner* within the ENI CBC framework (Haukkala, 2008).

Relations between the EU and Russia began to deteriorate with the annexation of Crimea by Russia in 2014. At the time, former Finnish Prime Minister Stubb promoted CBC as an essential tool contributing to the stabilization and normalization of cross-border relations in the shared neighbourhood (Fritsch et al., 2015; Virkkunen, 2020). In 2014, following the Russian annexation of Crimea, the EU Commission refrained from sanctioning or suspending ENI CBC programs with Russia (Council of the European Union, 2023). Nevertheless, the EU indicated that:

> The European Council invites the Commission to re-assess EU-Russia cooperation programmes with a view to taking a decision, on a case by case basis, on the suspension of the implementation of EU bilateral and regional cooperation programmes. (European Council, 2014, p. 3)

With the Russian invasion of Ukraine, "the implementation of EU bilateral and regional cooperation programs with Russia was re-assessed and certain programmes suspended", including the three Finnish-Russian CBC programs (Council of the European Union, 2023).

Despite worsening bilateral and multilateral relations between Finland and Russia, as well as the EU and Russia as a result of the invasion of Ukraine, the impact on cross-border mobility was relatively limited due to the travel restrictions that were in place since the start of the COVID-19 pandemic in early 2020 (Fig. 1). Even prior to the pandemic, cross-border traffic had declined since the Russian annexation of Crimea in 2014. Cross-border traffic at the Finnish-Russia border declined from 12 million to approximately 8.5 million travellers annually between 2015 and 2019 (Fig. 1). While cross-border travel began to slowly recover after

2016, the COVID-19 pandemic reduced it to just about 2 million travellers in 2020. Following the invasion of Ukraine by Russia, the number of border crossings was again impacted and failed to make a significant recovery towards pre-pandemic levels, despite the lifting of pandemic-related travel restrictions at the Finnish border (Finnish Border Guard, 2022b) (Fig. 2).

Following the invasion, Finland restricted non-essential travel of Russian citizens into the country from September 3, 2022. Russian citizens who hold entry visas to the Schengen area or are entering Finland for work or commercial purposes continue to be allowed to enter the country (Finnish Border Guard, 2023b). At the same time, Russia also restricted travel for Finnish citizens across the Finnish-Russia border, turning Finnish citizens away at the land border (Yle News, 2022b).

In a direct response to the Russian invasion of Ukraine, Finland presented plans for a 200 km eastern border fence in 2022 which, at the time of writing, is under construction (Yle News, 2022b). On the purpose for the border fence, the Finnish Border Guard explains that:

> Finland prepares for widespread influencing that has been encountered in eastern Europe countries in recent years. The barrier fence improves our

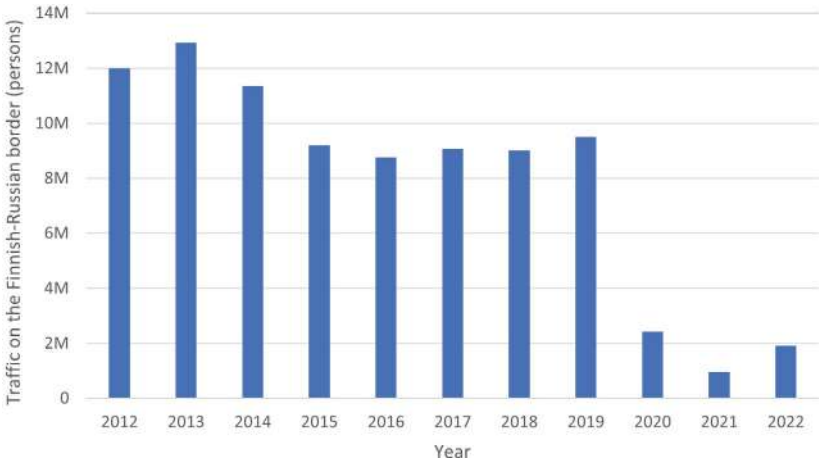


**Fig. 2** Traffic on the Finnish-Russian border (number of persons crossing the border in millions) (*Source* Finnish Border Guard [2022a])

> border surveillance here and now. It supports the management of disruptions at the border in a significant manner. In practice, a physical border fence is necessary in exceptional situations, in which instrumentalised or otherwise widespread illegal migration would take place at the border. The barrier fence reduces Finland's dependence on the effectiveness of Russian border control. (Finnish Border Guard, 2023a)

In general, border walls or fences reflect a hardening of border relations and in the case of Finland and Russia, "can be viewed as a step to further escalate a tense situation" (Nielsen, 2022, p. 52), in addition to transforming the narrative about the border and its residents on each side of the fence.

*Norwegian-Russian Visa Free Travel Zone*

Following the end of the Cold War, Norway was open to collaborating with Russia. Norway's 2006 Arctic strategy explained that "After decades of authoritarian rule and isolationism, Russia is now finding its place in the European cooperation between democratic states" (Norwegian Ministry of Foreign Affairs, 2006, p. 18). In part, Norway sought to "identify further measures to facilitate border crossings between Norway and Russia" (Norwegian Ministry of Foreign Affairs, 2006, p. 9). In the same year, the EU authorized the creation of local border traffic initiatives to facilitate cross-border traffic with some non-EU countries (Gumenyuk et al., 2016), including Russia. While Norway is not a part of the EU, it is a Schengen member and thus able to participate in this agreement (Regulation (EC) No 1931/2006 of the European Parliament and of the Council […] Text Republished in Corrigendum (OJ L 29, 3.2.2007, pp. 3–9), 2006). By 2009, Norway's next Arctic strategy mentioned the creation of a visa-free system with Russia in the context of "maintain[ing] the positive trend in people-to-people cooperation and economic cooperation with Russia" but also to "[simplify] border procedures" (Norwegian Ministry of Foreign Affairs, 2009, p. 39).

In 2010, the two governments signed an agreement to facilitate the visa-free movement of residents living in the Sør-Varanger area of Norway and the Zapoliarniy and Korzunovo areas of Russia, as well as parts of Nikel and Pechenga. Upwards of 42,000 people are eligible for the program (Gumenyuk et al., 2016), although applicants must have resided

in these areas for at least three years and the permit will only allow residents to stay within a 30 km zone of the border for up to 15 days (Royal Ministry of Foreign Affairs, 2010).

Mention of the visa-free system continued in the 2011 Arctic strategy (Norwegian Ministry of Foreign Affairs, 2011), while the 2014 strategy comments on the success of the system and Norway's desire to "expand the local border traffic regime with Russia to include residents of the whole Neiden area" (Norwegian Ministry of Foreign Affairs, 2014, p. 19); which it did in 2016 (The Barents Observer, 2016). Certainly, until this point, the strategies touted this agreement as an important element of Norwegian cooperation with Russia.

In 2017, Norway's next strategy explains that "Despite Russia's violations of international law in Ukraine and Norway's response to these, it is vital that Norway and Russia work together to address key challenges in the north" (Norwegian Ministries, 2017, p. 18) but there is no further reference to the visa-free travel regime. Certainly, this is a change in tone from the previous strategies. Research has shown that despite the annexation and political rhetoric on both sides of the border, outside of a small decline in the number of visa-free permits issued to Russians in 2014, the number of permits issued by both countries was largely unaffected (Makarychev & Kuznetsova, 2022, p. 390). By 2020, the tone had shifted even further and the strategy released that year offered even less discussion on Norwegian-Russian cooperation and also does not mention the visa-free travel agreement; although it does mention a new border agreement between Norway–Finland–Russia and overall says that Norway will "support cross-border cooperation with Russia in the north" (Norwegian Ministries, 2020, p. 23) without providing details on the agreement.

These documents show that prior to the annexation of Crimea, the facilitation of cross-border movements for residents in this border zone was considered a noteworthy achievement in Norway–Russia cooperation and it was seen as a point of pride and a promising opportunity for further expansion. While the program did not shut down post-Crimea, it appeared to no longer be discussed with the same enthusiasm in Norway's Arctic strategy documents.

The invasion of Ukraine started to affect cross-border flows at the Norway–Russia border. By the start of April 2022, both countries stopped simplified visa procedures for certain political actors, while Russia wanted to further close the border to those from "unfriendly states" (Nilsen, 2022a), including Norway (Al Jazeera, 2022). By the end of September

2022, Norway made it difficult for Russians to obtain new Norwegian visitor visas, if it all, and increased security measures along the border in anticipation of potential "illegal border crossing" into Norway as a result of Russian mobilization and other restrictive domestic measures (Ministry of Justice & Public Security, 2022). Despite increased security measures, Norway continued to allow Russians with valid tourist/Schengen visas to cross the border while maintaining options to close the border, if needed (Nilsen, 2022c, 2022d). Yet, one year after the start of the war, the border has remained open and unlike Finland, Norway does not think that a border fence is a necessary security measure (Nilsen, 2023).

As for visa-free travel, there was no immediate plan, at least on the Norwegian side, to suspend the local border traffic agreement although cross-border traffic flows had already been reduced due to the COVID-19 pandemic (Nilsen, 2022a). However, it was reported in August 2022 that no new Russian permits were issued for the program after March 2022, while the number of Norwegian applicants to Russia was unknown (Nilsen, 2022b). On the Norwegian side, there are hopes that the program will continue and even be expanded, however, much remains unknown (Jonassen, 2022).

*Canada–Denmark–Greenland Dispute Resolution*

Prior to 2022, Canada, Denmark, and Greenland had three ongoing boundary disputes. The first was on Hans Island (Tartupaluk), which lies between Greenland and Canada. This dispute dates back to the 1970s when Canada and Denmark were delimiting their continental shelves and is perhaps the most well-known of the three. Generally speaking, the dispute was light-hearted in nature and was dubbed the "Whiskey Wars" in the 1980s with both countries making multiple expeditions to the island. Although there was potential for serious escalation between 2002–05 due to military rather than civilian expeditions, diplomacy eased tensions and the dispute remained calm until its resolution (Lackenbauer & Nielsen, 2022; Landriault et al., 2023; J. J. P. Smith, 2023; Stevenson, 2007).

The second was a maritime boundary in the Lincoln Sea which was not a part of the 1973 maritime boundary agreement (Global Affairs Canada, 2022c). Negotiations carried on and "Although Canadian and Danish negotiators reached a tentative agreement on the maritime boundary in the Lincoln Sea in 2012, it was never finalized" (Lackenbauer & Nielsen, 2022, p. 362). Interestingly enough, as the discussions about Hans Island

carried on, the maritime boundary left a gap at the location of Hans Island (Stevenson, 2007). The third is another maritime boundary in the Labrador Sea that was a result of overlapping claims between Denmark/Greenland and Canada with their Commission on the Limits of the Continental Shelf (CLCS) claim submissions in 2012 and 2016, respectively (Global Affairs Canada, 2022c; Landriault et al., 2023).

All three boundary disputes were formally resolved within four months of the start of the war. For Hans Island, the border was established according to natural markers (Global Affairs Canada, 2022c), resulting in Canada retaining 40% and Greenland 60% of the island (Landriault et al., 2023). The maritime boundaries were also delimited as part of the agreement which "modernizes the 1973 boundary within 200 nautical miles and establishes the maritime boundary in the Lincoln Sea. It further establishes a boundary on the continental shelf beyond 200 nautical miles in the Labrador Sea" (Global Affairs Canada, 2022c; see also: Global Affairs Canada, 2022d).

Indeed, the settlement of this agreement is a testament to a history of cooperation between the involved parties to finalize the seabed delimitation (J. J. P. Smith, 2023). J.J.P. Smith (2023) further explains that "the Hans Island agreement shows that territorial disputes in a law of the sea context can be resolved with mutual gains for competing states" (p. 164). In other words, the hardening or solidification of a border need not be a negative development.

Although the three boundary negotiations ended in 2021 (Landriault et al., 2023) prior to the Russian invasion of Ukraine, this did not stop geopolitics from being applied to the situation after the fact when the agreement was signed in June 2022. The foreign ministers from both countries made statements about being able to peacefully settle boundary disputes (Burke & Raycraft, 2022; Coletta, 2022), with Danish Minister of Foreign Affairs quoted in the news explaining that "it is exactly this type of message we need in a time when international law is under attack, in particular, of course, by Russia's illegal invasion of Ukraine" (Kofod quoted in Breum, 2022). The expectation, at least for Minister Kofod, is that this agreement will "also have a positive influence on future negotiations with Russia over the seabed in the central parts of the Arctic Ocean" (Kofod quoted in Breum, 2022). The agreement also reinforces Canadian sovereignty through continued use of this territory as Natan Obed, the president of the Inuit Tapiriit Kanatami (ITK), was quoted explaining that "Our use of these areas underlie claims to sovereignty by nation states"

(Obed quoted in Global Affairs Canada, 2022c). The agreement also has implications for Inuit in Canada and Greenland.

Inuit have been separated by the creation of national borders, although the dispute over Hans Island seemingly was inconsequential in this regard (Breum, 2022). Nevertheless, the creation of these new boundaries should not have negative impacts for Inuit as they "will still be able to enjoy unhindered mobility, hunting and fishing" (Breum, 2022). Indeed, the Canadian government explains that even though there is now an official international border on Hans Island, the agreement "will ensure the continued access to and freedom of movement on the entirety of the island" (Global Affairs Canada, 2022d). This is an important development that may have implications beyond border management for Arctic governance. Landriault et al. (2023) explain that "the specific clause enabling Indigenous mobility through this border is also significant to the extent that any negotiations regarding the Arctic include Indigenous priorities and traditional uses of the land" (pp. 9–10).

## *Institutional Border Governance*

### *NATO Expansion of Finland and Sweden*

The expansion of NATO into Finland and potentially Sweden represents a significant change in Arctic border governance as it shifts the geopolitical security framework by hardening the borders between the EU and Russia. We highlight NATO's expansion into Finland within the context of Arctic affairs based on Finland's shared border with Russia and its identification as an Arctic country (Publications of the Finnish Government, 2021). According to its 2021 Arctic strategy, "Finland's Arctic interests and Arctic expertise are relevant to the whole country, and, on the other hand, the Arctic character of entire Finland supports and enhances Finland's international image as an Arctic country in international contexts" (Publications of the Finnish Government, 2021, p. 12).

Since the end of World War II, Finland and Sweden pursued a foreign policy of military non-alignment, which means they refrained from joining NATO since it was established in 1949 (Cottey, 2017; Forsberg, 2018; Karp, 2007; Lödén, 2012). Particularly Finland had, since the end of World War II, adopted a foreign policy approach of non-alignment which refers to a policy in which a smaller country adopts a stance of neutrality in the context of a larger and more powerful neighbour—in this case, the

Soviet Union. Finland's foreign policy approach of non-alignment was also referred to as "Finlandization" for cases in which a country refrains from opposing or challenging a perceived larger geopolitical neighbour's foreign policy rules (Arter, 2023). However, with the collapse of the Soviet Union in 1991, both Finland and Sweden swiftly applied for EU membership in 1992 and 1991 respectively, ending de facto the neutrality and positions of economic and political non-alignment of both countries and thus establishing a new EU external border with Russia.

Finland's and Sweden's foreign policies of "neutrality" until the invasion of Ukraine should not be equated with military isolation (Lödén, 2012). Throughout the last decades, Finnish and Swedish armed forces have participated in various activities and programs led by NATO (NATO, 2023d, 2023e). For example, both countries joined NATO's "Partnership Interoperability Initiative" when it was launched at the Wales summit in 2014 (NATO, 2023c). This initiative allows non-NATO countries to participate and engage in in-depth political dialogue and practical cooperation with the military alliance. Current members are Australia, Georgia, Jordan, Sweden, and Ukraine (NATO, 2023c). Finland and Sweden were also early members of the "Partnership for Peace" (PfP) program designed for countries in the Euro-Atlantic area which was established in 1994 to "enable participants to develop and individual relationship with NATO, choosing their own priorities for cooperation, and the level and pace of progress" (NATO, 2023b). Through these programs, both countries actively contribute to international crisis management and peace-keeping operations, share intelligence on security threats, and conduct joint military exercises with NATO for the purpose of testing and improving interoperability and coordination in case of a potential security challenge in the broader Baltic Sea and Arctic regions. Although Finland and Sweden participated in joint training exercises and operational activities since the end of the Cold War, their formal non-alignment with NATO helped moderate the relationship in the Baltic Sea region with Russia (Forsberg & Vaahtoranta, 2001).

Despite Finland and Sweden's close ties with NATO and its member states, accession to NATO had not received public approval by either parliament, until the Russian invasion of Ukraine in February 2022 (Arter, 2023; Fittante, 2023; Simons et al., 2019). Both Finland and Sweden applied for membership on May 18, 2022, with Finland signing the accession protocol on July 4, 2022, and becoming a member on April 4, 2023 (NATO, 2023d), formally expanding NATO borders eastwards

(Fig. 3). While Sweden also applied for NATO membership in May 2022, and signed the Accession Protocol in July 2022, the country became a member on March 7, 2024 (NATO, 2024).

Notably, NATO membership was not under consideration in Finland in 2014 when geopolitical tensions with Russia started to increase; however, Russia's invasion of Ukraine marked a turning point in which 76% of respondents to a survey conducted by the Finnish national broadcasting company Yle supported NATO membership in May 2022 (Yle News, 2022a). According to Yle, "before the Russian attack on Ukraine, a majority of Finns had long opposed membership" but in 2022, "backing for membership in Yle polls has grown from 53 percent in February to 62 percent in March and 76 percent in May 2022" (Yle News, 2022a).

The Russian invasion of Ukraine compelled both countries to apply for NATO, despite Russian Defence Minister Sergei Shoigu's statement that "Russia would be forced to take counter-measures" (Kauranen & Gray, 2023) without elaborating on the nature of these "counter-measures". Scholars emphasize that Finland's and Sweden's NATO memberships fundamentally transform European security as both countries "will be security providers, with highly capable forces" (Alberque & Schreer, 2022, p. 68) in the Baltic Sea region and beyond. According to the Finnish Ministry of Foreign Affairs, "NATO membership will strengthen Finland's security in the changed security environment and improve stability and security in the Baltic Sea region and Northern Europe" (Ministry for Foreign Affairs of Finland, 2023a). In addition, the ministry indicates that the security guarantees in Article 5 of the North Atlantic treaty was one of the main motivators to apply for membership:

> The deterrent effect of Finland's defence will be considerably stronger than before, as it will be based on the capabilities of the entire Alliance, on collective defence planning and on the political weight of the NATO member countries. (Ministry for Foreign Affairs of Finland, 2023b)

Finland's NATO membership was confirmed in May 2023, and the geopolitical consequences of this decision, particularly in terms of its future interactions with Russia, are yet to fully materialize. Despite Russia's assertive position against any further eastwards expansion of NATO borders, experts agree that Finland stands on the brink of a new chapter in its relationship with Russia (S. J. Smith, 2023; Vanhanen,

**Fig. 3** European NATO member states, invitees, and aspirational countries as of August 2023 (member state Iceland not shown on map) (*Source* Map created by authors. Includes data from ArcGIS Hub [2022]. NATO members and aspirational countries in accordance with NATO [2023a] and NATO (2024). The following software was used: Esri, ArcGIS Pro, version 2.9.0

2022). While Finland's relationship with Russia is likely to encounter challenges in the coming years, it is crucial to acknowledge that during the Cold War, the connection between Finland and the Soviet Union was defined by pragmatism and diplomacy, even involving a certain level of bilateral CBC. Therefore, Finland's and Russia's future relationship may again necessitate practical solutions, requiring both countries to navigate within an altered geopolitical landscape.

*Arctic Council Pause under Russian Chairmanship*

The Arctic Council was created in 1996, bringing together the Arctic states to cooperate on issues pertaining to the environment and sustainable development (Arctic Council, n.d.). It was also an outcome of Mikhail Gorbachev's 1989 speech calling for peace and cooperation in the Arctic (Gricius & Fitz, 2022). In other words, the Arctic Council was a way to soften borders between Russia and the other Arctic states. Following the 2014 Russian annexation of Crimea, some disturbances were observed within the Arctic Council,[4] yet, work carried on as normal due to a "separation of issue areas" (Byers, 2017, p. 389). That said, a potential for escalation remained (Käpylä & Mikkola, 2019), which turned out to be the case following the invasion in 2022.

On March 3, 2022, the governments of Canada, the United States, Iceland, Denmark, Norway, Sweden, and Finland each released an identical statement explaining that international cooperation is no longer possible with Russia and that each of the "states are temporarily pausing participation in all meetings of the Council and its subsidiary bodies"[5] (Global Affairs Canada, 2022a) until a way forward can be determined. This decision was seemingly taken by the states themselves as consensus would not be reached within the Arctic Council (Koivurova & Shibata, 2023). These seven states, however, were not the only Arctic Council members to speak out about the war. Three Permanent Participant organizations[6]—the Gwich'in Council International (GCI), the Inuit Circumpolar Council (ICC), and the Saami Council—released their own

[4] These include the potential ongoing boycotts of meetings held in Russia (Canada and the US did boycott one meeting) and an indefinite delay in decision on EU's Observer status (Byers, 2017; Käpylä & Mikkola, 2019).

[5] Given that the statements are identical, the Canadian document is used for reference.

[6] The Aleut International Association's (AIA) website was under construction at the time of writing and the authors were unable to find a public statement.

statements in the weeks following that were in support of the Arctic Council's pause (Gwich'in Council International, 2022a; Inuit Circumpolar Council, 2022; Saami Council, 2022). The Arctic Athabaskan Council (AAC) did not release a statement in March 2022, but released a statement in February 2022 following the invasion that condemned the war, addressed Indigenous rights, and expressed their concern for the future of the Arctic Council (Arctic Athabaskan Council, 2022). RAIPON released a statement in support of the war,[7] a position that was not supported by other Russian Indigenous leaders (Zellen, 2023).

At the start of June 2022, Russia indicated that it still valued the work of the Arctic Council and that activities should resume (Edvardsen, 2022). On June 8, 2022, another joint statement[8] was released by Arctic states, except Russia, reconfirming the importance of the Arctic Council and explaining that "projects that do not involve the participation of the Russian Federation" (Global Affairs Canada, 2022b) may resume. While this was a step forward, it ultimately created a border within the governance structure of the Arctic Council between Russia and the other member states. The exclusion of Russia and Russian researchers from Arctic Council activities has affected a number of projects: "about a third of the council's 130 projects are on hold, new projects cannot go ahead and existing ones cannot be renewed" (Pamuk et al., 2023). Moreover, climate data from Russia is no longer being shared with colleagues in western countries and the scientific networks with Russian researchers can be lost (Andreeva, 2023; see also: Collins, 2022).

As for the Permanent Participants, it appears that only the GCI released a statement regarding the pause. They further condoned the war and expressed that while they understood that the Arctic Council was unable to operate as normal, they "demand to be a part of discussions on the resumption and continuation of Arctic Council work as well as the different modalities that are being considered" (Gwich'in Council International, 2022b). This is particularly important because while the Permanent Participants do not have voting rights, they do have "full consultation rights in connection with the Council's negotiations and

[7] To learn more about the history of RAIPON and different Indigenous views on the war, see the policy primer *RAIPON, Russian Indigenous Peoples, and the War in Ukraine: Pro-Kremlin Narratives and Voices of Dissent* (Lackenbauer et al., 2023).

[8] Given that the statements are identical, the Canadian document is used for reference.

decisions" (Arctic Council, n.d.) and they were seemingly overlooked in this case (see: Zellen, 2023).

Many of the Permanent Participants continued their work, although collaboration with Russia was not possible. Of course, this is a concern for lost environmental data, but the lack of communication across borders has also raised concern for Indigenous Peoples living in Russia. A representative of the GCI also expressed that given the new security situation in the Arctic with the adhesion of Finland into NATO, Indigenous Peoples also need to be represented at these forums (Jonassen, 2023a).

Almost a year later at the time of the Chairship transfer to Norway in May 2023, Russia continued to express its interest in participating in the Council (Jonassen, 2023c). While formal political representation was absent from the meeting (Jonassen, 2023b), a joint statement from *all* states recognized "the historic and unique role of the Arctic Council for constructive cooperation, stability and dialogue between people in the Arctic region" and further expresses a "commitment to work to safeguard and strengthen the Arctic Council" (Arctic Council, 2023a, points 1 and 2). On the one hand, it was uncertain how the organization would continue to operate as geopolitics complicates cooperation but on the other, the exclusion of Russia would be detrimental to international and cross-border scientific projects (Last, 2023). To move forward, the states worked together and the institutional border that was implemented in March 2022 appears to be softening as work gradually resumes, including with Russia (Edvardsen, 2023).

## Discussion: Spillover and Implications for the Cultural, Institutional, and Political Interlinkages of Arctic Borders

The events following the Russian invasion of Ukraine had a significant impact on Arctic border governance as shown by the five case studies which illustrated the spillover effects of the war in the Arctic. In this section, we discuss the political, institutional, and cultural interlinkages that are shaping the current Arctic border governance framework through the lenses of MLG, cross-border mobility, and institutional bordering practices.

Considering that borders represent institutions, practices, and discourses (Paasi, 2005) as opposed to "lines in the sand" (Parker et al.,

2009), our analysis demonstrates the perpetually changing nature of Arctic borders which were influenced by the Russian invasion of Ukraine. While borders with Russia hardened and became less permeable with the suspension of CBC programs and some visa-free travel agreements, the establishment of the new border between Canada and Greenland on Hans Island illustrates the way in which borders manifest territorial sovereignty while stabilizing relations between both Canada and Denmark in the Arctic.

However, the suspension of Arctic Council activities risks disrupting ongoing efforts to address environmental, economic, and social challenges in the Arctic that is increasingly under threat by climate change resulting in rapidly changing freezing and thawing cycles as well as the environmental degradation of permafrost (Ford et al., 2021). Furthermore, the decision by Finland and Sweden to join NATO has wider geopolitical implications, potentially affecting the way border security and defence issues are addressed in the Arctic and beyond. Similarly, the suspension of CBC programs and some visa-free travel agreements across the Russian border can impact cultural and economic ties that are vital for sustainable development and cooperation in the Arctic and sub-Arctic.

The case studies highlighted the interconnectedness of political, institutional, and cultural aspects of borders in the Arctic region. The suspension of Finnish-Russian CBC and the suspension of new Norway-Russian visa-free travel permits illustrate how political tensions resulting from the Ukraine war can disrupt established cross-border relations. The decision of Finland and Sweden to join NATO could potentially alter the political and security dynamics of the region, affecting how borders are managed and perceived. Additionally, the resolution of the Hans Island dispute showcases the significance of diplomatic efforts and cultural understanding in managing territorial conflicts peacefully.

### *Multi-Level Governance*

The impact of the Ukraine war on Arctic border governance underscores the importance of MLG and the cultural aspects of border governance. The Arctic Council pause demonstrates how decisions and actions at the international level can have ramifications for regional cooperation. More specifically, the pause was a decision taken and enforced by the non-Russian states themselves rather than an institutionally made decision. Indeed, given that the Arctic Council is a consensus-based organization,

it is unlikely that Russia would have agreed to the pause (Koivurova & Shibata, 2023). The demand made by the Gwich'in Council International to be included in Arctic Council resumption discussions, therefore, is likely a result of the exclusion of the Permanent Participants from the decision-making process (see: Zellen, 2023). This is problematic as the "Permanent Participants have full consultation rights in connection with the Council's negotiations and decisions" (Arctic Council, n.d.). Moreover, Indigenous groups have expressed that "the needs of their communities have little to do with the crisis in Ukraine or geopolitical rivalries" (Bloom, 2022). Here, we can see a new institutional boundary emerge with consequences at the sub-national and regional levels.

The pause meant that Permanent Participants had to suspend some of their cross-border activities, such as with the Saami Council and their work in the Russian part of Sápmi. However, challenges also arose outside of the Arctic Council. Some Russian Saami organizations, or individuals within them, supported the war, and in April 2022 the Saami Council "made the decision to suspend formal relations with Russia's two internationally recognized Sámi organizations—the Kola Sámi Association and the Association of Sámi in Murmansk Oblast (OOSMO)" (Last, 2022). Of course, not everyone in the Russian Saami community shares these views and there is concern about how the suspension of activities, and the war in general, will affect those living in Russia (Last, 2022; Zellen, 2023). Certainly, the varying levels of governance—local, national, and international—must be coordinated and aligned to effectively address the challenges posed by the evolving geopolitical landscape.

### *Cross-Border Mobility*

As mentioned, Norway sought to deepen cross-border connections with Russia after the Cold War ended and seemingly recognized the Sør-Varanger-Pechenga borderland community as one way to do so. One such approach to this was the twinning of Kirkenes and Nikel in 2008 which was an initiative driven by both federal and local governments; although this initially may have been more of a federal than local initiative (Joenniemi & Sergunin, 2013). The twinning initiative seemed to create a borderland that focused on three things: "capacity-building … problem-solving … and cultural interaction in order for negative perceptions of the neighbor to be down-graded and familiarity to be up-graded" (Joenniemi & Sergunin, 2013, p. 151). Moreover, the visa-free local

border initiative stemmed from this twinning process and resulted in an uptick in cross-border traffic and the opening of consulates in Kirkenes and Murmansk to process these permits (Joenniemi & Sergunin, 2013). Certainly, the program has helped develop cross-border cultural connections between people and communities that have now been negatively affected by the war. For example, a local resident on the Norwegian side of the border was quoted in the Barents Observer explaining they "are still our neighbors and we still have some good friends on the other side" and that "This type of iron curtain walls is quite negative for the community" (Aspholm quoted in Nilsen, 2023). The use of the term "iron curtain" by this resident is certainly telling and indicates that people do not want these types of East-West borders to come back, especially given the efforts to eliminate them in the first place.

The construction of a border fence along parts of the Finnish-Russian border and the suspension of CBC programs are concrete manifestations reflecting a hardening of the border and a return to division reminiscent of the Cold War era. In a report published by the Finnish government, the authors claim that Russia's invasion of Ukraine "makes it unlikely that Russia-related programmes will resume in the next few years" (Koivurova et al., 2022, p. 8). This could have significant implications for cross-border relations, not only in the European Arctic but for the entire Arctic region. Cooperation in the Arctic has been crucial for addressing shared challenges such as climate change and environmental protection. For example, the Kolarctic program played an important role in fostering cooperation between Finland and Russia in areas such as environmental protection, sustainable development, and improving connectivity between remote northern and Arctic regions on both sides of the border (Kolarctic CBC, n.d.). Without CBC, it will be more challenging for Finland and Russia to exchange knowledge, share resources, and implement coordinated measures to address shared challenges in the Arctic. Furthermore, the suspension of CBC programs strains diplomatic relations between Finland and Russia and in the absence of open channels of communication and cooperation, tensions may increase, potentially impacting other areas of multi- and bilateral relations beyond environmental and cross-border regional issues in the Arctic, including the security environment (Koivurova et al., 2022).

Not all instances of hardening borders, however, are negative and can serve as a steppingstone for increased cross-border mobility, as is the case with the Hans Island delimitation. Despite mobility applying solely to

Hans Island in the case of the new borders and boundaries between Canada and Greenland (Denmark), it is a step closer to greater Inuit mobility because "it holds a significant symbolic value for the Inuit of both sides, since it demonstrates the integrity of Inuit traditional areas that extend beyond state-established sovereign borders" (Tsiouvalas & Enyew, 2023). At the same time, Tsiouvalas and Enyew (2023) also point out that despite prior consultation, Inuit were excluded from formal negotiations. Despite these criticisms, this new boundary agreement has the potential to help Canada improve cross-border mobility for Indigenous Peoples, including between Canada and Greenland, as identified in Canada's *Arctic and Northern Policy Framework* (ANPF). Increased international mobility was also raised during the framework's consultation process by northerners themselves, indicating the importance of mobility rights (see: Everett, 2022). Moreover, there have been previous efforts to increase mobility, such as through the Pikialasorsuaq Commission (see: Eegeesiak et al., 2017). However, it will still probably take some time to work out the modalities to support Inuit cross-border mobility beyond Hans Island.

### *Institutional Bordering*

Following the Russian invasion of Ukraine, the North American and Nordic member states decided to pause AC activities. Koivurova and Shibata (2023) explain that this decision suggests there is no desire for the organization to come to an end and that soft-law organizations can take decisions like this, unlike treaty-based organizations. There is an element of politics to the decision to pause the Arctic Council as Gricius and Fitz (2022) point out that "members did not suspend Council activity during the 2008 Russian–Georgian war, 2014 annexation of Crimea, or amid any other conflict involving an Arctic member state" (p. 4) such as the American invasion of Iraq (see: Zellen, 2023). To this end, Gricius and Fitz (2022) explain that "the fact that the Council did not shut down during previous crises suggests that the other seven Arctic states viewed this conflict as a more significant, state-driven stimulus" (p. 4) and that the Arctic Council is simply not designed to address these kinds of events.

Indeed, the Arctic Council may have had some political origins stemming from the end of the Cold War, and while some political elements remain in its structure, such as the Senior Arctic Officials (SAOs) who are government appointees that advance national agendas (Arctic Council,

n.d.), politics is not its main purpose. Norway's SAO Morten Høglund explains that "without functioning Working Groups, we don't have a Council" (Høglund quoted in Arctic Council Secretariat & Bär, 2023) in regard to the resumption of working group activity. In other words, science and international research cooperation is what brings the states together through the Arctic Council, not politics. Thus, the pause in 2022 indicates that spillover took place along specific geopolitical lines, and as Zellen (2023) points out, Russia's decision to invade Ukraine led Sweden and Finland to seek NATO membership, which as we argue, has created a new institutional boundary with Russia in the Arctic Council.

When discussing the formation of delineations within institutions such as the Arctic Council, it is also important to consider the eastwards expansion of NATO towards Russia since Finland became a member in May 2023. Since Russia's invasion of Ukraine, the geopolitical environment in the Arctic has changed dramatically, especially the potential of future cooperation between Arctic states (Middleton, 2023). With formal CBC programs suspended between Finland and Russia, and Finland's application to NATO which ended its era of military non-alignment, the space for cooperation with Russia in the Arctic context diminished significantly, especially after the suspension of Arctic Council activities. In general, Finland's NATO accession is considered a "geopolitical game-changer" by enhancing the defence capabilities of the Baltic Sea region and increasing the defence alliance's capabilities along its eastern border which has now increased by 1,300 km (Hassebrauck, 2023). While the ramifications of Finland's NATO membership have yet to unfold, especially also given Sweden's acceptance into the organization in March 2024, the future relationship between Finland and Russia is permanently altered and this may affect future cooperation effort at the level of the Arctic Council as well.

## Conclusion

This chapter sought to understand and describe how Arctic border governance has changed since the Russian invasion of Ukraine in February 2022. The events that unfolded after the invasion have triggered significant spillover effects, impacting cross-border mobility and the dynamics of MLG in the Arctic region. With the termination of CBC programs between Russia and the Nordic countries, changes to cross-border

flows between Russia and Finland and Russia and Norway, the temporary suspension of Arctic Council activities, the eastwards extension of NATO borders towards Russia, and the resolution of the territorial dispute between Canada and Denmark concerning Hans Island and in the Lincoln and Labrador seas, we are able to identify the changing connections between the political, institutional, and cultural dimensions of Arctic border dynamics since the invasion of Ukraine.

These changes have influenced political, institutional, and cultural border governance dynamics across the circumpolar Arctic. Moreover, they highlight the importance of MLG (and how easily it can be limited amidst geopolitical tensions) and the need to manage spillover effects from international conflicts in order to maintain effective cooperation and sustainable development in the Arctic region. As geopolitical situations evolve, it's crucial for Arctic states to navigate these challenges while preserving the delicate balance of interests and priorities within the context of Arctic border governance.

Given these new political and institutional borders, the potential for cooperation and collective action in areas of shared interest has been hindered. Science diplomacy can, however, play a role. Science diplomacy can be defined in different ways, but ultimately it is "is the use of science to achieve a certain foreign-policy goal" (Bertelsen, 2020, p. 235). It was a tool used both during and after the Cold War to build bridges. Indeed, science diplomacy and research more broadly, particularly through various international Arctic scientific organizations (see: Berkman et al., 2017), could yet again seek to broker relations and open dialogue between Russia and the Arctic states who oppose the war in Ukraine. However, Russian scientists displayed a rather large Russian Flag on the sea ice on August 22, 2023, to celebrate State Flag Day. According to Gunhild Hoogensen Gjørv, "If you have a very highly politicized scientific community, that hinders the possibility for cooperation with Russia" (Hoogensen Gjørv quoted in Vereykina, 2023). Nevertheless, this is a single incident and science should be used as a mechanism to foster trust (The Royal Society, 2010). In the case of the current geopolitical situation in the Arctic, science and science diplomacy can serve as a vehicle to re-establish lines of communication which can only be done if there are no hidden agendas.

Since the changes to border governance that have occurred in just over a year and the current dearth of published academic literature on the consequences of the war for Arctic governance, there are likely multiple areas that future research could or should focus on. Based on

our case studies and findings in the discussion, we suggest that future research should address the interlinkages between political, institutional, and cultural borders. More specifically, this research could examine if and how state governments recognize and respond to the importance of cross-border mobility pertaining to initiatives that support cultural and capacity building of local border communities, including Indigenous mobility in times of geopolitical uncertainty. If states don't respond, research could explore the tensions between state and local needs and how this affects cross-border governance, especially as cross-border and international cooperation will likely start from the bottom up.

Considering that the war in Ukraine is still ongoing with no clear end in sight, there are many uncertainties that make the situation complex and difficult to predict how border governance will be affected in the long run. For instance, at the time of writing, although the Arctic Council is resuming its work, it remains uncertain if the institutional border that was implemented during the pause will affect Russia's ability to fully participate in future Council work as it previously had. It is also not clear if new tensions will emerge in the Arctic Council as a result of the Finnish and Swedish membership in NATO. Moreover, the consequences of hardening political borders on cross-border communities are not clear. It will be important for the research community to collaborate with those affected and think about what lessons learned can be applied in the event of future geopolitical situations to limit disruptions to the different forms of border governance, and cross-border flows and cooperation in the Arctic.

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# Back to the Past? The Barents Euro-Arctic Region Between the 'Old' and the 'New' Cold War

*Tiziana Melchiorre*

## Introduction

Geographically, the Barents Euro-Arctic Region (BEAR) is part of the wider Arctic region.[1] It is constituted of thirteen subregions in four countries, namely Finland, Norway, Russia and Sweden: Finnmark, Nordland, Norrbotten, Västerbotten, Troms, Kainuu, Lapland, Oulu, Arkhangelsk, Karelia, Komi, Murmansk and Nenets (Elenius, 2015). It is a vast region that is inhabited by approximately 5159 million people and whose population and territory are mostly Russian (75%) (Grid Arendal, 2015). Indeed, the largest cities of the BEAR, which is the most populated area of the Arctic, are Arkhangelsk and Murmansk, located in Russia (BEAC, 2023c).

Since its creation in 1993, just a very few years after the end of the Cold War and the dissolution of the Soviet Union, the Barents Euro-Arctic Region (BEAR) has generally been considered as an 'international success story' (Edvastri, 2023) because it has fostered trust and stability

[1] The Arctic region is constituted of Canada, Denmark, Finland, Norway, Sweden, Russia and the United States.

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in a region that had been the theatre of military confrontation during the Cold War (BEAC, 2021). Nevertheless, the war in Ukraine, which began on the 24th of February 2022 (although the crisis had already begun in 2014 with the Russian annexation of Crimea), has halted cooperation and worsened the relations among the states leading to the re-militarization of the region.

Given this background, the aim of this chapter is to analyse the impact of the war in Ukraine on governance in the Barents Euro-Arctic Region (BEAR) by linking the regional and the international levels. These two levels are strictly intertwined as what happens at the international level affects what happens at the regional one. Therefore, the analysis will explain how the relations among the states in the BEAR have evolved since the Cold War by dividing the chapter into two sections. The first one focuses on the cooperative efforts that began in the early nineties by leading to the establishment of the Barents Euro-Arctic Council (BEAC) and that have been recently halted because of the war. The second section will focus on the militarization of the BEAR, which began before the war in Ukraine but that has intensified because of that (since 2014). These two sections, read together, give an overview of the geopolitical developments occurred from the Cold War to the war in Ukraine and their impact on governance in the region.

## From Cooperation to Tensions: The Evolution of the BEAR from the Cold War to the War in Ukraine

The end of the Cold War brought about radical changes in the international system leading to rethink the relations among states. In this context, the creation of new regions aiming at strengthening the relations among states sharing geographical characteristics (e.g. borders, harsh climate, sparse population, etc.), and eventually also having historical and cultural links, played a key role in reinforcing the ties among them. This is the case of the BEAR, which was established in 1993, just one year after

the creation of the Nordic-Baltic Sea Region[2] with which it has some states in common, namely Finland, Norway, Russia and Sweden.

Nevertheless, cooperation in the BEAR was not new as it had already began in the 1950s when the Nordic Passport Union was established in order to set up a passport-free area, which was followed by the common labour market in the same years. These cooperative initiatives were at the basis of the establishment of the North Calotte Region, which is considered the forerunner of the BEAR and which included the northern areas of Finland, Norway and Sweden (Elenius, 2015). The North Calotte Region was established in accordance with the North Norwegian Plan of 1951 aiming at reducing the disparity between the more developed southern and the backward northern areas (Elenius, 2015). In the 1960s, the North Calotte cooperation, which gradually included also the Russian Murmansk area and the Kola Peninsula, was part of a process launched by various political groups in Northern Europe that began considering 'the potential of the circumpolar north as a means of re-establishing horizontal connections and functional cooperation across the Cold War political divide' (Elenius, 2015). In the 1970s and the 1980s, other forms of cooperation took place like the Kvarken cooperation across the Gulf of Bothnia and comprising Umeå in the Västerbotten county and Vasa in the Ostrobothnia country that were the main partners (Elenius, 2015). In spite of this and of official statements, Nordic cross-border cooperation was complicated by nation-state prejudices and national legislation (Elenius, 2015). Additionally, the Cold War confrontation between East and West negatively affected cooperation in the High North. However, here it is interesting to notice that paradoxically cooperation between Norway and the Soviet Union was strengthened during the 1980s initially through an environmental agreement (environmental issues were considered less sensitive than others such as the military security ones), which was followed by negotiations on the demarcation of national economic sea zones in the Barents Sea (Elenius, 2015). Very importantly, in 1987 Soviet leader Mikhail Gorbachev held the so-called Murmansk Speech with which he launched a series of initiatives aiming at relaxing the relations among states and promoting cooperation (Elenius, 2015; Gorbachev, 1987). In his speech, Gorbachev stressed his intention of

[2] The Nordic-Baltic Sea Region (sometimes called just the Baltic Sea Region) includes Denmark, Estonia, Finland, Germany, Iceland, Latvia, Lithuania, Norway, Poland and Russia.

making the Arctic a 'pole of peace' by 'lowering the level of military confrontation' between the East and the West (Åtland, 2008; Axworthy, 2012).

In order to understand the very aims of Gorbachev's speech, it is necessary to insert it in the wider context of his foreign policy strategies. In particular, Gorbachev based his foreign policy on the so-called 'New Thinking' concept that he launched in 1986. This concept served Gorbachev's main aim of foreign policy, namely 'to make sure that the USSR [Union of Soviet Socialist Republics] faced the 21st Century as a great power' (Wallander, 2001). In order to reach this goal, Gorbachev considered essential improving the East–West relations, which were quite poor but slightly improving when he came to power in 1985 (Wallander, 2001; Van Oudenaren, 1990). As Lars Elenius puts it, 'at the time the speech was an early indicator of the geopolitical change which was about to become a real turning point for the entire Arctic region' (Elenius, 2015). Immediate outcomes were the friendship agreement between the Murmansk region and Finnmark county signed in 1988 and the Rovaniemi process initiated by Finland in 1991, which led into the Arctic Environmental Protection Strategy (AEPS) signed by the eight Arctic states (Elenius, 2015).

The changed geopolitical environment leading to increased international cooperation encompassing both national and regional levels was a favourable environment for the initiative launched by Foreign Secretary of Norway Thorvald Stoltenberg in 1992. He proposed the establishment of a transnational region, the BEAR, with the aim to maintain stability in northern Europe by building networks and trust through transnational activities between the eastern and western parts of the region (Elenius, 2015; Hønneland, 1998). A major reason for this proposal was the fact that Norway was considered to be in a peripheral position in the cooperative framework proposed by an epistemic community of social scientists, civil servants and politicians from the Baltic states (Hønneland, 1998). For this reason, Norway feared to lose its say in the making of security in Northern Europe (Hønneland, 1998). Thus, representatives from the Norwegian Ministry of Foreign Affairs and the international relations research institutes in Oslo began talking about the possibility of creating a Northern region in which Norway could play a significant role (Hønneland, 1998).

Consultations took place between Norway and its northern allies as well as with Russia (Hønneland, 1998). Finally, the BEAR[3] was established with the Kirkenes Declaration signed by the Ministers of Foreign Affairs or representatives of Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the Commission of the European Communities (EC) in 1992.[4] The Kirkenes Declaration, which is not binding as it is a soft-law instrument, is a clear example of the construction of a region for geopolitical aims. Indeed, the Declaration clearly states that the Participants to the conference expressed their conviction that expanded cooperation in the Barents Euro-Arctic Region will contribute substantially to stability and progress in the area and in Europe as a whole, where partnership is now replacing the confrontation and division of the past. The Participants felt that such cooperation will contribute to international peace and security (BEAC, 1993).

Additionally, the Declaration linked the regional to the international level stressing that the Barents cooperation initiative is 'part of the process of evolving European cooperation and integration, which has been given a new dimension with the Conference on Security and Cooperation in Europe' (BEAC, 1993). Also, the Participants considered the establishment of the Council of the Baltic Sea States (CBSS-it was established in 1992), which was partly taken as a model, an important step towards the strengthening of cooperation in Europe. In the same way, they considered the construction of the BEAR as 'an important contribution to the new European architecture' as it was meant to reinforce the relations between Northern Europe and the rest of the European continent (BEAC, 1993). In this context, they recognized the importance of the profound 'historical changes caused by the end of ideological and military confrontation in Europe' (BEAC, 1993).

Furthermore, in the Declaration the Participants pledged to cooperate at both national and regional levels (Elenius, 2015). In order to

[3] Initially, cooperation was supposed to include the three northernmost counties of Norway, Norrbotten and Lappland from Sweden and Finland, respectively, as well as Murmansk and Arkhangelsk oblasti from the Russian Federation. However, Finland and Russia asked to include the Republic of Kareliya as well. The Russian Nenets Autonomous Okrug and the counties of Oulu (Finland) and Västerbotten (Sweden) were included in 1997 and 1998 respectively (Hønneland, 1998).

[4] The conference in Kirkenes was also attended by observers from the United States of America, Canada, France, Germany, Japan, Poland and the United Kingdom (BEAC, 1993).

do so, they established two governance structures, namely the intergovernmental Barents Euro-Arctic Council (BEAC) and the interregional Barents Regional Council (BRC). The BEAC meets at the Foreign Ministry level at the end of the chairmanship term in the chairmanship country (BEAC, 2023d). The Committee of Senior Officials (CSO) is in charge of organizing the work of the BEAC.[5] Currently, the chairmanship, which rotates every second year, is held by Finland (2021–2023). The Finnish chairmanship focuses on the areas of sustainable development and healthy environment, people-to-people contact and transport and logistics (Ministry of Foreign Affairs of Finland, 2021). The BRC represents 13 member counties and a representative of the indigenous peoples in the northernmost parts of Finland, Norway and Sweden and North-West Russia (BEAC, 2023b). In order to develop and coordinate cooperation in the region, the BEAC has established five working groups (WGs): Barents Forest Sector, Economic Cooperation, Environment, Barents Euro-Arctic Transport Area and Rescue Cooperation. Also, the BEAC closely cooperates with the BRC through six joint working groups: Culture, Education and Research, Energy, Health and Social Issues, Tourism and Youth. The WGs are important because they 'constitute a cross-border platform for exchange for the civil servants and professionals of the respective field both on the national and regional level' (BEAC, 2021). The Chairmanship of the Barents Regional Council, which rotates biennially between its 13 member counties, is currently (2021–2023) held by the Nenets Autonomous Okrug (BEAC, 2023b). This latter focuses on 'overcoming the challenges of remoteness and inaccessibility of territories' (BEAC, 2023b).

The overall objective of the BEAC is achieving sustainable development (BEAC, 2021). In this regard, it is interesting to note that the necessity of cooperating on issues of common interest like sustainable development emerged in the early 1990s as a tool facilitating relations among the states in the region and reducing possible tensions. In this context, environmental issues were particularly relevant as sensitiveness towards pollution problems had enormously grown internationally since

[5] The CSO is constituted of the civil servants representing the governments of the six member-countries and the European Union. Representatives of the nine observer states are also often given the possibility to participate. It meets on a regular basis 4–5 times per year and generally in the country holding the Chairmanship of the BEAC (BEAC, 2023a).

the 1970s. This was inevitably reflected at the regional level. In the case of the BEAR, environmental issues were particularly relevant because of the so-called 'nuclear problem', due to the presence of numerous high-risk hotspots like the nuclear waste dumped in the fjords of Novaya Zemlya and the Russian Navy's nuclear waste storage in Andreeva Bay (Elenius, 2015). More generally, in the High North environmental awareness grew during the Cold War not only because of these two cases but also because of the nuclear accident at the Chernobyl nuclear power plant in 1986 and the sinking of the Soviet submarine K-278 Komsomolets in the Norwegian Sea in 1989 (Elenius, 2015). All these facts, which had a huge socioeconomic impact on the local populations, led to a growing cooperation in the Arctic especially in the environmental sector (Elenius, 2015). Furthermore, as many of them concerned Russia, its involvement in cooperation was crucial. As Lars Elenius puts it (2015), the BEAR included Russia 'on a scale that was previously unprecedented'.

From the end of the 1990s, cooperation has continued although under changing conditions due to the political changes in Russia, the international 2008 financial crisis and the global warming in the Arctic (Elenius, 2015). In spite of these negative events, strengthened relations among states led to an increase in the investments of the Nordic states in subarctic Russia (e.g. and in a massive flow of people like businessmen, journalists, representatives of local authorities, scientists) in both directions across the national borders (Elenius, 2015). Also, as former Norwegian diplomat and security policy researcher Sverre Jervell argues, 'the Barents cooperation became Europe's most important experiment with people-to-people cooperation across the east–west border and between two different political systems. This was unique and also bore outstanding results' (Edvardsen, 2023).

Nevertheless, like it has happened internationally, cooperation in the BEAR has been halted by the war between Russia and Ukraine, which has had a huge impact on the relations between Russia and the West. The most immediate consequence of this was the joint statement of Finland, Denmark, Iceland, Norway, Sweden and the European Union concerning cooperation in the region and the Russian response on the 4th of March 2022, just a few days after the war in Ukraine started. In this joint statement, they 'condemned in the strongest possible terms Russia's unprecedented military aggression against Ukraine' (BEAC, 2022; Ministry of Foreign Affairs of Finland, 2022). Also, 'in light of Russia's blatant violation of international law, breach of rules-based multilateralism and

the principles and objectives of the Barents Euro-Arctic Council' they declared to 'have no other choice than to suspend activities involving Russia in the Barents Euro-Arctic cooperation' (BEAC, 2022; Ministry of Foreign Affairs of Finland, 2022). This decision was in line with the one taken by seven members—Canada, Finland, Iceland, the Kingdom of Denmark, Norway, Sweden and the United States (A7)—of the Arctic Council (AC), the major intergovernmental forum guiding cooperation in the region. On the 3rd of March 2022, they indeed announced a pause in their participation in the AC (Government of Iceland, 2022).

Russia has clearly violated the principles of sovereignty and territorial integrity that are based on international law and have always been at the core of cooperation in the Arctic. This is why the A7 have decided to exclude Russia from cooperation while resuming the regional collaboration among them (Kopra, 2023). Therefore, Russia has been excluded from a number of projects aiming at increasing the well-being of local people, protecting the environment and strengthening the relations among states in the region. In addition to this, cooperation was also suspended in the framework of the Northern Dimension (ND), which is a joint EU policy of four equal partners—EU, Russia, Norway and Iceland—initiated in 1999 and renewed in 2006 (European Commission and MFA of Finland, 2022). The BEAC is the 'voice of the regions in the ND policy' together with the Council of the Baltic Sea States (CBSS), the AC and the Nordic Council of Ministers (NCM) (Ministry of Foreign Affairs of Finland, 2009). The ND policy, which aims at supporting stability, well-being and sustainable development in the region through practical cooperation, has been suspended until further notice by the EU, Iceland and Norway as 'Russia and Belarus [that is an observer] have however through their actions grossly breached rules-based multilateralism and the principles which both underpin the Northern Dimension policy' (EEAS, 2022).

Furthermore, on the 18th September of 2023 Russia announced its decision to withdraw from the BEAC (Ministry for Foreign Affairs of Finland, 2023; Ministry for Foreign Affairs of Russia, 2023). On the website of the Ministry for Foreign Affairs of Russia (2023) it is possible to read the official reason for this, namely that 'through the fault of the Western members (Denmark, Iceland, Norway, Finland, Sweden, the EU), the Council's activities have been effectively paralysed since March 2022. The Finnish presidency failed to confirm the transfer of the BEAC presidency to Russia, scheduled for October 2023, in violation

of the principle of rotation thus disrupting the necessary preparations'. The Russian Ministry also adds that 'under these circumstances, we are compelled to announce the withdrawal of the Russian Federation from the Barents Euro-Arctic Council' and that Russia is 'convinced that the fleeting political situation, which our northern European neighbours are guided by, does not correspond to the long-term interests of the people of the Arctic region. The responsibility for breaking down the architecture of Barents cooperation rests entirely with our "partners"' (Ministry for Foreign Affairs of Russia, 2023).

Therefore, it is clear that what happens on the international scene has inevitable consequences regionally as well. Indeed, the most evident consequence of the war in Ukraine for the BEAR (and for the whole Arctic) is the fact that the worsening of the relations between East and West has had a negative impact on the relations between Russia and Finland, Norway and Sweden in the BEAR (and the A7 in the Arctic more broadly). This is inevitably negatively affecting regional projects. Some good examples are the environmental projects financed by NEFCO, the Nordic Green Bank supporting globally set environmental and climate targets (NEFCO, 2023b). It has contributed to cooperation on the environment and climate in the BEAR and in the Arctic more broadly since 2005 (NEFCO, 2023a). Following the war in Ukraine, NEFCO has stopped all its activities in Russia and Belarus, which supports Russia (NEFCO, 2023b). Another example is the decision taken by the University of the Arctic (UArctic), a network of universities, colleges, research institutes and other organizations concerned with education and research in and about the North. Immediately after the beginning of the war in Ukraine, it decided to pause the collaboration with Russian institutions until the situation allows for continuation (UArctic, 2022). At the same time, it stressed that 'collaboration between individual researchers in Thematic Networks and educational activities for students shall continue where possible' (UArctic, 2022).

Furthermore, scientific projects in the region are particularly affected by the war in Ukraine as Russia is being completely excluded from cooperation by the A7. This is jeopardizing those projects as most data are supposed to be collected in Russia owning most of the Arctic territory. As biologist Eric Regehr of the US Fish and Wildlife Service argues, 'so much of what we need to know about these impacts is being lost. It's hard to see how we are going to be able to resume the science without the government and non-government funding [for] us and the Russians,

and without us being there to work with their scientists' (Struzik, 2023). Also, the cessation of cooperation comes at a difficult period for the Arctic as risks associated with sea ice loss, pollution and shipping are increasing (Struzik, 2023). Evan T. Bloom, Senior Fellow at the Wilson Center in Washington and former US diplomat engaged for nearly three decades on Arctic governance, has observed that 'the Arctic has long been a model for optimism and international cooperation. The disruption of cooperation is necessary because of the [Ukraine] crisis, but there can be no progress on pan-Arctic issues without Russian participation' (Struzik, 2023).

In conclusion, the spirit of Gorbachev's speech leading to successful cooperation in the BEAR and in the Arctic more broadly has been lost because of the huge negative impact of the war in Ukraine. In particular, cooperation with Russia in the BEAC, which guides cooperation in the region, has stopped and regional projects have been halted with negative consequences especially for scientific research.

## Militarization, De-militarization and Re-militarization: From the Old to the New Cold War

During the Cold War the Arctic was a region of strategic military confrontation between East and West because it was the shortest distance for aircraft and ballistic missiles between the Soviet Union and the United States (Le Mière & Mazo, 2013). Therefore, the Arctic has always occupied a special place in Russian defence strategy (Laruelle, 2014). Since the 1950s, Russia has in fact built industries and infrastructure necessary to its nuclear deterrence (Laruelle, 2014). The Kola Peninsula was particularly important from a strategic perspective as it is a very convenient location for launching ballistic missiles, for missile defence systems and for other elements of strategic deterrence systems and was the place where most of the Soviet Union's nuclear-armed ballistic missile submarines (SSBNs) was located (Laruelle, 2014). Consequently, a substantial part of the Soviet naval forces were located on the Kola Peninsula posing 'a strategic threat to NATO's transatlantic sea lines of communication via the Norwegian and Greenland seas and the Greenland-Iceland-United Kingdom gap, making the defence of this region critical for the Allies and providing a key role of the Royal Navy' (Le Mière & Mazo, 2013).

Additionally, the Arctic Ocean has always been vital to the Russian navy because it guarantees access to the Atlantic Ocean (Laruelle, 2014). Thus, the strategic geographical location of the Kola Peninsula is the reason why the Soviet Union based the headquarters of its Northern Fleet in Severomorsk, in the Murmansk Oblast along the NSR (Miller, 2023). Also, the Barents Sea, together with the Norwegian Sea, was the scene of an intense underwater competition between East and West (Miller, 2023).

The strategic significance of the Arctic Ocean has increased with the collapse of the Soviet Union as Russia lost territories where important ports like the Estonian Paldiski and the Ukrainian Sevastopol' ones are located (Laruelle, 2014). When the Cold War ended, the military activity in the Arctic was drastically reduced as the military expenditure of the eight Arctic nations declined with the starkest decrease registered in Russia (Le Mière & Mazo, 2013). The Russian official defence budget declined because of lack of funding, which meant that vessels, submarines and aircraft of the Northern Fleet were not maintained and there were no resources and staff to ensure regular patrols (Le Mière & Mazo, 2013). For instance, the number of patrols by Northern Fleet nuclear-powered submarines passed from 80 per year in 1985 to 18 in 1995 while the number of submarines patrols fell from 230 in 1984 to fewer than 10 in the early 2000s (Le Mière & Mazo, 2013). Thus, with the end of the Cold War the Northern Fleet was cut by more than 50% in the years after 1991 with the consequent dramatic reduction of the strategic importance of the Murmansk area (Elenius, 2015). This situation begun changing in the 2000s when Russian economic growth enormously improved leading to the increase of the defence budget that became one of the largest ones in the world in 2012 (Le Mière & Mazo, 2013). Between 2000 and 2008 Russia increased its defence expenditure by 500%, especially in strategic sectors like weaponry, the navy and missiles (Laruelle, 2014). A significant reason for this is the fact that the rapid growth of oil prices in the 2000s allowed Russia 'to make the transition to economic growth on the new capitalist foundation created in the 1990s and free itself from external financial dependence' (Trenin, 2019). This served Russian President Putin's foreign policy purpose, namely restoring the great power status of Russia in the global arena (Trenin, 2019). According to Dmitri Trenin, a member of Russia's Foreign and Defence Policy Council and Director of the Carnegie Moscow Center, 'Russia's confirmation as a great power has taken place in the context of a renewed confrontation with the US, which signals a long and uneven struggle'

(Trenin, 2019), which is also evident in the case of the war in Ukraine of 2022. At the same time, Trenin also stresses that 'Putin's foreign-policy legacy is sweeping and varied: a complex and contradictory process that has changed on more than one occasion over the course of its formation' (Trenin, 2019). Nevertheless, the aim of reaffirming Russia as a great power on the global scene is a constant element of Putin's foreign policy. Also, very interestingly, Trenin highlights the fact that the Arctic 'has turned into a new arena for the development of relations with the outside world and a new front for confrontation with its rivals' as a result of climate change making natural resources and transportation routes increasingly accessible (Trenin, 2019). This latter element is actually the first reason why the Arctic states have begun militarizing their Arctic territories. For instance, in an interesting article published on the High North News in 2022, Malte Humpert (2022b) highlights the fact that over the past decade Russia has been systematically expanding and strengthening its Arctic military through bases, airfields, large-scale radar installations, as well as defensive and offensive weapons systems. The satellite pictures obtained by CNN from Maxar Technologies in 2022 support this statement showing that over the previous year Russia had been fortifying and expanding its radar stations at the Olenegorsk site on the Kola Peninsula, at Vorkuta north of the Arctic circle as well as one of five Rezonans-N radar systems at Ostrovnoy on the Barents Sea, near Norway and Finland in Russia's west (Walsh & Dean, 2022). According to Russian officials, the Rezonans-N are able to detect stealth aircraft and objects (Walsh & Dean, 2022). Also, Russia has reactivated and renovated more than 50 military bases from the Soviet era and has invested in fighter jets and missile defence systems to strengthen defensive and deterrent capabilities (Winle, 2023).

In another article Humpert speaks about the Nagurskoye Air Base, which is Russia's northernmost military installation and is located on the archipelago of Franz Josef Land in the Barents Sea (Humpert, 2019). The strategic relevance of this base, which was upgraded since 2015 with new facilities, is due to the fact that it allows for the much closer access to North America for Russian bombers thus constituting a threat for North America (especially if combined with the longer ranges of the new generation of hypersonic cruise missiles) (Humpert, 2019). However, Russia has been bolstering its Arctic military bases for years by furbishing several old Soviet bases with modern designs and equipment (Walsh & Dean, 2022).

Most of Russia's Arctic military bases are located along the western reaches of the NSR, including in the Barents and Kara Sea near the Northern Fleet (Humpert, 2022b). The Barents Sea in particular 'serves as a passageway through which Russia's largest fleet gains access to the world's oceans' (Humpert, 2022b). As Jonas Kjellén, a Military Analyst at the Swedish Defense Research Institute, argues, 'safeguarding the Barents Sea is both about securing safe entry/exits for Northern Fleet vessels and interdiction of ships entering the Northern Sea Route' (Humpert, 2022b). Hence, 'Russia has not the ambition to maintain a uniform military stance along its entire northern coasts, but will give priority to the Northern Sea Route entry points, and especially the Western one' (Humpert, 2022b). This is why Russia upgraded its Northern Fleet in 2021, which was the second time in less than a decade, making it Russia's fifth military district (Humpert, 2022b). As Humpert notices, it is the first time that the 'fleet's standing is elevated to equal to that of the existing four military districts – West, South, East and Central' (Humpert, 2022b). The Northern Fleet military district on the Kola Peninsula, where much of Russia's strategic nuclear assets are concentrated (two-thirds of its nuclear-powered vessels are assigned to the Northern Fleet), will be responsible for the Arctic, the Russia Arctic coastline and the Northern Sea Route (Bochove, 2023; Humpert, 2022b).

Furthermore, the relevance of the Northern Fleet has grown as a consequence of the war in Ukraine that has led the Arctic states to increase the militarization of their Arctic territories in order to demonstrate to Russia that its aggressive behaviour against Ukraine would not be tolerable in the Arctic. This is why the strategy documents of the Arctic states give increasing importance to military security issues.

In 2022, Russia adopted its Naval Doctrine that puts a significant emphasis on the Arctic by describing the measures that Putin intends to adopt to 'enhance the Navy's warfare capabilities in the Arctic and the world's oceans' (Humpert, 2022a). The document highlights the growing role of the Northern Fleet in ensuring the protection of Russia in the region and the necessity that Russia exerts full control on its internal waters of the NSR and the naval activities of foreign vessels (Humpert, 2022a). As Humpert puts it, 'security experts confirm that the naval doctrine formalizes the maritime dimension of Russia's resurgence as a regional hegemon with offensive capabilities and interests' (Humpert, 2022a). Additionally, according to the document the US and NATO maritime activities in the Arctic are a major threat to Russia (Humpert,

2022a). In particular, the document stresses that any effort of the United States and NATO to weaken Russia's control over the NSR and to build up foreign naval presence in the Arctic are a key challenge to Russia's security (Humpert, 2022a).

As a reaction to Russia's annexation of Crimea in 2014, NATO has been conducting a number of military exercises with the aim to strengthen 'deterrence and defence posture that draws upon all the tools at NATO's disposal, including military exercises' (NATO, 2023b). An example is the NATO Cold Response Exercise 2022, which is 'a long-planned exercise bringing together thousands of troops from NATO Allies and partners, testing their ability to work together in cold weather conditions across Norway – on land, in the air and at sea' (NATO, 2023a). It was conducted from March to April 2022 in Norway and its surrounding seas (NATO, 2023a). More recently, in May 2023 the USS Gerald R. Ford, the world's largest aircraft carrier, sailed into Oslo in order to conduct training exercises with the Norwegian armed forces along the country's coast (Fouche & Klesty, 2023). As Jonny Karlsen, a spokesperson for the Norwegian Joint Headquarters, the operational command centre of the military, argued, this visit was 'an important signal of the close bilateral relationship between the U.S. and Norway and a signal of the credibility of collective defence and deterrence' (Fouche & Klesty, 2023). Additionally, Norway is the first of the NATO members to move its military headquarters to the Arctic by opening a new high tech Operations Center located one kilometer inside the mountain at Reitan outside Bodø in North Norway (Arctic Portal, 2010).

The growing presence of NATO in the Arctic is naturally perceived as a threat from Russia. In particular, its reaction to the 2023 NATO membership of Finland that has decided to join the Alliance as a consequence to the Russian aggressive behaviour in eastern Europe. The NATO membership of Finland, which borders the Kola Peninsula for a total of 1340 kilometers (Sharma, 2023) and which has brought significant military capability to the Alliance, is considered by Russia as a violation of its security and of its national interests (BBC News, 2023). Indeed, Russia immediately responded that it would strengthen its military capacity in its west and northwest in order to take the necessary countermeasures to ensure its own security, tactically and strategically (BBC News, 2023; Kauranen & Gray, 2023). Mr Dmitry Peskov, diplomat and press secretary of President Putin, stated that Russia would closely observe how Finland used its territory 'in terms of basing weapons systems

and infrastructure there which will be right up close to our [Russian] borders, potentially threatening us [Russia]' (BBC News, 2023). On its side, Finland announced in the summer 2022 the plan to build a 200 km eastern border barrier fence along its border with Russia 'to prevent large-scale instrumentalized migration and improve the effectiveness of territorial surveillance' (Middleton, 2023). Following Finland, Sweden, whose accession is currently stalling because Turkey has put its approval on hold, is supposed to join the Alliance as well (Pappin, 2023). Finland's and eventual Sweden's accession to NATO has inevitably increased tensions and instability in the BEAR and in the Arctic more broadly. As Sanna Kopra (2023) puts it, 'although Russia's war in Ukraine has not escalated to the Arctic, it has dramatically shaped the security situation in the region'.

Tensions in the region are increasing also as a consequence of the Russian military exercises in the Barents Sea. In August 2023, for instance, Russia issued Notice to Air Missions (NOTAM)-warnings for two larger areas north and south of Norway's Bear Island in the western Barents Sea (Nilsen, 2023). The aim of the exercise was to test 'various options for managing the forces and troops of the fleet in the performance of tasks to protect the sovereignty of the Russian Federation in the waters of the Northern Sea Route' (Nilsen, 2023). Norway, which was very worried about its search and rescue capabilities in the waters around Svalbard, could not do anything to prevent Russia from using the Norwegian Exclusive Economic Zone (EEZ) as an impact area for cruise missiles because they were international waters (Nilsen, 2023). The United Nations Convention on the Law of the Sea (UNCLOS) allows state to conduct military exercises in other states (Nilsen, 2023). Ane Haavardsdatter Lunde, spokesperson with the Norwegian Ministry of Foreign Affairs, argued that Norwegian authorities assumed that Russia conducted its military exercises 'in a way that safeguards Norwegian rights under the Law of the Sea and international law in general' (Nilsen, 2023). Lunde underlined that this also concerned Norway's fishing rights (Nilsen, 2023). Russia's Sea Port administration for the European Arctic warned Russia's trawlers to keep out of the two large training areas in the western Barents Sea (Nilsen, 2023).

In conclusion, the war in Ukraine is causing the increase of militarization of the BEAR, which is one of the most militarized subregions

of the Arctic. The refurbishment and the construction of Russian military bases together with the increasing presence of NATO has made the BEAR unstable and insecure.

## Conclusion

The war in Ukraine has dramatically affected the relations among the states in the BEAR and in the Arctic more broadly leading to a new Cold War. The two sectors taken into consideration in this chapter, namely regional cooperation and militarization, clearly demonstrate that the period between the Cold War and the present is characterized by drastic changes in the relations among states in the BEAR as a reflection of the changes occurred at the international level over time.

Cooperation in the BEAR started during the Cold War but it was only in the early 1990s that it flourished because of the geopolitical changes occurred at the international level with the collapse of the Soviet Union. One of the most important results was the establishment of the BEAC that has fostered cooperation at both intergovernmental and interregional level thus strengthening the relations between the states in the BEAR. Unfortunately, regional cooperation has been halted by the war in Ukraine with the inevitable consequence that Russia has been excluded from the regional dialogue. Additionally, Russia has recently announced that it will withdraw from the BEAC, which will very probably negatively affect cooperation in the region even at the end of the war in Ukraine.

Furthermore, militarization, which began some decades ago as a consequence of the accessibility of natural resources and transportation routes, is definitely increasing in the BEAR. The Kola Peninsula has regained the strategic importance it had for Russia during the Cold War because of its geographical location. This, together with the increased presence of NATO and the military expenditure of states to defend from an eventual aggressive behaviour of Russia, is making the BEAR an unstable and insecure region. Militarization creates mistrust and contributes to increase tensions among states in the region thus negatively affecting cooperation among them.

Therefore, the BEAR is an excellent example of the dramatic impact of the war in Ukraine in regions other than eastern Europe. This clearly shows that what happens in a particular part of the world does not stay there but has important consequences also in a region that is traditionally considered remote and isolated like the BEAR.

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# The Arctic in the Era of Global Change: An International Security Perspective

*Florian Vidal*

## The End of the Post-Cold War Era

The Russian full-scale invasion of Ukraine, launched on February 24, 2022, unleashed a cascading sequence of events that are reshuffling the global geopolitical deck. This continuing situation affects the Arctic region. From the complete freeze of the Arctic Council's diplomatic activities to the Finnish and Swedish applications to join the North Atlantic Treaty Organization (NATO), the polar region is entering a new era that is still evolving towards further uncertainties away from a stable and peaceful background. Undoubtedly, this massive geopolitical event sets a new trend and signals the conclusion of the post-Cold War era. After three decades of close cooperation between the Arctic states, which successfully built complex and comprehensive institutional arrangements to address common issues in environmental, economic, and social dimensions, this advanced governance architecture is being permanently shaken (Kankaanpää & Young, 2012; Steinveg, 2021; Vidal, 2016; Young, 2016).

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More specifically, this war ends the Arctic exceptionalism, a feature that long characterized the region by remaining insulated from global geopolitical tensions (Bertelsen, 2020; Exner-Pirot & Murray, 2017; Young, 1992). Russia's annexation of Crimea in 2014 was the first crack in the robustness of the polar governance. As Russia gradually retreated, other Arctic states, particularly the Nordic states, no longer had confidence in the Russian regime. Nevertheless, the resilience of intergovernmental structures enabled forms of cooperation to continue, even if no political initiatives emerged between 2014 and 2022 (Byers, 2019; Vidal, 2022a). Indeed, the war outbreak is the culmination that follows a continuum of a deteriorating diplomatic and geostrategic environment. The end of the Arctic exceptionalism reveals new geopolitical realities in which the evolving relationship between China and the United States is lastingly shaping the international system.

Against the backdrop of these geopolitical shifts, the intensification of climate change in the polar region is rapidly reconfiguring its geography. In addition to the global consequences of the ongoing transformations in the Arctic, it also brings further uncertainties about the future of regional governance, and the ramifications of the crisis are unquantifiable. The international system has entered a multifaceted era that some describe as *permacrisis* or *polycrisis* (Homer-Dixon et al., 2022; Hening & Knight, 2023; Turnbull, 2022). This ongoing systemic transformation will inevitably affect the Arctic region and its stakeholders. According to the *Global Arctic* concept, the alteration of the polar region opens up new economic prospects while at the same time it is experiencing an increase in global demand for its natural resources (Finger & Heininen, 2019; Finger & Rekvig, 2022; Vidal, 2018). In a nutshell, this concept takes on a new dimension, as the region becomes even more intertwined with the rest of the world.

From an international security perspective, this chapter delves into the processes at play and their implications for the future of the Arctic region. The primary effect of the outbreak of war is the realignment of the security agenda for the region, with a divided arena between the NATO bloc and Russia. The entry of Finland and Sweden into the Atlantic Alliance entails a paradigmatic change. It also casts doubt on the historical analogy of the Cold War. Next, this dichotomy between Russia and the Western countries embarks the region into a new narrative that questions the future of the Arctic Council, the long-term consequences of the war for Russia, and its domestic stability that directly affects its northernmost

territories. Meanwhile, the Arctic displays the expanding geoeconomic competition between the West and the Asian states, starting with China. Finally, the Arctic region is embedded in a broader geopolitical spectrum that comprises the growing strategic value of the Bering Strait, meanwhile, while Alaska is emerging as an essential component of the US defense strategy in the context of the complex and contested Indo-Pacific.

## A New Cold War?

Since Russia's annexation of Crimea in 2014, Western experts have widely discussed the hypothesis of a return to Cold War-like geostrategic and security conditions in the polar region. The present geopolitical configuration is both complex and uncertain.

### *NATO v. Russia: A Reboot*

The security regional dynamics in the Arctic reflect the persistent deterioration of Western–Russian relations on the global stage, returning to a Cold War-like geopolitical environment. Distant from the bipolar world that opposed the United States and the USSR, the international system in the twenty-first century is, however, entangled in complex and broad challenges such as climate change impacts, systemic economic and financial crisis, and mounting geopolitical competition, starting with China's political and military rising. In addition, the Arctic area evolved towards a more integrated regional governance system since the 1990s to tackle mutual concerns, including environmental issues and economic development. Despite improved strategic developments in the polar region, the increasing security tension in Eastern Europe between 2014 and 2022 drove military conditions in the European Arctic. The outbreak of war in 2022 is a watershed moment in the security architecture of the European continent, shattering the post-Cold War balance. In a dramatic spillover effect, security issues in Northern Europe are taking a new turn, putting NATO's role back at the heart of regional policy issues in the High North (Nokkala, 2022; Odgaard, 2022; Pesu, 2023). In these circumstances, military considerations are increasingly dominant, undermining the dynamics of cooperation and dialogue that previously prevailed.

From a military point of view, the Arctic region differentiates itself from the Cold War due to the development of the Russian position in the area. The strengthening of the military infrastructure along the

Russian Arctic coastline is a significant outcome that has taken place over the past decade, including the construction of more than 475 structures in the whole area. Thanks to its archipelagoes and islands along the northernmost coastline, Russia has a distinct geographical advantage in the region, as it possesses a unique projection capability in the polar region (Vidal, 2018). Contrary to the Soviet era, Russia is focusing on the modernization and mobility of its armed forces in the region rather than on a massive, systematic reinforcement of the 7,000 km of its coastline (Pedersen & Pincus, 2021). Yet, similar to the Cold War era, geostrategic tensions are focused on the European Arctic as it connects to the North Atlantic Ocean.

In this respect, the Greenland–Iceland–United Kingdom (GIUK) Gap concept has been revitalized since 2014 in light of the Ukrainian crisis and the consolidation of Russia's posture in the polar region. From a maritime perspective, this imaginary line that goes through the northern Atlantic Ocean forms a choke point nurtured in the early Cold War. Specifically, Soviet strategic submarines had to cross in order to access the broader Atlantic and structured the NATO-Soviet contestation at sea for several decades (Nordenman, 2017). Soviet armed forces relied on the Northern Fleet, headquartered in Severomorsk in the Kola Peninsula, to deploy their naval capabilities in the global ocean system. Mirroring this period, Russia's Northern Fleet, which houses most of its nuclear submarines, remains a strategic tool regaining a prominent role as Russian military activities expand worldwide. To address this strategic challenge, NATO has increased, since 2014, its readiness and deterrence through enhancing its training and deployment coordination and strengthening intelligence, surveillance and reconnaissance (ISR) capabilities (Odgaard, 2022). For instance, the US Keflavík Air Base, located in Iceland, represents a critical asset for maintaining situational awareness and airspace surveillance. Besides, the upgrading of radar installations along the GIUK Gap is a priority for the Atlantic Alliance, including the stations located in the Faroe Islands, which stand as a sentinel in the middle of the North Atlantic Ocean (The Government of the Faroe Islands, 2022). upon that basis, it highlights a complete revival of the Cold War's legacy defense infrastructure.

NATO member states with their regional allies and Russia sharpen their military exercises, respectively. Russia's increasing drills off the coast of Norway, such as missile launches, stand as an instrument of defense diplomacy in reply to the ones conducted by Norway and its

allies in NATO's northern flank (Åtland et al., 2022). In recent years, NATO's large-scale exercises, such as Trident Juncture in 2018 and Cold Response 2022, are backed up by a strong UK and US presence in the region—the latter established the Joint Forces Command (JFC) Norfolk in Virginia (Pesu, 2023). Thus, the encompassed area between the GIUK Gap and the Bear Gap—stretching between the Norwegian continental territory and the Svalbard archipelago—turns into a maritime zone of strategic defiance between the two military blocs (see Fig. 1). While the prospect of reemerging Cold War-like conditions in the Arctic diverges, the current security entanglement in the European Arctic, with unprecedented strategic depth, reinforces the confrontational dynamic between the Atlantic Alliance and Russia.

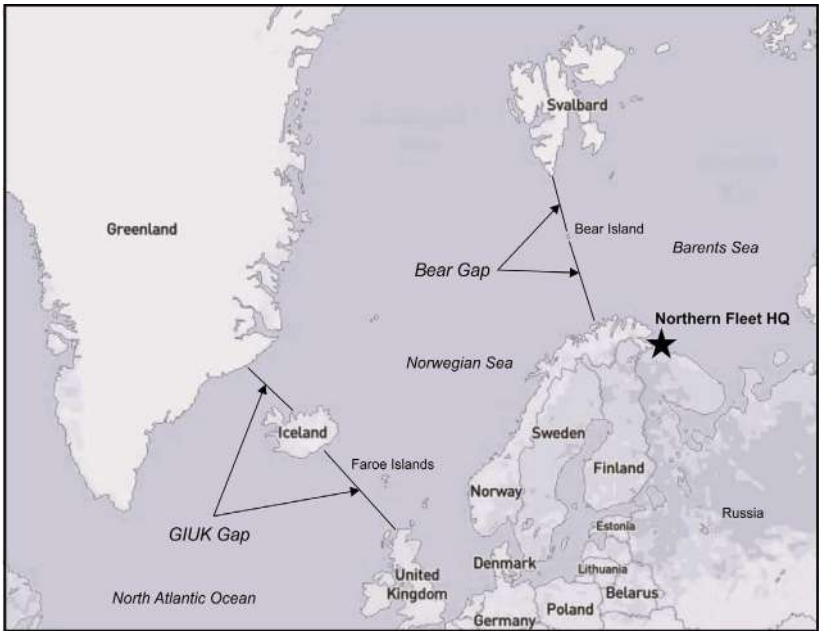


**Fig. 1** The Bear Gap and the GIUK Gap (map designed from US Geological Survey)

### *Finland and Sweden in NATO as a Game Changer*

On April 4, 2023, Finland officially became the 31st NATO member state, with considerable strategic implications. This accession marks a profound break with the Arctic security architecture that has evolved since the end of the Cold War. After an arduous process, Sweden officially joined the North Atlantic Alliance in March 2024, ending two centuries of neutrality (NATO, 2024).[1] Since 2022, Northern Europe has experienced an unprecedented transformation of its strategic environment. This perspective upsets the geopolitical balances that have been established in the Baltic region over the centuries in light of the long struggle for its control between the Kingdom of Sweden and the Russian Empire. This situation, however, creates a new security continuum interlocking the Barents and the Baltic areas.

Against the backdrop of this historical shift, Finland's accession, and the Swedish one, implies a political rather than a military magnitude. Both countries increased defense cooperation with their Western partners because of Russia's seizure of Crimea in 2014 (Alberque & Schreer, 2022). From NATO's perspective, these memberships simplify its defense policy of northern and eastern flanks. In other words, the Western military organization will be enabled "to degrade Russia's ability to conduct successful military operations in the Baltic Sea region" (Alberque & Schreer, 2022, p. 69). In the meantime, it allows the alliance to increase pressure on critical Russian nuclear assets in the Kola peninsula. Overall, the Nordic countries have bolstered their posture, which entails a paradigmatic change. First, it allows them to improve further their security and defense cooperation and open new constellations for collaboration that might emerge, including energy, climate change, and critical infrastructure (Ojanen, 2023).

To put it simply, the integration of these two countries into European and North Atlantic security and defense policies could facilitate the deepening of intra-Nordic cooperation. In March 2023, the air force commanders-in-chief of Denmark, Finland, Norway, and Sweden signed an agreement to develop a joint air force. Attended by the Commander of the United States Air Force in Europe, this project includes the

[1] Initially, both Nordic countries should join the Atlantic Alliance at once. However, Sweden's NATO accession process slowed down due to diplomatic disputes with Turkey over Kurds.

development of integrated command and control, flexible and resilient deployment of air forces, coordinated surveillance of joint airspace, and joint training and exercises (Jennings, 2023). Together, the Nordic countries intend to mount the capacity to deploy up to 250 combat aircraft (Johnsen, 2023). This agreement is the continuation of a dynamic that has been underway in the region for several decades and has gained momentum since 2014.

In that context, Norway appears to benefit from this development, and its position in the Barents region has improved. In practical terms, Finnish fighter jets may project themselves into the Barents Sea and support a Norwegian army operation in case of a potential crisis. The incorporation of Nordic airspace and air bases into a homogeneous security arena is a significant development. According to Särkkä, it is in the mutual interest of all Nordic countries "to have a common strategic understanding of the Arctic region" (2022, p. 14). However, as a non-EU member state, Norway does not get full access to the EU's defense policy framework, which may generate gaps with its Northern European partners in the long run.[2] Furthermore, some divergences occur among the Nordic countries on practical terms, distorting the strategic narrative.

Specifically, Finland and Norway differ concerning their respective view of Russia in the Barents region. While the former authorizes the use of its airspace for US military intelligence missions along its eastern border, the latter maintains self-imposed military restrictions set during the Cold War, such as forbidding the deployment of nuclear weapons and permanent allied forces in Norway and putting drills in the Finnmark—bordering Russia—on hold. While Finland allowed the United States to carry out its mission and collect information on the Russian military complex on the Kola Peninsula in March 2023, Norway is under pressure to lift these restrictions, which are considered no longer valid according to some experts (Johnsen & Mikalsen, 2023; Nilsen, 2023a). This case illustrates the United States' approach, to some extent, favors bilateral agreements with its allies.[3] Moreover, these agreements with the Nordic countries run parallel to the multilateral operation of the collective defense process within the Atlantic Alliance. The United States' role as a security provider

[2] On July 1, 2022, Denmark joined the European cooperation on security and defense with the abolition of the Danish EU defense opt-out following a referendum held.

[3] In August 2022, Finland started talks with the United States for such a deal, while Sweden began similar negotiations in January 2023. In October 2023, both countries

is critical to fill that gap and facilitate the cohesion of a unified posture in the area.

Overall, the implications of this systemic shift for the Arctic region are challenging. While this geostrategic rearrangement concludes three decades of relatively stable and peaceful governance, the new security architecture leads to a strategic imbalance, initiating an uncertain transition. In the meantime, Russia perceives these developments as an additional threat to its borders. As a primary effect, the Barents region continues to loosen towards significant strategic dependence, firmly anchored to the North Atlantic and the Baltic Sea areas.

## *The Era of Grey Zone Tactics*

Since the start of the war, military units located in the Russian Arctic region have largely been deployed on the Ukrainian front. The human and material losses suffered by these units have weakened the country's military posture in the Barents region for the foreseeable future. In other words, the weakened state of the country's ground forces significantly limits Russia's conventional threat to its northern neighbors. In fact, the strong mobilization of Russian units based on the Kola Peninsula reflects the relative stability of this region, as Nordic countries do not pose a direct threat to its territory (Staalesen, 2023b). At the same time, the accession of Finland and Sweden to NATO increases the conventional military advantage over the given Russian posture in the region.

If the conventional threat seems far-flung, the strategic one hangs in the balance. the strategic threat is close at hand. The presence of ballistic missile submarines and nuclear warhead storage facilities makes the Kola Peninsula the cornerstone of the Russian army's strategic doctrine of nuclear deterrence. As such, tensions surrounding this strategic threat dominate NATO–Russia relations, and the likelihood of such a strike remains very low on the Atlantic Alliance's northern flank. Hybrid and cyber threats are the principal sources of destabilization in the region. These threats involve an operational reality as they aim to target critical infrastructures in Northern European countries. The sabotage of the Nord Stream 1 and Nord Stream 2 underwater gas pipelines in the Baltic

concluded their Defense Cooperation Agreements (DCA) with the United States, respectively, opening the way for bilateral military provisions like those existing with Norway (see Evardsen & Molid Martinussen, 2023).

Sea in September 2022 demonstrated the degree of geopolitical destabilization that undermining critical maritime infrastructure in the area would entail. In response, NATO established a Critical Undersea Infrastructure Coordination Cell to enhance coordination between civilian and military stakeholders regarding these issues (NATO, 2023). Norway; as a strategic European energy supplier, is particularly vulnerable to possible disruptions. Therefore, its allies prompt navy patrols to protect and monitor critical maritime infrastructure such as oil rigs, pipelines, and submarine cables.

In recent years, Norway has been subject to numerous incidents related to hostile and unfriendly actions, including the suspected destruction of a submarine cable connecting the Svalbard archipelago to the continent, several cyber-attacks, the arrest of spies, and growing illegal surveillance activities near the country's critical infrastructures. Also, the significant increase in GPS signal jamming in the Finnmark region, which poses a threat to civil aviation safety, is another clear example of this trend (Strøm, 2023). Furthermore, Russian fishing activities could be another security concern in the region. Norwegian Broadcasting Corporation (NRK) investigative reporter, Beth Mørch Pettersen, uncovered that several boats were involved in espionage activities (Mørth Pettersen, 2023). Dual-use potential related to maritime activities in Northern Europe increases the stakes, as it is difficult to attribute liability for grey zone actions. Additionally, certain territories, such as the Svalbard archipelago (a Norwegian unincorporated area subject to the Svalbard Treaty), the Åland Islands (an autonomous region of Finland with a demilitarized and neutral status), and the Faroe Islands (a self-governing archipelago that is part of the Kingdom of Denmark), complexify the geopolitical situation due to their legal specificities and strategic locations.[4] In other words, hostile powers could exploit those security loopholes to challenge the given defense framework.

As the regional entanglement becomes evident, grey zone situations bring ripple effects on the stability of energy, communication,

[4] From a military point of view, the Åland Islands are critically relevant to Finland's defense, given that they could serve as a naval base for Finnish forces, protecting the country's southern flank in the Baltic Sea. In addition, those islands form a critical strategic lock, where potential control by an opposing power would isolate the Gulf of Bothnia from the rest of the Baltic Sea. In this scenario, Finland and Sweden would jointly repeal any Russian potential contestation over the Åland Islands in the future. See Tuchtenhagen (2022).

and transportation operations throughout Europe. In response to this broad spectrum of security challenges, the Nordic Defense Cooperation (NORDEFCO), established in 2009, is another multilateral layer that may address increasing hybrid threats. For instance, it enables the development of cross-border cybersecurity solutions (O'Dwyer, 2023). In the long term, this military-influenced strategy aims to improve intelligence sharing between the Nordic countries, giving them a greater capacity to defend themselves against critical infrastructure threats.

## The Arctic Governance and the Decoupling Effect

The systemic implications of Russia's all-out war in Ukraine are triggering a series of structural effects on the future of Arctic governance. In addition to the uncertain future of the Arctic Council, the polar region could split into two geoeconomic blocs that could have a lasting impact on its governance.

### *Protecting the Legacy of the Arctic Council*

The Russian full-scale war in Ukraine, which began in February 2022, had a significant impact on the Arctic region, leading to a non-linear chain of event. In March 2022, seven out of the eight member states of the Arctic Council suspended their "participation in all meetings of the Council and its subsidiary bodies" (Ministry of Foreign Affairs of the Kingdom of Norway, 2022). The governance of the polar region has faced uncertainties due to the suspension of the Arctic Council's activities and the breakdown of interactions between Russia and the other seven Arctic countries. This has created uncertainties regarding the management of common issues such as climate change, biodiversity conservation, and natural resource management. After three decades of building a stable and lasting Arctic governance, the region is facing its most serious crisis since the end of the Cold War.

The deep rift between the Western Arctic states, the so-called "Arctic seven", and Russia endangers the functioning and viability of regional institutional bodies. Russia's withdrawal from the Barents Euro-Arctic Council (BEAC), established in 1993 on the Norwegian initiative, is a prime indication of the decline of the diplomatic framework in the Arctic (Ministry of Foreign Affairs of the Russian Federation, 2023b). Once down, revitalizing an intergovernmental cooperation architecture is a

protracted and complex challenge. The preservation of the Arctic Council requires innovation and flexibility as it faces an existential crisis for the first time since its inception in 1996. After the failure of the Russian Chairmanship of the Arctic Council (2021–2023), Norway took over the chairmanship for the two following years with the intention to reinstate some room for cooperation between the "Arctic seven" and Russia. The resumption of activities within the working groups is an essential step towards getting the intergovernmental organization up and running again and ending the diplomatic deadlock (Evardsen, 2023). Beyond this, the multilateral organizations are based on the density of exchanges and the openness of cooperation spheres. The genesis of this cooperation, which was shaped at the end of the Cold War, is, however, durably affected by the shift in Russian policy, that began with Putin's return to the Kremlin in 2012 (Devyatkin, 2023).

Given the urgency of climate change, scientific cooperation in the polar region is critical to ensuring access to research sites and enabling scientific data exchange on marine, meteorological, and glaciological observations. The isolation of Russian climate science and the weakening of dialogue with their Western colleagues poses a greater risk regarding network resilience over the long term (Andreeva, 2023). While scientists outside Russia maintain some personal cooperation with their Russian colleagues and collect some information through remote sensing, the disruption of these interactions threatens to permanently deteriorate the quality of polar research (Witze, 2022). Considering the utter importance of monitoring climate change in the Arctic, science remains a vital factor in safeguarding an open dialogue between all regional stakeholders (Vylegzhanin et al., 2023). Among critical scientific areas under close watching, the condition and degradation of permafrost, identified as one of the tipping points in the climate system, is central when it comes to sustaining cooperation with Russia on this specific topic, and thus, despite geopolitical tensions (Arctic Council, 2023; Lenton et al., 2019). As permafrost covers approximately 60% of Russia's territory, it is thawing and looms as a potential exponential contributor to methane release into the atmosphere, accelerating global heat. Considering Earth's climate transformation, the safeguarding of the Arctic Council's existing cooperative achievements is a matter of common interest. Maintaining scientific exchanges between Western and Russian researchers in the region is a priority task, as data loss could jeopardize systemic monitoring of climate evolution. Specifically, while the permafrost weakens, this matter goes beyond Arctic governance as the

impending feedback loop with substantial methane release could accelerate global warming, endangering human societies (Westerveld et al., 2023). In other words, the permafrost issue is part of a planetary challenge, which in turn may require the implementation of permafrost governance that extends to the international community. As such, non-Arctic states are likely to step in to follow research studies on this uttermost critical ecosystem for Earth's climate balance (Bochove, 2023). Ultimately, scientific cooperation has to be insulated from diplomatic rifts and included in a regime of continuity within intergovernmental bodies and distinct diplomatic channels. This is necessary due to the global scale of climate change impacts in the polar region and their extensive implications on international security.

### *A Line in the Permafrost: Uncertain Future in the Russian Arctic*

Although the Russian Arctic covers half of the polar region, the country's domestic evolution has undeniably had a considerable effect on Arctic dynamics. The war created new socio-economic and political conditions in the country that directly affect its northernmost territories. The Russian society in the northernmost territories has thrived on wartime conditions that changed the daily life of the local population. The first consequence lies in the significant mobilization of the Russian forces based in the Arctic region. Conventional forces were particularly afflicted, including large human and material losses (Humpert, 2023; Ministry of Defense of the Russian Federation, 2023; Staalesen, 2023a). Within civil society, the propaganda of the Russian regime has been spreading in the polar region since the beginning of the war, assisted by regional and local public authorities. In addition to the termination of institutional cooperation with neighboring countries and the principle of people-to-people contact, regional institutional stakeholders have engaged in public support for the country's military offensive in Ukraine. Based on social features, the wartime outcomes in the region are reflected in mobilization and militarization, resulting in a different societal condition that de facto distances them from other Arctic populations. For instance, local schools rallied to display patriotic support for Russian soldiers fighting in the war (Staalesen, 2023c). Overall, Russian Arctic youth is actively mobilized in patriotic organizations, such as the so-called "Avangard", in the Arkhangelsk and Murmansk oblasts (Ministry of Defense of the Russian Federation, 2022; Telegram, 2023; Vkontakte, 2023). In

a similar fashion, the Orthodox Church is firmly committed to the war and, more broadly, to the confrontation with the West, and positions itself as the moral protector of the Russian state and civilization in the Arctic (Nilsen, 2023b; Staalesen, 2022). The mobilization of social bodies is restructuring the course of the region's socio-economic development, which remains a political priority for the Russian state despite the systemic effects of both economic and financial sanctions and the implementation of a wartime economy (Ministry of Foreign Affairs of the Russian Federation, 2023a).

The Russian Arctic region has become increasingly isolated, with the northernmost area experiencing a significant decline in connections with other Arctic countries since 2014. While existing channels are still maintained, no new initiatives for cooperation and exchanges have emerged during this period. In fact, the Russian government has tightened its grip by empowering the Federal Security Service (FSB) in the area. As primary effects, cooperation in the scientific and environmental fields was directly impacted, including curtailing foreign NGOs' activities such as the Norwegian environmental association Bellona (Vidal, 2022b). Concurrently, Russia increasingly consolidated its military posture. Throughout its Arctic territory, the Russian Ministry of Defense deployed its most recent military equipment, notably advanced aerospace, and coastal defense systems (Pedersen & Pincus, 2021). Due to these circumstances, the isolation of these territories underlines conditions that once prevailed during the Cold War. As a result, cooperation has been lastingly altered, entailing the permanent loss of ties established over the course of a generation.

All in all, the war is transforming the country and shifting its trajectory to a different and unstable path, away from the dominant conditions settled during the post-Cold War era (Stanovaya, 2023). This new phase in Russian history raises political and ideological uncertainties, similar to the dismantling of the USSR in the early 1990s (Kolesnikov, 2023; Shlapentokh, 1992). Central to the current debate is the question of the nature of the Russian state as an empire, which links it to the Russian idea and its identity over the course of its thousand-year history. Against the backdrop of political and ideological domestic dynamics, the fate of Russian Arctic territories is closely tied to any potential changes in the country's leadership. The increasing political instability raises questions about the future of the Russian regime, particularly as the northernmost territories are highly vulnerable to long-term systemic changes. Here,

thawing permafrost acts as a critical layer that may ultimately imperil all Russian geoeconomic ambitions—all integrated infrastructure, such as roads, railroads, and buildings, are exposed to a greater risk induced by permafrost degradation with impending substantial financial costs (Hjort et al., 2022; Streletskiy et al., 2023).

Although the Russian state faces numerous constraints, the development of the Arctic region, including the exploitation of natural resources and the expansion of the Northern Sea Route (NSR), remains a national priority (TASS, 2023c). The NSR, which spans from the Kara Sea to the Bering Strait, is crucial for Russian national security, not only in the Arctic context but also in the broader scope of Russian security (Bouffard, 2023). The Russian Arctic's socio-political uncertainties have created a thick fog around the future governance of this vast territory. However, changing security and geopolitical conditions have made this region a backbone for Moscow's strategic guidance on the international stage. From an economic perspective, the growing entanglement of the Russian Arctic with the Asian economic powerhouses is further shifting Russia's orbit towards the Eurasian and Asia–Pacific areas.

### *Western Arctic v. Eurasian Arctic: The Geoeconomic Competition*

The sudden onset of geopolitical tensions in the Arctic has prompted a fundamental shift in regional governance. In light of the Russia-West breakdown, the polar region is witnessing a singular split within the polar region, mirroring the global decoupling that is taking place between China and the United States (Felbermayr et al., 2023; Suslov & Kashin, 2022; Witt et al., 2023). While the latter is a central element of the global stage, the looming geoeconomic division in the Arctic reflects this systemic rivalry. In other words, the antagonistic dynamic between the world's two economic powers is reflected in this part of the world as well. But beyond this, the Arctic is exposing a bipolar system consisting of five Western Arctic coastal states (Canada, Denmark, Iceland, Norway, and the United States) on the one hand, and Russia on the other.

In this two-way split process, Moscow's Arctic policy turns to non-Arctic states to sustain its own geoeconomic ambitions. At first glance, the BRICS grouping emerges as the first receptacle to lever investment mechanisms in energy and infrastructure projects in the northernmost

territories.[5] For instance, Brazil is seen as a potential partner for the Russian authorities to cooperate in the scientific and economic spheres, particularly in the energy sector (TASS, 2023b). The South American country, thanks to its scientific experience in Antarctica, expresses a growing interest in assuming a more significant diplomatic role in the polar region (Casella et al., 2020).

In 2023, Russia adjusted its polar strategy by claiming its intent to engage in mutually beneficial cooperation with non-Arctic states that envision a constructive policy vis-a-vis Russia in different areas (Kremlin, 2023a). In addition to alternative multilateral platforms, the approach of bilateral relations drives Russia's policy in the polar region, where the expansion of the NSR is the backbone of its geopolitical bifurcation towards Asia. In these circumstances, two countries stand out as strategic partners: China and India, respectively. Since the early 2010s, China has asserted itself as a non-Arctic power that matters (Brady, 2017). Self-defining as a "near-Arctic state", Chinese polar ambitions are extensive, while the country's relationships with Western Arctic countries sharply deteriorate in light of the systemic rivalry at play (Small, 2022; Xinhua, 2018). In that context, the convergence between Russia and China in the region is moving ahead and expanding despite the war (Chen, 2023). As for India, its relationship with Russia has a strategic dimension, as it guarantees a balance of power with China. India, which imports coal and oil from the Russian Arctic, is keen to secure its supplies of raw materials by stepping up its use of the NSR (Ramakrishnan, 2023; Vostok Today, 2023). Besides these two large economic powerhouses, the Russian Arctic region extends its economic ties with other Asian countries. Once prestigious partners, Japan and South Korea have reduced their cooperation as they sided with the Western sanctions regime (Heng & Freymann, 2023). For those countries, their economic involvement in the Arctic region seems to be undermined, while their contribution to the scientific field is acknowledged (Kim & Stenport, 2021; Lomanova & Saunavaara, 2022). Instead, other Asian countries, such as Vietnam, are keen to develop their relations with Russia in the polar region (TASS, 2023a). In addition to the NSR, Russia also intends to shift the material flows

[5] BRICS is a grouping of Brazil, Russia, India, China, and South Africa officially formed in 2010. Since January 1, 2024, four countries (Egypt, Ethiopia, Iran, and the United Arab Emirates) have joined the group, and on January 6, 2025, Indonesia followed, bringing the total to 10 countries.

from the Kola Peninsula through the construction of a North–South railway connection between the port of Murmansk and the Iranian port city, Bander-Abbas, and get access to the Persian Gulf and the Indian Ocean (Kremlin, 2023b). By the same token, the agreement between the Russian nuclear agency Rosatom and the UAE's DP World port operator, reached in October 2023, aims to develop transit container shipping along the NSR (Rosatom, 2023). Rosatom, as the operator of the NSR, assumes the promotion and development of this Arctic shipping lane as a reliable and safer alternative interlinking Asia and Europe in line with the Russian government's objectives. Although those achievements remain unclear, the geopolitical balance is likely to enhance the flow of investments coming from Asia into the Russian Arctic.

As for the Western Arctic, aside from the tensions from the rivalry dynamic NATO–Russia that overshadow the Arctic arena, economic development also remains a priority in the Western agenda. As such, the area emerges as a strategic region for securing critical raw materials needed for digital and carbon-free infrastructure technologies. Under these circumstances, natural resource exploitation in this part of the polar region may move under Western supervision and ultimately be insulated from other geoeconomic competitors, namely those belonging to the Eurasian system. In this way, the Barents region is an example of how extractive projects are now closely linked to the European Union's sovereign industrial strategy. At the same time, mining potential in Greenland is subject to growing interest from Western industrial powerhouses, while China lost its economic edge regarding the Arctic island as Beijing's momentum faded (Nuttall, 2021; US Mission Denmark, 2023). All in all, there's a sense of retreat in this part of the Western ecosystem.

## The Arctic Embedded in the Confrontation Dynamic

In the ongoing shift of geopolitical dynamics, the polar region is encountering a dramatic alteration as its eastern side gains unprecedented significance and attraction. From the geoeconomic importance of the Bering Strait to its straight connection to the Indo-Pacific region, the Arctic finds itself caught in the global faceoff between China and the United States, which is likely to continue throughout this century.

### *The Bering Strait, a Forthcoming Choke Point*

The movement of the global economy from West to East since the beginning of the twenty-first century has reshaped maritime communication flows, which remain the leading vector for international trade. Given that twenty-seven of thirty of the world's container ports are located in Eurasia, the economic importance of this region is undeniable as it shapes the global exchange architecture (Gresh, 2020). In addition, this extensive area is holding a prominent significance from a strategic perspective. The transformation of military and economic balances is thus proving favorable to Asian countries, particularly China, the acknowledged driving force bolstering globalization (Kauppila, 2022; Layne, 2012; Small, 2022). On that basis, the Arctic region is part of this process, as Asian countries have been demonstrating growing economic and scientific interest since the turn of the century. The Bering Strait has the potential to become a significant node for future sea lanes and could impact global maritime traffic flows, given the lengthy process involved. Between 2009 and 2021, shipping traffic has more than doubled from 130 transits annually to 347 (Paul, 2023). In this respect, the Bering Straits stands as a strategic knot that connects a region amid rapid climate change and the hotspot of the globalized economy—including several major industrial powerhouses, such as China, India, Indonesia, Japan, and South Korea. Considering the potential of Arctic shipping expansion through more intense use of the NSR, the Bering Strait may gain further geopolitical significance in the coming decades (Rothwell, 2015). Due to the rise of geostrategic considerations regarding the Eurasian region, this process emphasizes the strait's increasingly strategic value.

Until now, the Bering Strait is mainly seen as a secondary strait in the various junctures listed on the world ocean network in which shipping lanes connect continents and islands (Alexander, 1992). From a strategic meaning, the geographical condition of this strait makes it a choke point that implies the ability to hamper the trade flow, threatening countries' interests. The global economic shift towards the East may provide this strait an unprecedented significance. The 83-kilometer-wide strait between Alaska and the Russian Federation is the termination of the NSR from the Arctic Ocean (see Fig. 2). Moreover, this area has been subject to evolving perceptions in recent history. During the Cold War, the Bering Strait was dubbed the *Ice Curtain* as this region indicated the contact line between the United States and the USSR. Subject to

ideas and projections, the strait was once envisioned as a transcontinental land bridge between the Americas and Eurasia in the 1890s. In 2007, a Chinese railway engineer Wang Mengshu advised to build a tunnel that could connect the two continents and achieve a long-stand engineers' dream shared in Russia, Canada, and the United States (Small, 2020). Political conditions, well beyond the realm of architectural utopias, have never enabled the implementation of such a project.

At present, the Bering Strait is becoming a conflicting spot driven by the logic of confrontation between China and the United States. While the maritime connection between the Arctic and the Atlantic can be carried out across multiple junction nodes, the one between the Arctic and the Pacific relies on this narrow strait. The vessel traffic growth to and from the Asia-Pacific may intensify the significance of the strait in the coming decades, involving scientific, commercial, and military activities. The potential deployment of submarines may illustrate the unprecedented strategic dimension that the strait could reach. In this respect, the Chinese navy's projection capability in Arctic waters is upsetting geopolitical

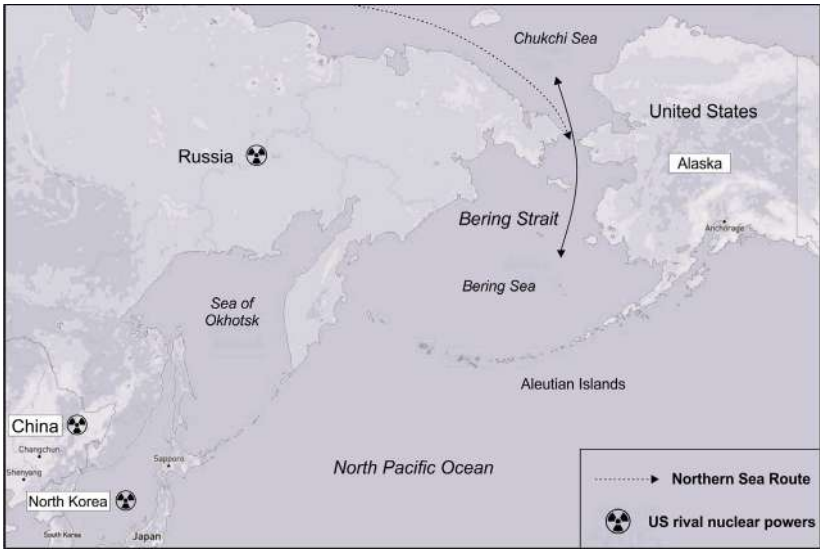


**Fig. 2** The strategic value of the Bering Strait (map designed from the US Geological Survey)

balances. In 2021, Chinese vessels conducted surveillance missions in the Bering Sea (Uryopova, 2022). Despite the increasing military activities, the Bering Strait demonstrates long-standing stability that may ensure an effective governance of this zone. In 2018, Russia and the United States agreed to regulate shipping traffic in the Bering Strait and the Bering Sea (Paul, 2023). Despite the war, both parties appear to cooperate, particularly in applying treaty obligations. The further involvement of non-Arctic actors is a destabilizing factor in the balance that prevails in this spot, whereas maritime traffic is for now limited. In 2022, the total volume that crossed the NSR reached about 34 million tons (CHNL, 2023). The anticipated expansion of maritime traffic that includes LNG tankers, freighters, and oil tankers entails an increased risk about environmental matters and the traditional way of life of Indigenous peoples living along the Bering Strait (Huntington et al., 2023). In this regard is important to note the high biodiversity value of the region and the dependence of coastal communities on the sea. The combined geoeconomic transformation and shifting strategic balance may ultimately weaken Arctic shipping governance.

### *Alaska as the New Stronghold*

Since its acquisition from the Russian Empire in 1867, Alaska has long been far from the imagination and political priorities of the US government. During the Second World War, the Japanese military offensive succeeded in capturing three Aleutian Islands—Adak, Attu, and Kiska—in the vicinity of Alaska before being completely retaken by the US forces in July 1943. For the first time, Alaska acquired an unprecedented military value since its incorporation into the United States. Nonetheless, this direct military threat did not alter the US federal authorities' mindset to envision this territory as a cornerstone of its defense. Echoing anticipated growing activities in the Bering Strait, the US assessment of its northernmost territory is drastically changing as it never occurred in the past.

As Corgan rightly remarks, the United States has lacked sustained interest in the American Arctic since the Second World War (2020, pp. 152–153). This lack of vision is rooted in the non-existence of its geostrategic relevance in the post-war years, namely the incorporation of Alaska in the national security doctrine. During the Cold War,

the Western Arctic area concentrated most of the US strategic attention within the frame of the Atlantic Alliance. At the same time Alaska, the closest US territory to the Soviet border, remained away from this rivalry between the two great powers. During the post-Cold War period, followed from 2001 onwards by the war on terrorism, the major national security threat for this territory remained the nuclear and ballistic threat posed by North Korea (Bertelsen, 2020). In the meantime, the expansion of the polar cooperation further strengthened the idea of a stable and peaceful area when the country was massively engaged in other geopolitical theatres, particularly in the Middle East. It is also the manifestation of a lack of political consistency in the framing of a US Arctic strategy, which has a direct impact on Alaska. Thus, the Obama and Trump administrations (2009–2021) reflected these constant evolutions according to their own preferences and interests (Weignartner & Orttung, 2020). Yet, this northernmost American territory provides the United States the legitimacy to hold a comprehensive role in the Arctic region.

The Arctic's lack of centrality to the US vision of security policy has left the political forces advocating for a stronger US presence in the region, particularly Alaska's political representatives, isolated. Since 2009, efforts have been made to secure US Congress approval for funding new icebreakers (Paul, 2023). In response, US federal authorities plan to deliver a new icebreaker to bolster its presence in the Arctic Ocean. Among the priorities, the US strategy aims to ensure freedom of navigation (The White House, 2022b). Regarding its maritime capacity, the United States lags behind China and Russia, its main competitors, and lowers its ability to cope with the increasing influx of commercial activity as expected (Aton, 2018). While the US Coast Guard has only two operational Polar-class icebreakers (*Polar Star* and *Polar Sea*), Russia has the world's largest icebreaker fleet—and the only country to own nuclear-powered icebreakers—and China operates two icebreakers and is building a third (Todd Lopez, 2022; US Coast Guard, 2019; Xie, 2023). Henceforth, the US Coast Guard's projection at sea is dwarfed by its main geostrategic competitors, whereas security concerns are likely to extend throughout the polar region.

The gap in the US strategic posture in the region occurs at a critical juncture since Asia, particularly China, has returned to the center of the global economy in recent decades (Bertelsen, 2022). In addition to economic growth, the region is also taking on an unprecedented strategic and security dimension with the rise of the Chinese army. Interestingly,

Alaska's economic ties with China are significant, as the majority of its exports, such as fisheries and oil, are directed towards the country (Ren, 2022). As the northern window of US national interests in Asia, Alaska is redefining its strategic value in this global reconfiguration. In 2023, a Chinese spy balloon flew over this US state, and a US fighter plane downed another one. For the federal authorities, this crisis was a reminder to bolster its security and defense infrastructure (Danner, 2023). The current geostrategic entanglement in the Northeast Asian region undermines the US defense architecture in Alaska. The close geographic vicinity of China, North Korea, and Russia—three rival nuclear powers—poses a critical security threat to Alaska (see Fig. 2).

Under the Biden administration, the United States strives for a revamped Arctic strategy to catch up with its geopolitical competitors, namely Russia and China. From the North American Aerospace Defense Command (NORAD) modernization to upgrading military capabilities in the polar region, the US government recognizes the need to scale up the country's investment in this area. In particular, the US Department of Defense has established the 11th Airborne Division in Alaska to develop expertise in Arctic mobility and extreme cold weather operations (Garamone, 2022). The federal authorities, with the support of the US state, Alaska Native, and rural communities, plan to conduct military activities, including combined exercises and training on cold weather operations and interoperability (The White House, 2022a). In the meantime, the Alaskan NORAD Region (ANR) remains strategic as it conducts aerospace control within its area of operations and contributes to NORAD's aerospace warning mission. Nevertheless, the slow path of its modernization with the Canadian partner suggests that Alaska should remain vulnerable to threats posed by cutting-edge military technologies in the foreseeable future (Charron & Fergusson, 2023).

The envisioned future of Alaska as a strategic foothold for the United States is yet far from being materialized and a long overdue process. However, the geopolitical perspective gives this territory critical leverage for US projection in the wider Indo-Pacific region. In 1935, Brigadier General William Mitchell had his prophetic words regarding the strategic role that Alaska may assume as he described the region as the key point of the entire Pacific (Garfield, 1969). A century later, this prediction seems closer than ever.

### *The Great Entanglement with the Indo-Pacific Region*

The Indo-Pacific region, due to its vast geographical size and the presence of numerous states, has become the primary stage for geostrategic confrontation between China and the United States. Covering the Pacific and Indian Ocean worlds, this immense maritime arena challenges major powers that attempt to spread their influence or, conversely, see it weakened (Hakata & Cannon, 2021). This comprehensive geographical concept is a direct answer to the United States and its regional partners considering China's growing influence. The German geographer Karl Haushofer (1869–1946) initially elaborated the "Indo-Pacific" theory, which encapsulated a political oceanography and anticolonial vision (Li, 2022). Unlike this scholarly approach, the resurgence of this notion in the twenty-first century, supported by regional powers such as India and Japan, is a counterbalance to the systemic challenge that China entails (Denisov et al., 2021). In 2013, Chinese President Xi Jinping launched the Belt and Road Initiative (BRI), reflecting the ever-extending geoeconomic influence translated into massive investments across Eurasia and the Indo-Pacific (Li, 2020).

Alongside the Indo-Pacific system, Eurasia is another precursor and terrestrial equivalent to the increasing international security dilemma between China and the United States. In these circumstances, the Arctic is embedded in these two large geographical areas. The patterns of this trend are expanding and bolstering the United States and its allies in broader Asia. As a ripple effect, the Arctic region, due to its proximity, is being drawn into this logic of two blocks that entails complexity and extensive ramifications. It also resulted in an interlocked process ranging from the forming of a new geostrategic environment to the Asian countries' interest in the polar region. Diven by resources, energy, and technology needs, Asian countries are leading the global economy and having a direct impact on the Arctic as a neighbor area throughout the Bering Strait stretch. As noted by Pincus, the Indo-Pacific and the Arctic are "adjacent, but they are very different" (2021, p. 98). From a security perspective, the latter is not the arena for strategic engagement, as China's military presence in the polar region remains a distant prospect. However, the strategic closeness between Russia and China provides a consistent and geographic framework that encompasses the Arctic. From this perspective, the Russian proposal in 2019 to support China develop a missile warning system is one example of a potential comprehensive

Eurasian integration from the Arctic to the South China Sea (Stefanovich, 2019).[6] In the meantime, Russian weapon sales are also helping China in achieving military balance with the United States in the Western Pacific region (Lukin, 2020).

In this context, Russia defines itself "as a unique country-civilization and a vast Eurasian and Euro-Pacific power", while distancing itself from the "Indo-Pacific" concept promoted by Western countries (Ministry of Foreign Affairs of the Russian Federation, 2023a). According to Moscow's perception, this Western concept attempts to keep India away from the Eurasian realm, which threatens to create new artificial boundaries and undermine the regional architecture built around the Association of Southeast Asian Nations (ASEAN) (Huan & Thambipillai, 2022). From the Russian standpoint, the Asia–Pacific is a legitimate space for its power projection while rejecting any hegemonic form, both from the United States and China (Lukin, 2022). Although Russia's influence mainly focuses on Northeast Asia, it underpins the Arctic entanglement with the Indo-Pacific. In the meantime, interest in its natural resources is notably growing among Asian economic powerhouses.

Similarly, the conflict between Russia and Ukraine directly affects the dynamics of the US–Chinese relationship, while the Taiwan issue remains the central component of this bilateral relationship (Zhao, 2023). The strategic competition between these two great powers is accelerating and expanding, which creates a security dilemma that could directly affect the Arctic area. The polar region may undergo strategic adjustments, but hegemony is unlikely in the Indo-Pacific, according to Wuthnow (2019). US strategy prioritizes Chinese systemic challenges in the Indo-Pacific over the Arctic, which remains a secondary theater (Pincus, 2021). From this feature, this trend has an expanding dynamic that bolsters the United States and its allies in broader Asia.

However, Cannon and Hakata (2021) highlight pitfalls in the strategic debate due to the absence of the Arctic region in the Indo-Pacific. Among them, China's position concerning the polar regions—Arctic and Antarctic included—requires a broader understanding of the strategic

[6] Such a potential deployment of Russian-based radars could anticipate any US ICBM launch flying over Russia that could target facilities on Chinese territory. Nonetheless, the prospect of such a level of bilateral cooperation appears to be materialized in the long-term future.

debate. As such, it involves grasping the magnitude and systemic dimension of Beijing's efforts to craft a coherent geopolitical project.

## Conclusion

In a systemic confrontational mindset, the decoupling process between China and the United States appears like as a permanent phenomenon. This acknowledgment induces the establishment of their singular ecosystem by rallying with the other countries, respectively, ranging from attempted economic and technological dissociation to systemic diplomatic antagonism. It is already shaping the global balance of power, which is bound to spread to all parts of the world, including the Arctic region. Although the globalized economy is ending, the international security system is diving into an uncertain reconfiguration process. Given the multiple crises, the international order that emerged from critical historical junctures, namely post-World War II and post-Cold War periods, is experiencing an existential transition that is taking place in the Anthropocene event.

In this paradigmatic shift, the Arctic region is embarking on an uncertain and challenging journey. The region is moving away from the principles laid down in the twilight of the Cold War, reflected in Gorbachev's Murmansk speech in 1987, which sought to frame an open, inclusive zone where the northern hemisphere would meet (Gorbachev, 1987). The idea of Arctic exceptionalism, already challenged since 2014, has been stripped of its essence as the polar region becomes further entangled in global dynamics. Despite geopolitical tensions, addressing systemic challenges that directly affect the polar region should prevail since challenges implied by Earth's changing climate occur on timescales far longer than human ones. In a survival mode, the intergovernmental institutions may attempt to safeguard the scientific cooperation that is essential in this context, and thus, despite a more challenging strategic environment.

In recent years, the trend in the Arctic region has been to strengthen the confrontational dynamic between NATO and Russia. The integration of Finland and Sweden into the Atlantic Alliance encapsulates even further this pattern. However, far from being a mere replay of the Cold War period, this NATO expansion brings new challenges as the articulation of the level of responsibility between member states could exacerbate disagreements among them (Alberque & Schreer, 2022). The United States is focusing its defense policy efforts on the Indo-Pacific area.

Consequently, the Nordic countries, together with their European partners, are called upon to step up their efforts. What is new in this ongoing process of transformation process is the interconnectedness of the Arctic region with the Asian and Pacific areas, which may become more evident as the flow of materials is directed towards this most dynamic part of the planet.

In some ways, this development further underscores the notion of *Global Arctic*, as the region is poised to expand itself into new geographical territories. Paradoxically, all this is happening at a time of sharp divisions across the international community. The growing ties between NATO and US Asian allies such as Japan and South Korea, which have been underway since the beginning of the twenty-first century, are fostering a deepening and multilateral defense and security cooperation with European countries (Matsumura, 2023; NATO, 2022). Driven by the United States as a bridge-builder, this supports its allies to act together in blocs. This approach serves as a counterweight to the geostrategic challenges raised by the convergence of Russia and China. As Snow concluded, the Sino-Russian relationship and its evolution will be of "decisive importance to the world as a whole" for the rest of the twenty-first century (2023, p. 527). In the case of the Arctic region, an initiative to implement a US–China dialogue mechanism may facilitate the prevention of tensions and deconfliction on critical issues (e.g. climate change, fisheries, and freedom of navigation) (Zengjun, 2023). Thus, the future of Arctic governance will largely depend on the outcome of this bilateral systemic dynamic. Ultimately, this would give China, as a non-Arctic stakeholder, an undeniable role in the region.

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# From Neutrality and Peacemaking to Military Alignment—Finland's Illusive Geopolitical Imagination

*Lassi Heininen*

## Introduction

What is the idea of Finland, and the core of Finnish national consciousness, and where is Finland located—geographically, culturally, mentally, historically—has been asked (e.g. Harle & Moisio, 2000). This deals much with identity politics and geopolitics, as critical geopolitics also recognizes other factors, such as identity/ies, knowledge, the environment, as well as non-state actors.

A retrospective overview of Finland's history shows, even manifests, that Finland has been located between East and West—geographically, botanically, economically, culturally, geopolitically, mentally, and historically, as well as concerning food—and its peoples were influenced by Eastern and Western cultures. Importantly, the cultural, political, and economic foundation of Finland's independence was created during the autonomy as a Grand Duchy, as a part of the Russian Empire. Similarly, "Sauna" (genuinely a Finnish word), broadly used in North-western Eurasia (Finland, Baltic republics, North-western Russia, Siberia) with a

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shared sauna culture, is another proof of Finland's Eastern roots (Eronen, 1997), as well as vodka as a traditional drink.

Interestingly, Kalevala (published in 1835), Finland's national epic, as well as a Karelian-Finnish one, is based on Finnish-Karelian oral epic poetry which Elias Lönnrot collected mostly in Viena's Karelia, a part of Russia (never being a part of the Finnish territory), and constructed its plot "around the Sampo adventure" (Ahola, 2004). Similarly, Akseli Gallen-Kallela painted there, when Finland was a part of the Russian Empire, one of Finland's iconic national landscapes, including forests, lakes, and hills; Eero Järnfelt painted another national landscape at Koli, in Finnish Karelia, close to the Russian border. Hence, Lönnrot and Gallen-Kallela crossed the former/present Finnish (geographical, historical, linguistic, state) borders to (re)build national identity, and by doing so also froze, for a long time, Karelia as a representation of Finnishness (Tamminen, 2024).

Whereas, emphasizing a nationalistic point of view, mainstream members of the political, economic, and cultural elites have tried, since the end of the nineteenth century, to argue that Finland belongs—ideologically, historically, economically, politically, mentally—to the West. As well as, that the border, defined as a boundary, between East and West goes along the Finnish-Soviet/Russian border (e.g. Harle & Moisio, 2000, pp. 220–240), when actually it goes within Finland. After being defeated by the Soviet Union in the Second World War, Finland made a paradigm shift in its foreign and security policy towards neutrality and good relations with the Soviet Union, as well as actively supporting peace, disarmament, and confidence-building in world politics. Finland earned credibility as a peacemaker by hosting the Conference on Security and Cooperation (CSCE) in Europe. Conversely, after the Cold War, Finland slowly moved towards alignment with Western political and military structures via a decade-lasting and partly hidden process.

In International Relations it is politically relevant and scientifically interesting to study a remote geographical periphery on the top of the world, as the upper edge of the Mercator map, marginalized and colonized for centuries by great powers and states, which suddenly becomes attractive and a subject of growing global interest. The post-Cold War Arctic is such a remote area with high geopolitical stability, on the one hand based on constructive cross-border cooperation—between Arctic states, between them and Indigenous peoples, as well as globally between Arctic states and non-Arctic ones—and on the other, due to certain special

features of Arctic geopolitics, security and governance (Heininen, 2024). By the 2020s, the Arctic is considered to be becoming global, and hence, what happens worldwide matters for the region, as well as what happens in the globalized Arctic has worldwide implications (Heininen & Finger, 2017).

In this environment Finland, with its "de facto" Northern dimension foreign policy, had credibility to make an initiative on the Arctic Environmental Protection Strategy (AEPS), a foundation for the Arctic Council. Hence, as a small militarily non-aligned Arctic state, Finland played a bigger role than its weight in world politics. Yet in the 2020s, after becoming militarily aligned, this potential is fading, and the momentum has passed.

This chapter is a narrative on Finland, as an Arctic state, geographically and geopolitically located in Northwestern Eurasia, between the East and the West, neighbouring the Russian Federation, Norway, Sweden, and Estonia; politically a part of the Nordic region; as well as politically economically aligned with the European Union, and militarily with NATO and the USA. It is an evolution of Finland's foreign and security policy in the world politics of the 2020s with two-fold reality: great power rivalries, new East-West tension, hot and proxy wars vis-a-vis the climate crisis and environmental catastrophe. Its focus is on a transformation of Finland's geopolitical and security-political position from the Cold War period, as an active non-aligned country and a peacemaker between the major nuclear weapon powers, to the 2020s, as a NATO member-state and military ally to the USA.

The theoretical approach is based on the principle that instead of "fear" the main factor in international politics is "cooperation" (see Heininen, 2024). Similarly, that for a small nation located between East and West, like Finland, it is better to lean on cooperation than rivalry and conflicts, and have two or more (big) friends than only one. The underlying assumption is that the global Arctic is—geopolitically, (geo)economically, environmentally, military-politically—an important context for Finland, and that an active role of a peacemaker is needed in the future Arctic facing the existential climate crisis.

The hypothesis is that national identity, consciousness, and a society's mindset matter, and that those of Finland are neither possible to understand without the aspects of Northern, Eastern, and Western (cultural) influences. Nor Finland as a mediator and peacemaker, and its foreign and security policy without international cooperation, confidence-building,

peace, and neutrality—their legacies live. Whereas, the military alignment with NATO and the USA is jeopardizing this, as it leans on division and rivalry, not cooperation and confidence, and leaves Finland dependent on one (big) friend: Quo vadis, Finland?

The chapter is more descriptive than analytical, as it is too early to analyse thoroughly all consequences of military alignment for Finland. It leans on a functional causal explanation, where a reason produces something else, if preconditions are fulfilled, yet the interrelationship is either determined or probabilistic (Uusitalo, 1996, pp. 99–104). The article refers to the Finnish information society model, as a success story, by Castells and Himanen (2001) arguing that also in foreign and security policy a Finnish model, though with different gradients, can be interpreted as a success. After the introduction the chapter's structure is as follows: (1) A retrospective overview of Finland's national features and peculiarities, from being Sweden's Eastern colonies to independence via a Grand Duchy under Russian rule, and further from a Nazi Germany's ally to the truce with a former enemy via wars; (2) Transformation of Finland's foreign and security policy from a German ally to neutrality resulting in the CSCE, and becoming a historical motor of Arctic cooperation resulting in the AEPS, via the Paris Peace Treaty and the FCMA agreement with the Soviet Union; (3) Another transformation from neutrality and peacemaking to political alignment, with a referendum, by the European Union membership, and military alignment by NATO membership, without a referendum with a few consequences; (4) An aligned Finland in the globalized Arctic based on national policies vis-a-vis global values; and (5) Conclusions.

## Finland Between East and West—A Retrospective Overview

Among geographical, geopolitical, cultural, historical, and identity features of Finland a few ones are obvious: Geographically Finland is located in the north-western corner of Eurasia, and extends beyond the Arctic Circle. It is bordered by the Baltic Sea from the South and West, and hence concerning foreign trade Finland is almost an "island", though a land-locked country concerning the Arctic Ocean. Finland is located somewhere "under the North Star", as described by a well-known Finnish author Väinö Linna in his novel trilogy (1959–1962), as an important part of the nation's mental map. Finland's demography is consisted of the

Finns—majority Finnish speaking, and minority Swedish speaking—and the Saami, one of the Arctic Indigenous peoples with northern cultures, expertise, and livelihoods, and the Roma as minorities.

In the Viking Age, residents of the Western and Southern coasts, as well as the Åland Islands, actively traded with the neighbours: seal fat and meat with the Swedes, fur, and fish with the Varjagians (the Vikings from Sweden) and Novgorod, the Northern centre of the ancient Russia. Becoming a part of the Vikings' trade networks could be interpreted to be a beginning of Finland's historical, cultural, and geopolitical positioning between East and West (Ahola & Frog, 2014).

After the Viking Age, Sweden conquered the South-western coast of Finland. Although, the official notion of the "Crusades" was to baptize the pagans, it was all about colonialism. Behind was a race, to the North, between the Catholic Church and the Orthodox Church, which expanded its influence to the North via Karelia and the White Sea area. Since then, these two fractions of Christianity have been influencing the territories of the current Finland.

The colonized Finland became a part of Sweden as its Eastern provinces (or colonies), and the Western European expansion captured Finland under its influence (e.g. Kaplinski, 1995). Further, its people—Finns, as well as Karelians and Saami as ethnic and language minorities—became subjects of the Swedish king, were heavily taxed, and not allowed to speak their own language, and hence, albeit not treated like slaves, often rebellious against the Swedish rule. Unlike, the Swedes settled in the eastern colonies by the King enjoyed their ethnic- and language-based privileges for more than 600 years, as well as Swedish-speaking Finns, as their descendants, enjoy today.

Sweden, as an emerging kingdom in the West, and Novgorod, as the ruling republic in the East, agreed on a peace treaty in 1323 in Pähkinäsaari (Nöteburg in Swedish) on the Karelian Isthmus. Neither as a strict border nor a boundary the Pähkinäsaari Peace Treaty divided the current territory of Finland into two parts for centuries: the Western part ruled by Sweden and the Eastern one, including Karelia and Lapland, by Novgorod. Interestingly, if religion is one indicator of "Finland between East and West", so is genotype, which is not homogenous but much follows the Peace Treaty's border. This is understandable, as both religion and genotype have had their influences on peoples' cultures and languages. Interesting though, that the Peace Treaty is still dividing—culturally, mentally, according to human health—the people, if not the

entire country, and could be used, like also bread, as a metaphor for a divided mental map of Finland: the "rational" West with hard rocks, (rye) bread and values, and the "mystique" East with soft birch forests, bread and values (Laaksonen, 1994; Silvasti, 2000).

As a geographical-ethnic term Karelia—never been united as a political entity—is obscure and ambiguous, as instead of one Karelia there are several ones: the ancient Karelia, the Republic of Karelia, Viena's Karelia, the Karelian Isthmus, and North Karelia (in Finland) (Kaukiainen, 2004; Solomeschch, 2004). Thus, Karelia is not located between the current Finland and current Russian Federation, but within both states, being interpreted "as a battlefield, myth, springboard, gateway, corridor, landscape for war and peace" (Solomeshch, 2004). Here a border—either acting as a (closed) boundary or (open) borderland, and reflecting a conflict or peace—is a right geopolitical term to describe Karelia's history (Heininen & Solomeshch, 2004), as well as the existing/emerging East-West tension of the 2020s between Finland and Russia.

After Moscow took over Novgorod and after the Union of Kalmar (1397–1521), which united all the Nordic countries and nations, the Swedish Kingdom started its further expansion, slowly but definitely, towards the East and North-East (of Finland). Consequently, in the Era of Swedish-Russian wars of attrition the Finnish territory became a battlefield for centuries. After successful invasions into the East covering the Karelian Isthmus and Western part of Karelia, fighting was transferred into the Southern part of the Baltic Sea and further to Central Europe. As a result, for a while, Sweden became a major European power, partly thanks to Finnish soldiers fighting for the King.

The greatness of Sweden was temporary, as the King's army was defeated in Central Europe, and Russia started its expansion towards the West, and built St. Petersburg as its westernmost outpost and glorious city. By the early nineteenth century Sweden had also lost its interest to defend Finland and consequently, its Eastern colonies to Russia. Finland became a part of the Russian Empire as a Grand Duchy, and the people subjects of the Russian Tzar.

The new status meant that Finland had its own administration, economy, and currency, and there was an economic border between Finland and the rest of the Empire. This made it possible to develop infrastructure, such as railways (e.g. Helsinki-St. Petersburg railway line in 1870), on the one hand, and on the other, build cultural self-determination, including a right to use and teach the Finnish language,

and an autonomy with a Parliament Act and an equal right to vote, also for women as the first in Europe, in 1906. Followed from this, a nation-building by the forerunners of the Finnish cultural, economic, and political elites started.

As a cumulative process, this was transferred into state-building, and at the beginning of the twentieth century into into a full independence, when the Tzar's rule was weakened by the rapid transformations of world politics, the defeated war with Japan, the First World War, and finally the collapse of the rule by the Bolshevik Revolution. Due to this turbulence, the time was ripe for Finland's independence, which was recognized by Lenin, the Bolshevik leader, interpreted as a gift or a tactical move.

Unluckily for Finland, as a consequence of these transformations a bloody civil war started in Finland between the Reds, encouraged by the Revolution yet not assisted by the Bolsheviks, and the Whites, assisted militarily by the German troops by an invasion of Southern Finland. The Whites—ironically led by a Russian general Mannerheim, originally a Swedish-speaking aristocrat—won the war, and strangely, admiring Germany, elected a German prince as the king of Finland, though his rule was among the shortest in world history, as Germany was defeated soon. All this heavily damaged the just-independent Finland and much showed the direction for its foreign policy for the next decades.

As conventional wisdom says a defeat of a war has potential to have a seed of a new one, and it happened when 20 years later Germany started the Second World War. For Finland this meant militarily three different wars (against two enemies) and two truces: the Winter War against the Soviet Union and the first truce, the Continuation War in connection with Germany's invasion of the Soviet union and the second truce, and Lapland's War against Germany/German troops in Lapland. Politically and mentally the short war period was very confusing and contradictory: On the one hand, joining Nazi Germany in its attack of the East, and being involved in ethnic cleansing, when aiming to occupy Soviet Karelia, and hence create a greater Finland. On the other, an almost schizophrenic shift from being an ally of Nazi Germany to fighting against it, and making a truce with the Soviet Union, a former enemy.

The second truce made it possible for Finland to quit the war earlier, and hence avoid being occupied; interestingly, Helsinki is the only European capital of a defeated state which was neither surrounded nor occupied. This meant gaining back firm control over the entire country, including Lapland, which was during the war delegated to the German

armed forces, albeit not Petsamo (Petchenga), which was lost to the Soviet Union.

Finland had to pay heavy war compensations to the Soviet Union, and accept the Paris Peace Treaty, in 1948, with strict regulations to the army. Yet more importantly, there was a shift in domestic policy and the political structures were strengthened and democratized, as the treaty confirmed human, political, and basic rights for all residents of Finland (e.g. all left-wing parties were rehabilitated). The economy was rebuilt based on heavy (metal, paper-pulp) industry, originally to pay the compensations, and since then foreign trade, in particular export, was for decades based on the barter trade with Russia.

## Finland's Role of a Bridge-Builder and Peacemaker—A Success Story

In foreign and security policy "the electoral mandate is to advance a country's core interests of peace, security, and welfare by cooperating with others and, when necessary, asserting them against others" (Haass, 2023). Behind are two challenges: On the one hand, competitive and conflicting interests between policy goals, and the reality of domestic politics, for example, "The most urgent and significant threat to American security and stability stems… from within… [when] deep political divisions make it difficult… to design and implement a steady foreign policy" (Haass, 2023). On the other hand, foreign and security policy faces a challenge of how to deal with conflicting objectives: national interests (e.g. unilateral, national security) vis-a-vis universal values (e.g. human rights). "There is no hierarchy between values and interests… [which] face up to moral dilemmas and trade-offs of interests" (Lubkemeier, 2021), and similarly, ethics says that to emphasize national interests over moral points of view, such as human rights, is not always allowed (Sihvola, 2006).

It matters how the history and current state of a national identity-policy and its transformations are interpreted, and what aspects, for example myths, are being used and how in nation/state-building. This could be done by a brand-building advertising a country and its peculiarities abroad; or consciously emphasizing and developing its national expertises (e.g. education, sport), as strengths of a nation; or creating a credible foreign policy profile for a nation. Finland has tried them all: (1) Instead of "the Business Center of the New Northern Europe" (Finnish Foreign Trade Association), in the 1990s, there was a project of the

national brand-building delegation of 2008, chaired by the former CEO of Nokia, with innovations, such as "Sustainability" and "Sisu" (e.g. Finnish National Commission on Sustainable Development, no year); (2) Whereas building on expertises and knowledge, such as sport (e.g. several gold medals in 1924 Olympic Games), and a compulsory school system and well-functioning public library system for all, resulting in a 100% literacy rate, have been more successful, as high test scores in the PISA (Programme for International Student Assessment), the Finnish knowledge society model (e.g. Kivinen & Rinne, 1993; Castells & Himanen, 2001), and the first place in the 2010 Newsweek (2010) rating well indicate; and (3) A credible foreign policy profile as a mediator and peacemaker as another success.

For a small state to become a mediator/peacemaker and to maintain the profile is neither a matter of brand-building nor statement, but to earn it. In the first place, to have a political will and intention, and capable individuals (e.g. diplomats) and financial resources (e.g. to maintain UN peace-keeping troops) to make it, as well as an active civil society to support. Further, to prove that the position is credible by having logical foreign and security policy, albeit not necessarily being non-aligned, and emphasizing non-military security means like for example, Norway is doing. After the Second World War Finland had all these, and hence its new foreign and security policy became a success story in managing to build a credible high profile as a mediator and peacemaker including concrete results (see Piiparinen & Brummer, 2011).

Finland's new foreign and security policy was four-fold: First, good relations with the Soviet Union based on the Paris Peace Treaty, and the FCMA Treaty; Second, joining the United Nations and the Nordic Council as politically and militarily non-aligned and being active; Third, actively supporting peace and disarmament, such as President Kekkonen's (1967, pp. 282–284; also Utrikesministeriet, 1986) initiative on the Nordic Region as a nuclear-weapon-free zone, as well as becoming an expertise on (nuclear) arms control; and Finally, consisted of these aspects and the AEPS there was a "de facto" Northern dimension of Finland's foreign policy (Heininen, 2002).

This kind of active neutrality, between the East/Soviet Union and the West/the USA, and within Nordic and international structures, was dynamic, albeit controversial: On the one hand, close Soviet relations based on FCMA caused a political pressure from Moscow—for example, during the 1961 note crisis due to growing militarization in

West Germany (Ulkoasiainministeriö, 1961), and after the Soviet 1968 invasion of Czechoslovakia—and the related worries and alarms of Soviet interference, such as proposals of joint military drills, and even a fear of a communist revolution, among Finnish politicians.

On the other hand at the same time, the position brought economic and political benefits: the barter trade with construction projects (e.g. the eight years one of Kostamus) was very beneficial for Finland's economy, in particular the involved companies; and the militarily non-aligned Finland became an active member of UNs, and contributor for UN peace-keeping troops, that of the Nordic cooperation, and finally—slowly, partly secretly—Finland became integrated into Western European economic and political organizations, such as EFTA, European Communities (e.g. Vares, 2002).

Credibility and acceptability were the key words behind the (Nordic) active neutrality based on the policies of the former presidents, Juho Paasikivi (1946–1956) and Urho Kekkonen (1956–1982). According to President Kekkonen "… a policy of neutrality can only be pursued in practice if it has been accorded the recognition and trust of those foreign states which influence the country's destiny; this recognition and trust must be gained and constantly regained, through unflagging work and care", also called the "confidence model of neutrality" (Möttölä, 1982, pp. 290–291). Here Finland was successful and managed to avoid the worst range of rocks as consequences of the Soviet Union's notes, for example that of 1961, and dared to initiate to host the Conference on Security and Cooperation in Europe (CSCE), in 1975.

This was like walking on a tight rope, as having pressures from, and rocks on, both sides: to act according to the Peace Treaty and FCMA in order to keep its neutrality credible, and at the same time cooperate with Western countries/organizations.

In the 1960s–1970s, this kind of neutral foreign policy was neither understood nor liked by a few policy-makers in Western countries. For example, according to a US State Department report the US Administration would not militarily assist Finland, unlike Sweden, against a possible Soviet attack due to a lack of trust (e.g. HS 21.12.2002, C1). Also extreme right-wing politicians in West Germany looked down on this policy naming it "Finnlandisierung" ("Finlandization" in English), with a negative connotation, to mean a despised kneeling and lack of independence before a greater power, the Soviet Union. Among the consequences was, for example, based on the US ban of hi-tech export to the Soviet

Union, CIA demanded to quit the export of deep water sub-vessels, such as MIR I and MIR II (HS 22.10.2003). In contrast, Helsinki, much due to its empirical centre, acted as a setting of St. Petersburg (Leningrad at the time) or Moscow for American movies, for example, The Reds, Gorky's Park.

Being a land-locked country without a coastline on the Arctic Ocean, the Cold War Arctic was interpreted to have a marginal relevance for Finland's foreign and security policy, unlike the Nordic Region and the Baltic Sea area (e.g. Heininen, 1989, 1999, 2014a). Consequently, the region was underestimated by the Finnish security-political elite, who did not see Finland as "an active contributor to the security-political equation of the Arctic comparable to the coastal states of the Arctic Ocean" (Ruhala, 1988, p. 117).

Interestingly, this was not always the case. By the Tartu Peace Treaty of 1920, as a newly independent state, Finland received the Petsamo area—after geopolitical dreaming and several demands to the Russian Empire as a Grand Duchy (e.g. Voionmaa, 1918)—with a short coastal area of the Barents Sea rich in nickel. In that capacity, Finland signed the Svalbard Treaty, the only international treaty concerning the Arctic, and became its party. Petsamo became Finland's other "arm" for 25 years between the World Wars, though after the great Eastern invasion its governing was given to Nazi Germany, and finally lost to the Soviet Union.

Similarly, a railway connection to the ice-free coast of Arctic waters is been defined, almost for a century, strategic for Finland's security and foreign trade. If the first plan was to build it to Liinahamari, in Petsamo, where the first road to the Arctic Ocean ended, during the Second World War there was a proposal by a special, secret state committee to end it to Skibotn, in Norway, after renting a port area from Norway, just invaded by the Nazy Germany (Komiteanmietintö, 1941). This example of Finnish-German cooperation is also one of the various episodes in the Finnish-Norwegian "cold war", firstly due to the dominance of Finnish-speaking people in Northern Norway, and since Finland's independence due to a potential threat of "Greater Finland" (e.g. Eriksen & Niemi, 1981). (also Heininen, 1999, pp. 134–147).

Whereas, Finland's business elite became interested in the Arctic, in the 1980s–1990s, due to its rich resources, geographical location, and features favourable for sea and air transportation, as well as shipping and ship building. An interesting project was Kimek A/S in Kirkenes, a Finnish-Norwegian joint venture (owned by A/S

Södvaranger, Sörvaranger Invest A/S, Wärtsilä Marine Industries Inc) for a floating dock to rebuild and modernize ships (e.g. Heininen, 1999, p. 179). The Norwegian government had accepted the Soviet Union as a co-owner, yet its collapse caused hindrances in the implementation, and Wärtsilä Marine Industries Inc withdrew from the project, as the entire Finnish marine industry was bankrupted in the late-1980s.

Interestingly, inspired by Soviet President Mikhail Gorbachev's Murmansk speech, Finland regarded its initiatives for Soviet-Nordic cooperation on environmental protection and science, "as an important opening in approaching security and co-operation problems in the Arctic and Nordic areas" (Torstila, 1988), and initiated the Arctic Environmental Protection Strategy (Ministry of Foreign Affairs, 1989). As a result, Finland hosted the first ever ministerial meeting of the Arctic states, in 1991, where the eight states signed the AEPS agreement. It has been considered and referred to as the basic document for cross-border (functional) cooperation on environmental protection in the circumpolar North, as well as the ministerial as starting point of the current intergovernmental cooperation on Arctic affairs including high-level forums, organizations, networks (e.g. Arctic Council (AC), Barents Euro-Arctic Council (BEAC), International Arctic Science Committee (IASC), University of the Arctic (UArctic)). Finland became a member state of these, and vigorously promoted the Arctic Council. As a result of this significant transformation, high geopolitical stability based on constructive cooperation was achieved.

A significant change of the international system, caused by the end of the Cold War and its bipolar world order, meant a new environment for Finland's foreign and security policy. The shift was remarkable, as foreign policy used to mostly be about a function of relations with two great powers, and caused new challenges, such as the environment, human rights, terrorism (Väyrynen, 1993, pp. 36, 55–56), and raised the question of whether Finland should continue its neutrality, or go towards alignment (Möttölä, 1993, pp. 119–120).

If in the Cold War Finland's neutrality was not trusted, and "Finlandization" was taken as a contrast to Westernalization, in the 2010s a few Western policy-makers/experts, such as Zbigniew Brzezinski and Michael Byers (2015), nonetheless interpreted Finland's foreign policy being a smart policy, not only to survive but thrive between two superpowers, without a fear of Russia and to join NATO, or even as a model for Ukraine (e.g. HS 23.3.2015). The same was admitted even by a few critics in

Finland (e.g. Tarkka, 2013), as Finland played geopolitically a unique role by staying non-aligned and focusing on cooperation and disarmament.

In the post-Cold War period, it would be logical to continue this kind of policy. Indeed, Finland's foreign and security policy was designed according to the principles of military non-alignment, and, for example, the 1995 Government Report stated that Finland emphasizes cooperation to strengthen international and its own security based on common values, and the best means to enhance stability, in North Europe, was seen to be militarily non-aligned and maintain its own credible military defence (Ulkoasiainministeriö, 1995). Finland also signed a traditional agreement with the Russian Federation, in 1992, to continue political and trade relations with the new political entity behind the Eastern border.

Nonetheless, Finland chose alignment with the West and became politically and economically integrated in Western European institutions: joined the European Union (EU) with a referendum, in 1995, and the European Monetary Union (EMU) without a referendum, in 2002, becoming a member of the Euro Area. Not yet militarily, though, as the majority of Finns, and that of political parties, used to oppose NATO membership. Interestingly, the Nordic cooperation, nonetheless, continued to be, for a while, the closest like-minded international community to most people, and majority of academic, economic, political, and cultural elites.

Before and just after the EU membership, it was stated that Finland is a European country next to Germany, and this new image was much supported by the political and business elites. Followed from this first, the Finnish government initiated the Union's Northern Dimension (ND), in 1997, and worked hard to ensure that the ND would become a major external policy of the EU towards the Arctic and Russia (e.g. Heininen, 2002; Lipponen, 1997). Finland also acted as an advocate for the EU trying to have the Union being recognized as an Arctic stakeholder and accepted as an observer of the Arctic Council (e.g. Prime Minister's Office, 2010; also Pokka, 2004).

These two efforts were not, however, successful, as the Union has not yet been accepted as an AC observer, and the EU's ND policy was tamed and narrowed by EU bureaucrats into one of the Union's Russian strategies. Whereas, an ND policy, based on the de-facto Northern Dimension, had potential to become an important tool in Finland's foreign and security policy toolbox for a new kind of sovereignty applied for an integrated community and towards Russia (Heininen & Käkönen, 2000).

All in all, the CSCE and the AEPS are among the success stories of Finland's foreign and security policy (e.g. Mäkinen, 2014), and were well looked upon in Europe and the Arctic. They also well reflect the main aim of Finland's active foreign and security policy, after the Second World War, as a mediator and peacemaker (Piiparinen & Brummer, 2011). According to functional causal explanation, the motivation/reason for the transfer was a deadlock of the pro-German and anti-Soviet foreign policy, and preconditions (i.e. defeated wars) were fulfilled. Yet it is fair to ask if Finland has given up its constructive role in world politics, and that of a forerunner of Arctic environmental protection in the 2020s.

## Military Alignment—Quo Vadis, Finland?

Finland, as an EU member-state, finally turned its foreign and security policy towards the West, and transformed, with an elusive geopolitical imagination, its militarily non-aligned position to that of a NATO military-bloc member and a US military ally. As a result, Finland neglects the rest of the world—the global South, the United Nations—and its own history and foreign policy's successes, which made it possible for Finland to have more political weight than its actual size.

This new position as militarily aligned is derived, to a great extent, from classical geopolitics and hegemonic political realism, a picture often presented by mainstream political elite and media: the Russian invasion of Ukraine, in February 2022, is seen as a trigger for fear. Interpreting Finland as a small nation on the periphery of Northern Europe, whose security is threatened by Russia, is a simplified picture. While unexpected crises (e.g. Covid-19, climate crisis), or the world (dis)order of multiple crises, could easily cause demands to search for security, and a panic to close borders, and hence military alignment in the globalized world could be done, nonetheless, better via cooperation.

Behind this are two debates, which have dominated Finland's foreign and security policy after the end of the Cold War: First, the question of joining NATO or not debated between two groupings: The Pre-NATO grouping used to consist of the national security elite/security establishment, and the right-wing Coalition Party that desired to be allied with the USA vs. the majority of Finns and Finnish political parties, as well as several experts, were against joining NATO and preferred non-alignment (e.g. HS 22.2.2014).

Second, how to deal with Russia, a geographical, geopolitical, historical, emotional factor of Finland and for the Finns: Either as a threat like for example, the then Minister of Defence Häkämies (2007) named Finland's biggest security threats being "Russia, Russia, and Russia"; or as a strategic partner like for example, the EU's ND policy as a means to build partnership with Russia (Lipponen, 1997). At the beginning of 2000s, there was a debate that Finland, as an EU member-state, has neglected its own policy towards Russia and externalized it to the Union (e.g. Heininen & Käkönen 2000; Haukkala, 2001; Pennanen, 2008). It is, nonetheless, fair to add that Russia as a threat picture in Finland's foreign and security policy is nothing new, but an old and often cultivated threat picture, which was transferred, in the late nineteenth century, into an enemy picture by Finnish (Swedish-speaking) political and cultural elites, and finally materialized as an enemy in two wars.

After the EU membership the Republic's presidents—Tarja Halonen, Sauli Niinistö—kept good relations with the Russian and US presidents, as well as Finland's foreign and security policy was in balance between Russia and the West, without joining NATO. While not successful, President Niinistö (2016) made a few initiatives, among them one on air and aviation safety (use of transponders) in the Baltic Sea area, and repeated that of an Arctic Summit. Yet Finland became more critical towards UNs-related arms control initiatives, for example, hesitating to sign the land mines treaty, and did not sign the UN Treaty on the Prohibition of Nuclear Weapons.

The Government programme of 2019–2023 highlighted values and cooperation, instead of traditional threat pictures, for example, on Ukraine (Valtioneuvoston julkaisuja, 2019, p. 31). It stated Finland's aim to be a forerunner in climate change mitigation, building expertise for global challenges, and as an EU member-state actively strengthening European security and trans-Atlantic relations, albeit the then militarily non-aligned Finland decided to purchase new fighter jets from the USA. Unlike that of the next Government, started in 2023, which highlights strength (against crises), security, sustainable economy, taking care, as well as aiming for active participation in NATO, EU, UNs, Nordic cooperation (in this order), and making trans-Atlantic relationships strong (Valtioneuvoston julkaisuja, 2023, pp. 58, 160–161). If earlier Finland defined itself as an EU advocator in Arctic affairs (Prime Minister's Office, 2010), the 2023 Government profiles Finland as defending the Arctic and Baltic Sea regions within NATO.

More importantly, there is a decade-lasting, partly hidden, process, which slowly moved Finland towards military alignment with Western military structures, in particular NATO, as well as to lean on US foreign and security policy. Being a cumulative process, a growing concern about, and interpretation of, Russia as a military threat, though no real incentive by Russia, have fed the trend. Leaning on a functional causal explanation, it is easy to define how one thing—either determined or probabilistic—would lead into another and produce something else. This random looking process, conducted by the security establishment, consists of the following steps:

First, in the 1990s, Finland became engaged in political dialogue with the USA, for example according to Wikileaks (e.g. HS 11.2.2011, A5) Finnish presidents used to report their discussions with Russian leaders to the White House, as well as militarily purchasing 62 Hornet fighter jets from the USA. Finland also joined the so-called NATO waiting rooms—North Atlantic Cooperation Council (NACC), Partnership for Peace (PfP)—and participated in NATO-led crisis management operations.

Second, in the 2010s, Finland started defence and military cooperation with Sweden, signed an intent agreement on defence with the USA, and participated in supplementary activities of the NATO Response Forces. After passing NATO tests, Finland together with Sweden joined military drills with NATO member-states starting from the Finnish-Swedish-US air drill and that with Germany and USA, in 2015. As a result, after a few debates and critical comments (e.g. Bergquest & Nyberg, 2014), while the majority of Finns were against NATO membership and preferred non-alignment, these NATO joint drills became a new normal, and as a PfP-partner Finland was treated as a full member, as its defence was technically integrated into NATO structures. On the contrary, Russian military drills were interpreted as a threat like for example, Zapad 2017, a Belorussian-Russian one in the Baltic Sea area, was misunderstood by, and even caused hysteria in, the West (e.g. Raitasalo, 2017).

Third, by the 2020s, Finland completed technically the defence/military integration with the West, and expanded its wartime troops. It also made big arms purchases, in particular that of 64 American F-35 fighter jets, in December 2021, based on the decision by the government consisted of left, central, and green parties. A full membership of NATO was missing, yet been strongly lobbied by the security establishment.

Fourth, triggered by the Russian invasion of Ukraine, Finland applied for full NATO membership by the decision of the Parliament, without

either setting any restrictions on its membership or having a referendum. Finland's government signed a defence cooperation agreement (DCA) with the USA, in December 2023, which will allow access of the US armed forces to 15 Finnish military bases. The Parliament ratified it in 2024.

Fifth, Finland did not set any restrictions, either on locations of the US troops or transport and deployment of nuclear weapons on Finnish territories. Hence, despite Finland's anti nuclear/radioactive material legislation there is a danger of importation and deployment of nuclear weapons into Finnish territories, if not categorically prohibited. Behind is the general US "Neither confirm nor deny" policy regarding stationing of nuclear weapons—whether its nuclear-classified aircraft and naval vessels, even when visiting allies' airfields or ports, are equipped with nuclear warheads or not—applied, for example, at the US Air Base in Thule, Greenland (e.g. Jacobsen & Olsvig, 2024).

When trying to define certain turning points, as indicators of a failure of the new aligned foreign policy, an obvious one, so far, is Finland's campaign to become a member of the UN Security Council, in 2013–2014, with the key slogans of "Credible in building peace" (Finland to the UN Security Council in 2013–2014). The voting at the UN General Assembly—Finland was beaten by Australia and Luxembourg—indicated that, by then, Finland's credibility was lost in the global South, and hence the country was left on the UN margin (e.g. HS 24.9.2013, A12-13). The main difference to the previous period of UNSC membership, in 1989–1990, was that, as an EU member state and joining NATO military drills, Finland did not have a clear foreign policy profile based on neutrality, UN peacekeeping, and aid for developing countries anymore, as it had limited its action within Europe and the EU (e.g. Pietilä, 2007; Tähtinen, 2012).

All in all, as the transformation started earlier, there are more/other reasons (military alignment/NATO membership) than the Russian invasion behind it, and according to a functional causal explanation they produce something else (military activities, coercion), if preconditions (division, rivalry) are fulfilled. Hence, the new alignment foreign and security policy jeopardizes Finland's security, neighbouring the Russian Federation, and leaves it dependent on one (big) friend, the USA.

## An (Militarily) Aligned Finland in the Global Arctic

The state of Arctic stability and cooperation has been resilient, as significant geopolitical changes, for example, the end of the Cold War was faced peacefully, and the self-governing status of Greenland went smoothly in full agreement between the Danish government and that of the Greenlandic Home Rule. The Russian Expedition to the bottom of the Arctic Ocean, in 2007, caused first a shock among the Arctic Ocean littoral states, yet they soon agreed and had their (first) summit (Ilulissat Declaration, 2008). Similarly, the Russian annexation of Crimea was passed without damage, though was much speculated by media. Albeit, the Russian invasion of Ukraine caused a temporary pause in the Arctic Council's work, which is, nonetheless, restarted by new guidelines for the working groups. Similarly, several common interests are still shared between the Arctic states, and all the special features of Arctic geopolitics are in place (Heininen, 2024).

While not always having clear priorities, the Arctic states' national policies, including Finland's, show an apparent preference for economic activities, international cooperation, governance, and environmental protection. Whereas, they do not have a clear focus on the linkages to global geopolitical shifts indicating unwillingness to open resources for more global exploitation and the discourse of "Global Commons". Similarly, policy documents of Indigenous peoples' organizations, and those of the AC observer states, explicitly discuss the role of international cooperation, not specifically globalization, and emphasize the importance of international treaties. Based on Arctic states' policies there is an ambivalence or paradox in Arctic development, when searching for a balance, that economic activities are prioritized over environmental protection, much due to political inability (Heininen et al., 2020). This raises a question of whether the Arctic states have realized the full significance that the Arctic is taken deeply into the global resource-based economy, and that rapid climate change makes utilization of resources and shipping attractive which causes a frenzy to exploit new global sea routes on the top of the world.

In this context, Finland—"Here under the North Star", a "great-power of Ice and Sisu" (Kukkonen, 1987) and profiled by "Arctic ambience" with an obvious "Northern" identity and ancient history of Fenno-Ugrian settlements, as well as with Northern dimension foreign

policy—is a laggard among Arctic states, explicitly self-identifying itself as an "Arctic nation" only very recently.

The first national policy on Arctic affairs, Strategy for the Arctic Region, has four substantial chapters (Prime Minister's Office, 2010) and proposals to accept the EU as an AC observer, and establish the EU's Arctic Information Center (mentioned in the EU Commission's 2008 Arctic Strategy) and locate it in Finland. This was followed by a short amendment, which promotes "international co-operation in the Arctic" and states Finland as an Arctic nation and expert (Valtioneuvosto, 2012); the updated 2013 strategy, based on the 2012 amendment, and its action plan; and finally, the 2021 Arctic Policy.

The 2013 document explicitly mentions new business opportunities, Arctic environment, cooperation, and stability, as well as highlights "Finland's objective to promote growth and actions to enhance competitiveness in the region with due regard to its environment". Instead of explicit priorities, the Strategy includes six "de facto" ones, for example, "the possibilities for bolstering Finland's position regarding the Arctic" (Prime Minister's Office, 2013, p. 7). Unlike the 2021 updated Arctic Policy which includes four priorities, as discussed later (Finnish Government, 2021).

Interestingly, the 2013 Strategy aimed to include aspects which are more ambitious than an updated policy, inviting relevant Finnish stakeholders to be involved in the process. Unlike the 2021 Strategy which was directed by a Steering group, with all ministries represented, and prepared by a public servants' working group, which was said to represent "a wide range of Finland's Arctic expertise" (Finnish Government, 2021, p. 12).

Finland is also among the member states who would like to develop the Arctic Council, for example, by adopting a new strategy, when holding the Council's 2nd chairmanship, in 2017–2019, with the priorities: Environmental protection, Connectivity, Meteorological cooperation, and Education (Finnish MFA, 2017). It was concluded by the 11th Ministerial, in May 2019, without a substantial joint declaration, for first time in the Council's history, but with two statements: a short Joint Ministerial Declaration (2019) with the signatures of the eight foreign ministers, and a more substantial Statement by the Chair (2019), with the same structure as the earlier joint declarations.

It would sound logical to evaluate that Finland's chairmanship was no success. Yes, it was a disappointment, when it comes to the most visible outcome: if no joint declaration, no agreement, as the Council

is a consensus-based body. Behind is that the USA did not accept explicitly the wording of "climate change", yet the other states did not accept a declaration without that, which was also supported by the Permanent Participants. This provocative action by the US government was started, a day earlier, by a speech of US State Secretary Michael Pompeo (2019), with hawkish great power rivalry rhetoric on China and Russia, trying to convince that "America is the world's leader in caring for the environment". As a consequence, the USA—the leading NATO member-state, an ally of Finland—was left alone at the summit.

This is not, however, the whole picture, as despite bringing great power rivalry to the Council's work, there were a few concrete outcomes: First, the eight Arctic states, including the USA, reaffirmed their "commitment to maintain peace, stability and constructive cooperation in the Arctic", as the first preamble of the Rovaniemi Joint Ministerial Declaration (2019), instead of promoting the exclusive club of the Arctic Five, or that of a NATO Arctic; Second, even though the slogan "Exploring common solutions" was not clearly materialized, it was brought onto the agenda of a global Arctic aiming to search for a balance between economic activities and environmental protection; and Third, interestingly, a very pragmatic achievement was to implement a sustainable meeting model, i.e. neither printed papers, nor plastic bottles/cups, but water from the tap and local food.

A deeper analysis of my previous study (e.g. Heininen, 2014b) shows that Finland's first Arctic strategies, as well as those of most Arctic states, well cover features of a modern strategy document in adopting a holistic approach and having major indicators of national policies. They could also be seen as reflecting the recent significant and multifunctional environmental and geopolitical changes in the Arctic, and their worldwide approaches. No doubt that with national policies the Arctic states, including Finland, also manifest their domination over Arctic governance, geopolitics, and security compared to Indigenous peoples, who have strong self-identification as Arctic stakeholders.

It would give an interesting context for a more detailed picture of Finland's policy in the Arctic to discuss the explicit priorities of the 2021 Arctic Policy, with the "de facto" priorities of the 2013 one, and analyse them in the context of Finland's new position as a militarily aligned country.

First, to start with Finland's position. Finland's geographical and geopolitical, not necessarily mental, position regarding the Arctic seems

to be obvious, as it is transferred from an "Arctic country" (by the 2012 decision) to be classified entirely "as an Arctic country" (by the 2021 Policy). For to increase its political weight the then Foreign Minister Alexander Stubb made, in 2010, an initiative on an Arctic Summit (Ulkoasiainministeriö, 2010), which President Sauli Niinistö repeated at "The Arctic: Territory of Dialogue" event, in 2017. As Finland was left out (together with Iceland and Sweden) from the summits of the Arctic Five, it would be good for Finland's profile to host a Summit as a part of Finland's AC Chairmanship.

The initiative was not, however, a breakthrough among other Arctic states mostly due to no agreement on an agenda, as the utilization of resources was seen as too sensitive (Heininen & Numminen, 2011). Partly due to the short leverage of mediation that a land-locked Finland would offer, in particular as neither Russia nor the USA had a need for such a favour, unlike Finland initiating AEPS at the end of the Cold War. Whereas, an International Arctic Forum, in 2019, hosted by President Putin attracted heads of five Arctic states (presidents of Finland, Iceland, Russia, and prime ministers of Norway, Sweden) to attend and have an intensive discussion of 2.5 hours—a sort of mini-Arctic Summit if you wish.

Second, unlike the 2013 policy, the 2021 one has "Climate change, mitigation and adaptation" as the first priority with a long list of strategic measures, following Finland's AC Chairmanship Program. Indeed, as the initiator of the AEPS and having an ambitious climate policy, Finland has responsibilities for protecting the Arctic ecosystem and using its resources in a sustainable way. Without the weight and dependence on drilling hydrocarbons of being a littoral state, Finland could build a more environmentally friendly profile by engaging its Arctic climate policy in global responsibility by prioritizing values (e.g. biodiversity) over national economic interests, as Palosaari (2014) has brainstormed, and propose strict environmental regulations on oil and gas drilling in the Arctic, and certainly not assist offshore drilling by icebreakers' services.

Third, the priority "Inhabitants - promotion of welfare, and the rights of the Saami as an indigenous people" is two-fold with strategic measures, such as "Exerting influence to strengthen the participation of Arctic residents… [and] Strengthening basic services and public health measures… by supporting cross-border cooperation…", and enhance methods on "the Sámi people's possibilities of maintaining and developing their languages and culture".

Here Lapland, as the northernmost country over the Arctic Circle, has been successful in attracting foreign tourists to experience Arctic conditions (e.g. snow), Northern Lights, Father Christmas. Though cooperation across national borders is highlighted, and Lapland has been an active member of the circumpolar Northern Forum, cooperation by/between sub-national entities has received little attention and resources, as state policies dominate. The Saami have their own self-determination and understanding of sovereignty, when it comes to how to use resources and land. Yet the reality is that their voices are not heard, when resources are utilized, and their rights are neither equal nor respected, when it comes to languages and culture. This is manifested by the fact that Finland has not ratified the ILO 169 Convention, as it could and should.

Fourth, "Expertise – livelihoods and leading edge research" is also two-fold, and closely related to "Creation of new business opportunities" of the 2013 Policy, with strategic measures "Supporting sustainable growth of the Arctic economy… [e.g.] year-round tourism", "Communicating about Finland's special sustainability expertise [e.g.] digital solutions, clean-tech", "Participating actively in the work of the Arctic Council and… [being] active in international research networks…", "Strengthening the interface between research and business…".

Finland's preferred aims and economic activities as top priorities in the Arctic are much driven by know-how and technology-based expertise on shipping, ice-breaking including services for offshore drilling, and mining. Implementation has not, nonetheless, been so successful, as Finnish companies were left out from the Snöhvit gas field project of Norway, and the tentative deals in the Stockman gas field project of Russia were never materialized.

Finland, as an "Arctic expert", as well as a co-founder of IASC and UArctic, has a long tradition of Arctic research with substantial contributions to Arctic science in many fields (e.g. Ministry of Foreign Affairs, 2012). Despite political and financial support of the foreign ministry and Finnish MEPs (e.g. Jäätteenmäki, 2013; Torstila, 2011), the proposal of locating the EU Arctic Information Center to Rovaniemi was never materialized. Whereas, the Arctic Studies Program at University of Lapland, since 1992, was the first of that kind of international study programme in Finnish and European universities bringing foreign students to Rovaniemi.

Fifth, the "Infrastructure and logistics" priority is a sort of shopping list including strategic measures on air traffic, maritime transport, communication, such as "Developing the European core transport networks (TEN-Ts) and extending them to the north…", "Paying attention to the importance of air traffic for… a large and sparsely populated country", "Ensuring the availability of reliable and high-performance telecommunications networks and digital services".

Being heavily dependent on maritime transport, and having expertise on ship design, there is a special interest to take care of "special expertise in winter navigation… and the protection of the Arctic environment… [also] in using the Northeast Passage for freight transport". This deals much with the entire ice-breaking value chain (Finpro, 2017) that Finland is a leading country in planning and designing vessels for icy waters and cold, harsh climates, also echoed by the 2013 "Arctic expertise in the widest sense of the term". Recognizing the strategic and commercial importance of the Arctic Ocean sea routes there were speculations that these Northern sea routes would become a new "Nokia" for Finland economically (HS 22.2.2010, B3). For a militarily aligned Finland this might not be a realistic goal in the shorter run.

Finally, it also matters what is missing. Albeit the 2021 Arctic policy explicitly supports "cross-border cooperation" and "international and Arctic cooperation and EU action to mitigate climate change", cooperation is neither included as a priority nor emphasized, unlike in the 2013 policy, nor is there an initiative for further or deeper cooperation. This should be, nonetheless, a relevant issue for the national security of an aligned Finland, in particular as climate change affects the region. Behind is that a non-aligned Finland used to lean on the international legal order and multilateral cooperation to maintain firm state sovereignty.

Finland also used to support the region's high geopolitical stability based on cross-border cooperation, not least as stability was seen as the main paradigm of the post-Cold War Arctic, and economic growth its tenet. Finally, the 2021 Strategy is meant to be a response to the "need to strengthen Arctic cooperation… identified in the strategic section title "Globally influential Finland" of the Programme of Prime Minister Marin's Government" (Finnish Government, 2021).

All this indicates that Finland—as a land-locked country without a shoreline on, and an exclusive economic zone in, the Arctic Ocean—interprets having definite rights to utilize resources in the Arctic, while

at the same time it states its responsibilities for environmental protection and good governance in the region. This raises a question (Vierelä, 2016; also Mikkola & Käpylä, 2013; Palosaari, 2014), whether Finland opportunistically uses a growing need for stricter environmental regulations for its own advantage by having "a strong interest in participating in the energy business operations… [with] demand for various products and services", and aiming "to promote sustainable development and stability… [and] environmental-friendly solutions and the ability to carry on business operations" (Prime Minister's Office, 2013, pp. 10, 26).

Here Finland, instead of accelerating the "Arctic paradox", could be profiled as an Arctic state connecting the "Anthropocene" into its foreign and climate policies, ratifying the ILO Convention, recognizing its global responsibilities, and hence proposing stricter regulations on, and certainly not assisting, offshore drilling. This kind of a paradigm shift in its policies would be, perhaps, disliked by domestic (political, economic, security) elites, and military allies, albeit much needed locally and regionally in the global Arctic, and planetarily.

## Conclusions

A retrospective overview of Finland's history manifests that Finland is been located between East and West, and its peoples influenced by Eastern and Western cultures. Similarly, "Sauna" the most basic Finnish thing is shared with nations in North-eastern Europe and Siberia. While being under Swedish rule for centuries, its independence was created when being a part of the Russian Empire for a century.

After being defeated by the Soviet Union, Finland made a paradigm shift in its foreign and security policy. The defeated wars acted as a learned lesson—to the political and national security elites, as well as to the entire nation—to make a turn in—yet no paradigm shift in (military)security—foreign and security policy towards cooperation, peace, and disarmament as a non-alignment country, i.e. a good reason to produce something else, according to a functional causal explanation, when preconditions were fulfilled.

The new policy was based on neutrality between East and West, good relations with the Soviet Union, as well as active support of peace, disarmament, and confidence-building at the UN, making possible a slow integration into Western European cooperative structures. As a UN member-state and small, non-aligned, and peaceful Nordic welfare

state—with parliamentary democracy, a faith in education, an active civil society—Finland played an important role in world politics enhancing cross-border cooperation and earned credibility as a peacemaker by initiating and hosting the CSCE.

Conversely, after the Cold War—fed by a growing concern about Russia as a military threat in (North) Europe, yet without any real incentive by Russia—Finland slowly moved towards alignment with Western military structures through a decade-lasting, cumulative, and partly hidden process.

Finland as an Arctic state, and the Saami among its citizens, has clear interests and policy towards Arctic affairs and a Northern Dimension policy. Yet Finland's self-identification as an "Arctic nation" is rather recent, as the political elite has been a laggard when it comes to the importance of the Arctic. The success of the AEPS showed the potential of "Arcticness", as a part of Finland's non-aligned foreign policy, to emphasize cooperation for peace and environmental cooperation.

As an AC member state, Finland used to have a firm stance to maintain constructive cross-border cooperation in, and prefer to maintain the high geopolitical stability of, the Arctic, not least due to the climate crisis, and growing global interests in its resources. Hence having a right to be involved in policy-shaping and -making of Arctic governance, Finland is equal with Russia and the USA, and more influential than any of the observer states, important after the Council's work was restarted. Similarly, there is no risk of losing any international campaign, for example, on UN Security Council membership, Arctic Summit, EU Arctic Information Center.

Finland has rhetorically defined itself as an "Arctic expert" that complies with the principles of sustainable development, albeit it assigns priority to economic activities in the region. Not only an expert, Finland aims to be a pragmatic problem-solver, as the climate crisis and other global complex challenges impact the region. A relevant question is whether a militarily aligned Finland has credibility for that, when national interests take over values in foreign policy, yet world politics, with multiple crises, calls for an opposite approach.

Whereas, for a small nation, without (political, economic, military) power, political influence could be achieved by emphasizing intangible values, such as expertise on the environment, knowledge- and confidence-building, and peacemaking. This is particularly important and timely, as climate change is accelerating locally, regionally, and globally, and hence

being a good reason to produce something else. Here Finland would be a more credible Arctic stakeholder, as well as responsible member of the international community, if it would stop supporting the mass-scale exploitation of (offshore) Arctic resources, and instead propose stricter environmental regulations and implement climate change mitigation.

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# The Nordic Peace and Norway's Crisis Management Historical Perspectives and Modern Challenges

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## Introduction

### *Contextualizing The Nordic Peace Within Norway's Framework for Security*

In this chapter, I will describe periods in Nordic history that have been characterized by intraregional conflicts, hegemonic politics, and a cyclical pattern of escalating tensions and interludes of stability; all parts of the gradual movement the region underwent as it progressed towards what we today understand to be the Nordic Peace. Parts of this material have been shared in lectures and talks focusing on frameworks of peace mechanisms at institutions that emphasize security and peace.[1] The examples given in this text show how diplomacy, legal inquiries, and the application

[1] Among others: George C. Marshall Center, Ted Stevens Center, Geneva Center for Security Policy, German Institute for International and Security Affairs, and a variety of higher education institutions.

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of law, alongside a strong desire for peace that brought creative solutions to conflict, are effective means to preserve peace and prevent wars.

Since the war in Ukraine started, the security situation for Norway and the High North has changed markedly.[2] Norway is heading into an era where predictability has been replaced by uncertainty. In the High North, and in the Barents region specifically, a peaceful, albeit asymmetrical, relationship Norway has had with Russia has been replaced by new conflicts alongside a loss of mutual trust—which in practice signifies the emergence of a new Iron Curtain. This regional peaceful era and relationship built on trust transformed after the war in Ukraine escalated with Russia's invasion of Ukraine on February 24, 2022. Moreover, this transformation is part of a larger restructuring of the international order, where the unipolar position the US has held is now being challenged by, among others, China and Russia, but also by the rise and consolidation of geopolitical blocs such as BRICS. (*Can BRICS weaken the dominance of the IMF and World Bank?*, 2022; du Plessis et al., 2023).[3]

How this new order will develop is still unclear, but it will most likely be multipolar (or even heteropolar) (Aydıntaşbaş et al., 2023, p. 17; Copeland, 2013).[4] Norway faces this new reality especially in the Arctic. Considering then that the Arctic reflects the international system with a focus on cooperation, exploitation of resources, and a common security policy on the one hand, and on the other, an escalating mistrust between

[2] The High North refers to the land and sea areas from Southern-Helgeland in the south to the Greenland Sea in the west and the Pechora Sea in the east. The area thus covers Norwegian interests in North Calotte, the Barents region and the Arctic *Meld. St. 9 (2020–2021)* (2020). Regjeringen Solberg Retrieved from https://www.regjeringen.no/no/dokumenter/meld.-st.-9-20202021/id2787429/.

[3] BRICS—abbreviation for the five growing economies, Brazil, Russia, India, China and South Africa—aims to increase economic cooperation; political dialogue (where peace and security are central) to promote a collective stance, change of global governance where international bodies such as the UN, the International Monetary Fund and the World Bank are reformed to become more fair and representative globally; as well as other initiatives to meet an American-dominated Western bloc. BRICS is now expanding its membership to include Saudi Arabia, Iran, Egypt, the United Arab Emirates, and Argentina (which has withdrawn after the November 2023 election).

[4] Heteropolarity is characterized by several criteria other than just the distribution of power (multipolarity, bipolarity, unipolarity) in the global system between states. In addition to military capacity or economy for power and influence, criteria such as culture, technology, diplomacy, and information are included. Furthermore, in a heteropolar world, non-state actors also have a dominant role alongside states.

Russia and the other Arctic 7 states; today the NATO 7 that are comprised of the US, Canada, Sweden, Finland, Denmark, Iceland, and Norway. This Arctic dynamic subsequently affects the international system in the same way that the international system affects the Arctic order (Finger & Rekvig, 2022). In peaceful times, the Arctic is characterized by trusting coexistence; in turbulent times, by mistrust and conflict.

### *The Significance of the Nordic Peace for Crisis Management*

Against this background of increased tension and uncertainty, The Nordic Peace stands out as a distinct approach to developing crisis management strategies. This regional peace has, since its onset in 1814, given the Nordic countries resilience in the face of conflicts (Berg, 2014).[5] The resilience has arisen from ad hoc resolutions to conflicts. From these resolutions, peace principles have organically emerged over time; for example, the Nordic countries are characterized by cooperation; in finding resolutions based on compromise (e.g. the delimitation agreement with Russia in 2010 (Wilhelmsen & Gjerde, 2018); by adhering to judgments from supranational bodies (e.g. the Greenland case in 1933 [MM. Adatci, 1933]); or neutralizing dialectically opposing principles in synthesis: self-determination versus territorial integrity (e.g. the Åland case in 1921 [Joenniemi, 2014]).

1814 marks the year after which no Nordic country has gone to war against another Nordic country to resolve a conflict. Accordingly, peace has played a crucial role in shaping Norway's response to crises and other challenges related to security. And thereby, the contours of the paradigm *peace fosters and promotes peace* begin to manifest. Central elements that promote peace are a focus on dialogue, mutual understanding, cooperation, and compromise; all these criteria are important elements for creating a sustainable peace of high quality. [For a discussion of the gradations of peace, see: (Tønnesson, 2019)]. It is this ethos that has given Norway historical and robust conflict resilience, which in turn has enabled creative navigation through a plethora of conflicts and security challenges since 1814 and given rise to peaceful resolutions. The Nordic

[5] Conflict resilience refers to an ability to resist or quickly recover from a conflict. This entails a deep cultural anchoring to handle and overcome conflicts without violence, but instead to use diplomacy and creative solutions. Social, economic, and political structures in the deep culture contribute to peace and stability.

Peace has thus had a clear regional and international function. It has contributed to creating peace and stability regionally, and it has enabled the Nordic countries to be peace advocates internationally in more recent historical epochs. This is a situation we no longer find ourselves in. The Nordic Peace has undergone a transformation from having external reach to becoming something internal to the Nordic region.

The chapter will discuss how Norway has navigated complex security landscapes where it has managed to promote a nuanced understanding of intentions, motivations, security, and threat perceptions among both allies and opponents in reaching peaceful resolutions to conflict.

### *Goals, Problem Statement, and Structure of the Chapter*

The goal of the chapter is to discuss the interplay between the Nordic Peace and Norway's strategies for security and crisis management. This organization will be a historical review to illustrate how principles from The Nordic Peace have been instrumental in shaping Norwegian foreign policy through different time periods and conflicts, where the principles helped anchor the Nordic region in promoting peaceful resolutions to conflicts. The problem statement for the chapter is to try to define the following question: How has the development of conflict resilience originating from The Nordic Peace shaped Norway's strategies for handling security policy challenges and crises? The structure of the chapter will thus be to trace the development by dividing it into four main points:

1. The origin of conflict resilience when peace was dawning in the nineteenth century through a review of two formative cases for Nordic Peace: Norway-Sweden and the Union period; and Sweden-Finland on the Åland issue.
2. Norway's relations with the Soviet Union after World War II and through the Cold War, where Norway was instrumental in creating a low-tension area in Northern Europe despite membership in the North Atlantic Treaty Organization (NATO).
3. The post-Cold War period, where peace and cooperation were in focus, and where the Arctic gained in global prominence as new actors arrived with their own ambitions and the implications this had for the regional security dynamics. China is particularly relevant in this context.

4. The post-post-Cold War period we now find ourselves in, characterized by uncertainty and high tension in the current security situation.

The chapter ends with a summary and reflections on the way forward.

By incorporating all these elements, the chapter aims to show an understanding of how The Nordic Peace has given Norway a nuanced and effective approach to handling crises, as well as balancing state and societal security needs.

## The Nordic Peace and the Foundation for Conflict Resilience

### *Pre-1814: The Nordic Region in a Time Without Peace*

The Nordic Peace has lasted for over two centuries. Before it emerged in 1814, the Nordic region was characterized by intraregional warfare to resolve conflicts and to achieve regional dominance (Lavery, 2021; Lisk, 1967; Lockhart, 2017).[6] With a historical background where conflicts were resolved by war, a dramatic change occurred in 1814, the year the Napoleonic Wars ended for the Nordic region and the year the Nordic Peace has its onset.

Still, before 1814 and peace, we have to backtrack to 1812, when Sweden, Russia, and Great Britain negotiated a coalition against France and, therefore, also against France's ally Denmark-Norway (Scott, 1935). In 1813, The Sixth Coalition, consisting of Russia, Prussia, Austria, Great Britain, Sweden, Spain, Portugal, and several German states, went to war against Napoleon. It was the last time that Nordic countries were at war with each other. The Napoleonic Wars, and thus also the intra-Nordic wars, end on January 14, 1814 with the Treaty of Kiel; commonly known as the Peace of Kiel. The peace agreement was entered into

[6] Some examples of major Nordic conflicts and wars from the late Middle Ages and early modern times: (1) The Northern Seven Years' War (1563–1570). A war between Denmark–Norway and Sweden for control of the Baltic Sea and trade routes; (2) The Great Northern War (1700–1721). One of the most significant conflicts in Nordic history was fought between Sweden and a coalition of Denmark–Norway, Saxony–Poland–Lithuania, Prussia and Russia. It resulted in Sweden losing territories and regional power; and (3) Conflicts and wars related to the Napoleonic Wars.

between the Swedish Crown Prince Charles John and King Frederick VI of Denmark–Norway (Barton, 1930; Berdah, 2008, pp. 31–94).[7]

The end of the Napoleonic Wars had major consequences for the Nordic region. Denmark had to cede Norway to Sweden; this dissolved a union that had lasted for 434 years (*Norge i union med Danmark [Tr.: Norway in Union with Denmark]*, n.d.). For Sweden, this meant revanche for the loss of Finland to Russia in the Finnish War (1808–1809): "Sweden committed herself to obtaining Norway as compensation for the loss of Finland in 1809, and the Allies needed the Swedish crown prince and commander, Charles John, and the Swedish military forces for the final military showdown with Napoleon" (Bregnsbo, 2014).

The geopolitical landscape in the Nordic region and Europe as a whole consequently underwent a drastic change for the affected countries. The Napoleonic Wars were over for the Nordic region; for the European mainland, they would go on for another year before Napoleon suffered his final defeat at Waterloo on June 18, 1815.

However, it was not a given that The Nordic Peace would begin in 1814. The peace that came after 1814 was not a planned peace and the Nordic conflicts were far from over. The Nordic Peace arose from ad hoc peaceful resolutions to conflicts that all carried the potential for war. The Peace of Kiel marks the turning point towards a time of peace.

Two formative cases that were part of shaping the foundation of The Nordic Peace will now follow.

[7] Charles John was a former French marshal for Napoleon. He was elected heir to Sweden. He had the qualities the Swedes wanted: "Sweden does not need a Dane, either a Russian, or a child whose long minority would cause us harm … What she needs, it is a Frenchman who will adopt our religion, who is known for his talents, for his courage and for the respect in which holds him the august Emperor of France; who belongs to the family of the Emperor, being the brother-in-law of the King of Spain; who has a son likely to replace his father without regency, when the Providence will order it." Berdah, J.-F. (2008). The Triumph of Neutrality. Bernadotte and European Geopolitics (1810–1844). *Nordic Historical Review/Revue d'Histoire Nordique*(6–7), 31–94.

Already in a speech to the Riksdag in 1812, Charles John implemented a shift towards neutrality and non-alignment: "Separated as we are from the rest of Europe, our policy and our interests will always lead us to refrain from involving ourselves in any dispute which does not concern the two Scandinavian peoples. At the same time, in obedience to the dictates both of our national duty and of our national honour, we shall not permit any other power to intervene in our internal affairs." Barton, D. P. (1930). *The Amazing Career of Bernadotte, 1763–1844*. Kessinger Publishing, LLC.

## Formative Cases of the Nordic Peace

### *Norway–Sweden and the Union Period 1814–1905*

The Treaty of Kiel in 1814 was the beginning of a fragile peace in the Nordic region. The basis of peace was initiated and cemented by the fact that Norway was to be transferred from Denmark to Sweden, something Norway did not accept. Instead, attempts were made to avoid a union with Sweden through various channels. The governor in Norway, the Danish Prince Christian Frederick, chose to lead an independence movement. He convened a constituent assembly with the Meeting of Notables at Eidsvoll (Gammelgaard & Holmøyvik, 2014, p. 22). On May 17, 1814, a Norwegian constitution was adopted, and two days later, Christian Frederick was elected King of Norway.

However, to no avail. Sweden had great power guarantees to take over Norway. After a short military campaign, where Norwegian forces mounted better resistance than the Swedes had expected, they lost to the Swedish troops, battle-hardened from the Napoleonic Wars. Still, Norway avoided unconditional surrender (Barton, 2003, p. 17). Despite military supremacy, great power guarantees, and threats of an English blockade of Norway, Charles John offered to negotiate with the Norwegians. Now it was a matter of decreasing tensions, reassuring, and reconciling with Norway. In Moss, negotiations started, negotiations Christian Frederick was not part of (Lindgren, 1959, p. 13). Christian Frederick abdicated on October 10, 1814. Norway proceeded to elect Charles II as king, and the constitution was amended to reflect the personal union (Mykland, n.d.).[8]

The Convention of Moss became the peace treaty between Norway and Sweden, and which de facto formed the basis for the union; all Norwegians who participated in the independence movement were pardoned. The Constitution was allowed to remain with minor changes: In the May 17, 1814 version it states: *The Kingdom of Norway is a free, independent and indivisible Realm. Its Form of Government is limited and hereditary-monarchical* ("Kongeriget Norges Grundlov," 1814–05–17). In the November 4, 1814 version, this proclamation is changed to:

[8] A personal union is a political construct where two (or more) independent states with separate governments have a common monarch.

*The Kingdom of Norway is a free, independent, indivisible, and inalienable Realm, united with Sweden under one King* ("Kongeriget Norges Grundlov," 1814–11–04).

The union was a fact, the Swedes had their revanche, but that did not mean all was good. Several crises arose. One example was that the Council of State was appointed by the king, who was both Swedish and Norwegian—as opposed to the Storting [parliament] and the Supreme Court. This formed the basis for conflicts between the Storting and the king. The king tried to impose unpopular constitutional changes on Norway to weaken the constitution. Changes that would also attack and weaken the growing national romanticism that characterized Norway in the nineteenth century (Taylor, 1858). Several issues related to governance and representation, such as economic and geopolitical challenges, led to several crises during the union period. What would eventually break the union were constructed and deliberate conflicts that were related to the foreign- and consular services. Norway was independent in all matters except those related to foreign affairs. For this, Sweden represented both countries through its consulates. Norway, with its merchant navy, was dependent on the Swedish foreign service, which they believed was inclined to promote its own trade over its domestic competitor, Norway. As a result, Norway argued that Sweden did not work for the union's interests but rather for Swedish interests (Lindgren, 1959, pp. 38, 39). This was strongly linked to an increased perception of protectionism in Sweden, with Norway as the losing entity.

Based on how the relationship between Norway and Sweden developed in a negative direction, two political issues emerged that would determine the outcome and, thus, an actual consequence for the coexistence and continued existence of the union. The first issue was on the position of the king, Oscar II, who was considered to protect Swedish interests, and the other issue was on his veto power and his Council of State, the de facto government. The Council was from the king, and the foreign minister had always been Swedish and thus considered biased. From the Swedish side, several attempts had been made to change the Norwegian constitution to their advantage. The Norwegian opposition met this by working on introducing parliamentarism in Norway. This would effectively give the Storting a mandate to control the Council of State and the king's ministers. In 1872, 1879, and 1880, the Storting passed laws to transfer power to the national assembly, and three times, Oscar II imposed his veto against these efforts. According to the constitution (of both May

17, 1814, and November 4, 1814), the king's veto was understood by the majority in the Storting to be suspensive and not absolute. In the 1882 election in Norway, a liberal wing led by Johan Sverdrup won both chambers in the Storting: At the fourth time the veto was attempted, the Council of State and the prime minister were removed in impeachment proceedings. Sverdrup became the first prime minister that the Storting forced upon the king (*Johan Sverdrup—«parlamentarismens far» / Johan Sverdrup—"the father of parliamentarism"*, 2009).

In the end, it was, nevertheless, the consulate issue that would end the union. On May 27, 1905, Oscar II again imposed a veto against a joint Norwegian-Swedish proposal for a consular service for Norway. Then the Storting declared that the king had violated the constitution and effectively deposed himself as king of Norway (Unionsoppløsningen 1905 *[Tr.: The Dissolution of the Union 1905, 2013]*, 2013). Oscar II gave two conditions for the dissolution of the union to become a reality: (1) Norway had to hold a referendum to show that it was not a wish from political radicals, and (2) that negotiations would be held regarding practical details of the dissolution (Kupchan, 2010, p. 114). The referendum got a majority for independence with 368,208 votes in favor and 184 against. 99.95% voted for the dissolution of the union. Unilaterally, Oscar II accepted the result, and Norway was independent. Oscar II had then given the following advice regarding the dissolution of the union: "Rather out of the union than war with Norway, was Oscar's advice. Rather preserve the Swedish throne with honor, than lose the entire dual monarchy with shame" (Unionsoppløsningen 1905 *"Heldre ut ur unionen än krig med Norge." [Tr.: Dissolution of the union 1905 "Rather out of the union than war with Norway"]*, 2005). The dissolution of the Union carried a great potential for war between Norway and Sweden, but the union was dissolved peacefully. Neutrality and the principle of not interfering in the affairs of other countries, the legacy of Charles John, was central in this context.

In the negotiations on the dissolution of the union, it was military questions that dominated and that had to be resolved. Norway had built fortresses along the Swedish border, all of which were to be destroyed to demilitarize the border. Significantly, after 1905, military threats between Norway and Sweden no longer arose. In contrast to military threats, cooperation between the two countries developed rapidly, as well as an ability and willingness to resolve conflicts and disagreements through negotiations, mediation, or arbitration.

### *Finland–Sweden and the Åland Islands*

The conflict between Finland and Sweden over the Åland Islands arose in the aftermath of World War I. The basis for the conflict and the resolution is a unique example of the effectiveness and significance of steadfast diplomacy in conflict resolution. The timeline is 1809–1921. The period sums up a significant chapter on international law, self-determination, territorial integrity, and ultimately, a peaceful resolution to the conflict; the origin of which goes back to 1809 when Sweden lost Finland along with the Åland Islands to Russia as part of the Napoleonic Wars.[9]

Finland (and the Åland Islands) had then been part of Sweden since 1157 (Lavery, 2006, pp. 31–35). After 1809 and under Russia, Finland, and the Åland Islands became the Grand Duchy of Finland. In connection with the dissolution of the Russian Empire and Finland's declaration of independence on November 15, 1917, the dispute escalated when the Swedish-speaking population on Åland wanted to reunite with Sweden, as opposed to Finland's claim to keep the islands.[10]

The core of the conflict represented the principles of self-determination versus the principle of territorial integrity. Two principles that tend towards antipathies and are therefore hard to reconcile. In the aftermath of World War I, the right to self-determination gained increased importance. The population of Åland and their desire to reunite with Sweden was rooted in their Swedish identity through linguistic and cultural ties. This was met by Finland's counterargument based on territorial integrity and historical sovereignty over the islands. This deadlocked situation, where two irreconcilable principles met, would illustrate the intricate interplay between the right to self-determination and state sovereignty in international law.

The situation was further complicated by the geostrategic significance of the islands. Located at the entrance to the Gulf of Bothnia, their control was important for both regional and maritime security. They have therefore been described as gatekeepers for the entrance to the Gulf of Bothnia and called "The Key to the Baltic Sea" (Modeen, 1973, p. 178). Due to their strategic significance, the conflict gained attention on the international stage, and would eventually lead to an intervention by the League of Nations.

[9] For which Sweden took Norway as revanche.

[10] The Åland Islands are Swedish speaking, but had been administered by Åbo, Finland.

Finland had autonomy under Russian rule in the sense that when Finland gained independence in 1918, they were equipped for self-rule. Finland's democratic institutions were then already so diverse and advanced that all they lacked was a national army, diplomatic relations, and a replacement for the tsar (Palo, 2004). Finland furthermore did not accept attempts to transfer the Åland Islands to Sweden. In 1918, Finland offered the inhabitants of Åland "a kind of autonomy" by decree and that they would be under a civil and military governor in Finland as a separate province (*Aaland Islands*, 1920). The population of Åland did not accept what Finland proposed, and this political conflict escalated repeatedly during the Paris Peace Conference after World War I. Despite support from the US, they did not gain support from the other allies. Great Britain and France ensured that the case was transferred to the League of Nations for further inquiries and attempts at an amicable resolution (Vesa, 2009).

In 1920, the League of Nations established a commission of jurists to investigate the case. Their task was to balance the conflicting principles of self-determination and territorial integrity, as well as to provide a legal framework for solving the problem (Gregory, 1923). The commission's findings recognized the Åland Islands population's Swedish identity, but also Finland's territorial integrity. In the report of the jurists, it was stated:

> The fact must, however, not be lost sight of that the principle that nations must have the right of self-determination is not the only one to be taken into account. Even though it be regarded as the most important of the principles governing the formation of States, geographical, economic and other similar considerations may put obstacles in the way of its complete recognition. Under such circumstances, a solution in the nature of a compromise, based on an extensive grant of liberty to minorities, may appear necessary according to international legal conception and may even be dictated by the interests of peace. (C. o. J. League of Nations, 1921)

The jurists gave no direct recommendation as to what should be done with the Åland Islands. A second commission, consisting of rapporteurs, became more central for resolving the conflict. The goal of this commission was to find a balanced resolution that respected both Finland's territorial integrity and, at the same time, would safeguard the interests of the Swedish-speaking inhabitants of the Åland Islands. The commission of rapporteurs gave the recommendation to grant autonomy to the islands

under Finnish sovereignty and, parallel to this, to ensure the protection of the population's cultural and linguistic identity (C. o. R. League of Nations, 1921). Finally, they recommended making the archipelago neutral to remove its potential in war. But perhaps most importantly for the resolution promoted by the rapporteurs, if Finland and Sweden could not find a common resolution, the case would be forwarded to the International Court, which would lead to a zero-sum solution. It was therefore in the interest of both countries to find compromises together.

The resolution that came granted extensive autonomy to the population of Åland but that the islands would remain under Finnish sovereignty. The autonomy of the population protected their Swedish language, culture, traditions, education, and several other social aspects. Furthermore, the resolution included demilitarization and neutrality for the Åland Islands, an important aspect when their strategic location is considered (Hannikainen, 1999). The resolution became one of the most important for the League of Nations, which also showed the potential of international organizations in mediating challenging conflicts. The legacy of the Åland solution continues to inform modern international relations with regard to sovereignty, self-determination, minority rights, and peaceful conflict resolution that led to peaceful coexistence.

### *Peaceful Resolutions to Conflicts*

What became the legacy after 1814 was that all Nordic conflicts were resolved with peaceful, legal, and political means. The principles were independent of whether they were intraregional or whether they were established between a Nordic- and an extra-regional country: *The Nordic region has now had over 200 years of peace, and for the later years, a high-quality peace.*

During this time, the region has developed preferences for peaceful conflict resolution, which in turn has fostered conflict resilience. The conflicts have not ended, as they are still evolving under regional, multilateral, bilateral, or even unipolar crises. For example, the Denmark-Norway and Greenland case that was resolved in the International Court in The Hague, or Norway's conflict with Russia and the delimitation agreement of the Barents Sea where the resolution was a bilateral diplomatic affair. It is important to emphasize that these conflicts have all been resolved by peaceful, legal, and political means. The conflict resilience has thus been important for the Nordic region in navigating challenges.

## Norway in the Cold War—Evolution in Trust-Building Between Norway and the Soviet Union

The time after World War II marked a critical phase in Norwegian–Soviet relations, characterized by a number of trust-building measures that transformed the geopolitical landscape in the Arctic and Northern Europe. The trust-building between Norway and the Soviet Union began during World War II. Soviet forces liberated Norway in 1944 in Finnmark. After the liberation, they unilaterally withdrew their troops from Norway (Skancke, 2016).

After the war, Norway had ideas about neutrality. This led Norway to attempt to build a bridge between East and West. Norway followed a policy based on friendship with the West, and to the Soviet Union. The idea was that "active neutrality could keep the two great powers in contact and thus keep the trend towards international tension in tow" (Moon, 1964). From 1946 to 1948, the idea of active neutrality halted after observing how the Soviet Union behaved in Eastern Europe. In 1947, Gerhardsen held the Kråkerøy speech where he announced the government's decision to accept the Marshall Aid. There were several reasons for this, but economic assistance, as well as geopolitical alliance and security, were important criteria. Through the Marshall Aid, Norway solidified its existence within the Western sphere. In 1948, in connection with the coup in Czechoslovakia, the Soviet Union gave a strong indication of its antagonism, as well as its willingness to use military force against peaceful countries. Communist rule, with support from the Soviet Union, would last until the Cold War was over. Several significant events would establish an image of the Soviet Union as a brutal great power. The imposed Friendship, Cooperation, and Assistance Agreement (FCAA) between Finland and the Soviet Union came in the same year (Brommesson, 2022). The FCAA became the basis for the concept of Finlandization, which describes how a free and independent country adapts its foreign and security policy to the will of a great power (here, the Soviet Union). A third important event in 1948 was the Soviet Union's blockade of Berlin. They closed all land and water routes to West Berlin, which was surrounded by East Germany. The intention was to force the Western Allies out of Berlin. This failed when the Allies established an airlift to transport supplies to West Berlin. The blockade ended after 11 months and resulted in the founding of West and East Germany.

In 1948, Norwegian Foreign Minister Halvard Lange declared that a military treaty with the Soviet Union was unthinkable (German, 1982). Norway became a founding member of NATO.

As Norway and the Soviet Union found themselves on opposite sides of the dividing line in the Cold War, effective trust-building measures became important for Norway. Norway was the only NATO country that shared a border with the Soviet Union, so it was placed at the front-line of a possible conflict with its neighbor to the east. This geopolitical reality necessitated a nuanced approach where deterrence strategies were balanced with trust-building measures to reduce tension.

An important milestone was the cultural agreement of 1956 between Norway and the Soviet Union (*Kulturavtale mellom Norge og Sovjet-Samveldet [Tr. Culture Agreement between Norway and the Soviet Union]*, 1956). It started a significant step towards thawing the conflictual and difficult relations the Cold War had caused. The agreement symbolized what mutual recognition and support for cultural exchange and understanding meant, and would lay the foundation for future cooperation. Cultural cooperation was especially important in the border area in the north. "It started as an opening in the Iron Curtain, and I think it has been of great importance for what would later come to happen up here. This is how Arne Ulvang describes the historical ski cooperation across the Norwegian-Russian border in the north, a people-to-people contact that often took place with the KGB and Norwegian surveillance police on their heels" (Jentoft, 2014).

Subsequently, scientific cooperation emerged. A critically important cooperation that had its origin around a common concern for sustainable management of fish stocks in the Barents Sea. This led to the joint research initiative that marked the start of a long-term partnership in maritime science. This was crucial for establishing a framework and mutual dependence on managing the fishery resources in a sustainable way (Hammer & Hoel, 2012).

Other maritime resources were not exploited in the Barents Sea. Particularly, the exploitation of oil and gas resources was under a moratorium due to the territorial dispute that existed between Norway and the Soviet Union in the Barents Sea. Negotiations for this dispute started in the 1970s and was resolved in 2010. The disputed area was divided into approximately two equally large areas (Jensen, 2011).

Nevertheless, of the trust-building measures Norway implemented towards the Soviet Union, the *self-imposed* military restrictions were

significant in creating low tensions in the Arctic and Northern Europe. It starts with the Norwegian base policy of 1949, which was introduced before Norway joined NATO. It forbade the presence of foreign military bases on Norwegian soil in peacetime, but not if Norway was at war, was threatened by attack, or during military exercises. From 1957 onward, Norway declared that nuclear weapons were not allowed on Norwegian territory in peacetime. This policy was reinforced in 1988, and the Minister of Defense then confirmed that Norway would not test, produce, or acquire nuclear weapons. Nuclear weapons would not be stored or deployed in Norway, and Norwegian forces would not be trained in the use of nuclear weapons. Norway furthermore introduced self-imposed restrictions in the northern areas. There would be no military operations from allied forces in Finnmark county, or from Norwegian airports or ports at sea or in the air east of 24 degrees east longitude (Børresen, 2011; Børresen et al., 2004).

The overall trust-building policy Norway pursued towards Russia created a low-tension area where stability and predictability shaped regional norms.[11] In 1987, Gorbachev gave his Murmansk speech which highlighted the necessity of reforms in the Soviet Union, including economic liberalization and political changes. For this and to meet internal and external challenges and to modernize the country, he proposed the Arctic as a nuclear-weapon-free zone and a zone of peace (Gorbachev, 1987). The speech was a turning point in Soviet policy. The Norwegian initiatives that were implemented during the Cold War played a crucial role in shaping the regional security dynamic. It also shows the legacy Norway had from The Nordic Peace. A legacy that enabled alternative approaches to security policy from military means to peaceful initiatives, either initiated and maintained as unilateral or bilateral fundamental activities.

[11] For this context, it should be emphasized that Norway abandoned its self-imposed restrictions in 1968 by conducting the military exercise Polar Express in the north. This resulted in a Soviet response where they mobilized on the Norwegian border (Kjøllberg, E., Kårstad, G., & Hansen, S. (2017). Tårnvakten [Tr. The Tower Guard]. *NRK*. https://www.nrk.no/dokumentar/xl/hemmelige-rom-ii_-episode-5-1.12945607.

## Post-Cold War Arctic: Peace and New Actors

When the Cold War ended with the dissolution of the Soviet Union, the Arctic and the High North for Norway underwent a significant transformation. The deterrence strategies were put aside and replaced with a focus on cooperation and peaceful exploitation of resources. Norway, which had (for the most part) adhered to the principles of The Nordic Peace, played a crucial role in establishing the Barents cooperation in 1993. Subsequently, the Arctic Council was established in 1996 as a circumpolar organization where several non-Arctic states have now gained observer status. China, Japan, South Korea, and Singapore gained it in 2013.

The Barents cooperation, started by Thorvald Stoltenberg, has been described as a highly successful regional peace project. The cooperation was to include the regional actors in Northern Norway, Northern Sweden, Northern Finland, and Northwestern Russia. This cooperative project covered a total of 13 administrative regions and over 5.5 million people. The greatest success was the people-to-people cooperation (*The success of the Barents Cooperation*, n.d.); a cooperation that has lasted since the Viking Age with one exception: the Soviet Union period. The historical background of cooperation and coexistence enabled the start of regional peace and cooperation. This would last until a change in this regime came in 2007 when Putin gave his Munich speech, where he described dissatisfaction with several international issues. And if Gorbachev's Murmansk speech in 1987 was a turning point and a movement towards peace, Putin's speech in 2007 was a turning point towards uncertainty and increasing tensions. Putin expressed, among other things, dissatisfaction with the unilateral foreign policy of the US, the expansion of NATO, and the global security architecture, where he argued for the need for a multipolar organization of the global system.

The geopolitical significance of the Arctic has increased with the emergence of new Arctic actors, wherein China has made a large footprint. Beijing's growing interest in the Arctic is described in China's white paper from 2018 in which they declared themselves a "near-Arctic state" (China's Arctic Policy, 2018). China brings ever-new diplomatic challenges and opportunities for Norway. China's ambitions, driven by the potential of the Northern Sea Route, as well as the region's natural resources, necessitate a nuanced approach from Norway. Economic interests and environmental considerations must be balanced with a focus on security but simultaneously enable the application of the mechanisms

that have built trust previously under the umbrella of Nordic Peace. Fundamentally, in this context, the emphasis must be on compliance with international laws and thereby lead to cooperation between states that announce their arrival in the Arctic arena. The Arctic Council, which purpose is to promote cooperation, coordination, and interaction among Arctic states and the inhabitants, including indigenous peoples, with a focus on sustainable development and environmental protection, has expanded with several non-Arctic observers. The implication of this is that the Arctic is global today in the sense that the global system has arrived in the Arctic. These non-Arctic actors furthermore bring different motives and strategies to the Arctic and that impact the Arctic states.

Russia, which makes up about half of the Arctic, has had a great need for stability as this is where they have the most economic extraction (Sergunin & Konyshev, 2018). After the Cold War and in pace with its economic growth, China has expanded its presence in the Arctic as part of its global ambitions. In the period after the Cold War, China accordingly became one of the major investors in Russian infrastructure in the Arctic, especially in the maritime domain with regard to the Northern Sea Route (Fravel et al., 2022). The investments from China also increasingly enabled Russian strategies for resource extraction. Therefore, stability is of critical importance to Russia in the Arctic since they are so economically dependent on the Arctic. China's investments in the Arctic are often referred to as the Polar Silk Road, which is part of the Belt and Road Initiative (BRI). Beyond transport, it is about securing access to hydrocarbons and other mineral resources in the Arctic (Stepien et al., 2020).

China has further increased its scientific presence by establishing research stations in Ny-Ålesund, Svalbard, and outside Akureyri, Iceland. China's icebreaker, Xue Long (Snow Dragon), has been instrumental in China's research in the Arctic. Through science interests and science diplomacy, China has created a platform to influence the discourses about the future of the Arctic (Bertelsen et al., 2016).

China's engagement in the Arctic must also be seen in light of geopolitical strategy. Beyond investments, science and resource extraction, China seeks to expand its global influence, which the war in Ukraine has made increasingly possible. This has created opportunities and challenges for Norway, which must balance national interests with cooperation. In the security policy sphere, China's potential for involvement has grown and thus also had implications for the security dynamic, considering

that China has become a real challenger to the US's unipolar position. For Norway, this manifests itself with increased uncertainty and an increasingly complex threat level (*Focus 2020 The Norwegian Intelligence Service's assessment of current security challenges*, 2020).

## Post-Post Cold War—The Ukraine War and the Shift to Multipolarity

The turning point with Putin's speech in 2007 would have major consequences, not only for Norway and the Arctic, but for the entire global security dynamic. The war in Ukraine, which broke out in 2014 and escalated in 2022, has caused a marked degradation of peace and an increase in uncertainty. In the contours of a shift in the global order, we see a movement towards a multipolar organization. This is an organization of states that in itself is inherently unstable (Broad, 2023). A multipolar world (with several nuclear powers) brings with it a dangerously high level of complexity and unpredictability in international relations. Moving from a bipolar (Cold War) to a multipolar order by adding a third great power (or more) complicates strategic approaches and increases the risk of misunderstandings, miscalculations, or accidents. Simple bilateral dynamics are exceeded, and a more unstable and unpredictable security environment emerges; an environment where traditional deterrence strategies may be less effective.

This new security dynamic has not stopped China's advancement in the Arctic. On the contrary, it has increased China's regional influence as Russia has become more dependent on China. Since the war in Ukraine broke out, the cooperation between Russia and China has increased in pace with sanctions from the West. This has led to a new threat assessment of China in the Arctic, where so-called "dual use" capabilities—where civilian infrastructure can also be used militarily—have received increasing attention. For example, ports along the Polar Silk Road can easily support both civilian and military vessels or research stations that can be used for surveillance. Activities that are kept below the threshold of armed conflict, gray zone operations, are something both China and Russia have been involved in for a long time (Belo, 2022). These activities include economic warfare strategies and cyber operations to undermine democratic discourses and disinformation. For the West and Norway, China's increasing presence in the Arctic and its close relationship with Russia thus represent a security policy challenge. In light of the war in

Ukraine, the security policy landscape has, as mentioned, changed towards increased uncertainty. It, therefore, becomes more important for Norway, in interaction with allies, to develop a coordinated and strategic approach to China. This includes strengthening cooperation within NATO, but also putting in place robust mechanisms to counter gray zone activities and promote the rules-based international order in the Arctic. For Norway, the war in Ukraine has underlined the fragility of regional security and the importance of maintaining strong defense capabilities within the framework NATO has set.

However, strengthening the military capacity for Norway and NATO alone will not address the complexity of the new security challenges. Dialogue and diplomatic resolutions are needed to an equally high degree, *if not higher*, now that remilitarization in Russia is occurring in the aftermath of Russia's invasion of Ukraine.

There is dialogue and cooperation with Russia today. Bilaterally, the fish stocks that migrate across the Norwegian-Russian border are managed, there is joint cooperation on border relations, search and rescue activities, and there are three Norwegian ports open to receive Russian fishing vessels that also conduct emergency repairs of the vessels. These activities maintain open channels between Norway and Russia. They contribute to predictability and stability. Something that is increasingly needed in a multipolar Arctic despite the war in Ukraine. Norway and Russia, as well as other Arctic actors, have a common interest in having a region in stability. Norway worked for stability during the Cold War with its trust-building work towards the Soviet Union that stemmed from the conflict resilience and the legacy of the Nordic Peace enabled.

It is furthermore important to point out that during the Cold War, several global issues and threats were resolved across the ideological line that separated the West from the East: The Apollo-Soyuz test project in 1975 became a symbol of détente; agreements on non-proliferation of nuclear weapons and arms control came from 60s; the Antarctic Treaty was signed in 1959; the protection of the ozone layer came with the Montreal Protocol in 1987; and smallpox was eradicated in 1980. These, in addition to cultural cooperation, scientific cooperation, or the development of international law, were events that took place during the Cold War.[12]

[12] Norway established a cultural agreement with the Soviet Union in 1956. Two years later, the US established its cultural agreement (the Lacy-Zaroubin Agreement).

## Concluding Remarks

The problem statement that was initially presented posed the question: how has the development of conflict resilience originating from The Nordic Peace shaped Norway's strategies for handling security policy challenges and crises? After 1814, the Nordic region built conflict resilience that enabled creative and non-violent resolutions to conflicts. This has meant that throughout history, Norway, parallel with deterrence, has navigated challenges and crises with a focus on dialogue and understanding of opponents and where there has been a concerted effort to build trust.

The multipolar world order is characterized by a resurgence of great power competitions, which in turn places Norway in a delicate and difficult-to-manage position. Norway must balance the two important but often conflicting aspects of its foreign policy by adhering to its NATO commitments. This is subject to Norway's tradition of dialogue and mutual understanding with its allies as well as opponents, whereby the maintenance of security interests is balanced with trust-building to counter escalations.

In conclusion, Norway's continued maintenance of the Nordic Peace has been a cornerstone in navigating through complex landscapes of historical and modern security challenges. As the geopolitics of today changes with the emergence of new Arctic actors alongside a war in Ukraine that is not abating, Norway must maintain an approach rooted in cooperation and collaboration, which is now more predominant than before. This strategy for creating mutual respect and understanding has been developed from historical experiences that span the entire Nordic region. The strategy was applied in the Cold War where it provided a nuanced balance between security interests and regional stability. The importance of this approach is highlighted by the need to adapt to a changing world. Norway is currently challenged by the war in Ukraine. This war has shaken the basic principles of the Nordic Peace. The Nordic region has abandoned dialogue and is now united in NATO. This has, and will, lead to a common strategy around security issues. We have developed and organized ourselves in a defense alliance that is close to what Sweden wanted after World War II: a Scandinavian alliance. In such a military-strategic organization, we must not lose the ability to integrate the Nordic peace legacy characterized by peaceful diplomacy, dialogue, and fostering engagement with our opponents. The Nordic Peace is crucial for shaping

a future anchored in conflict resilience and stability, not only regionally but also internationally. We do not choose our geography, but we choose our governance, and as the global system has arrived, we must retain our resilience in meeting our current and future challenges.

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# Arctic+ Governance

# Science Diplomacy and the People's Republic of China's Relationship with the Nordic Countries in the Arctic Region

*Özgenur Aktan*

## Introduction

What is the relevance of science diplomacy (hereinafter, SD) in engaging with national interests and multidimensional relations, and vice versa, in Arctic affairs and governance? To address this question, this study utilizes the framework of SD in order to capture diplomatic approaches, collaborations, and policies of the People's Republic of China (hereinafter, China) in connection with Arctic affairs and governance. In this regard, this study will benefit from the framework of SD at the intersection of

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the involvement of China and its relationship with the Nordic countries as Denmark, Finland, Iceland, Norway, and Sweden in the Arctic region.[1]

This study stresses that China's relationship with the Nordic countries deserves elaboration in order to understand the boundaries, contributions, and subtle implications of SD in the Arctic region. In this process, the crossed paths of SD and the Arctic policy of China will come to the fore. Accordingly, the Arctic region is selected for SD and China's relationship with the Nordic countries in which the latter has not been sufficiently analyzed in the literature pertaining to Arctic affairs and governance. Further to this, the framework of SD is both conceptualized and contextualized in understanding the motivations and dimensions of the relationship between China and the Nordic countries in the Arctic region.

Without overlooking its cooperative and normative functioning, SD might be read as a component of Arctic affairs and governance and as an instrument for China to promote and renovate its national image, to strengthen its influence, to be recognized as an Arctic actor with responsibilities, and to build alliances in the region. These considerations shall entail the efforts to cultivate relationship with the Nordic countries as well. Therefore, critical scrutinization of the relationship between China and the Nordic countries might be important to understand the role of such considerations and different areas of cooperation that require further exploration through the lenses of SD.

In this study, SD will be analyzed within the scope of the International Relations (IR) discipline. There have been different definitions regarding the interactions between science and diplomacy. The concepts in the definitions, which will be assessed in the following sections, have been drawn from diverse disciplines. Examples entail soft power, public diplomacy, and preventive diplomacy. With that being said, the focus, Galluccio argues, should be directed to the field of IR in obtaining the origin of SD. In this regard, IR-oriented approach to SD reveals the

[1] The Nordic region consists of the five countries as Denmark, Finland, Iceland, Norway, and Sweden, and the autonomous territories of the Åland, Faroe Islands, and Greenland. See: Nordic Co-operation. (n.d.). *Facts About the Nordic Countries*. https://www.norden.org/en/information/facts-about-nordic-countries#:~:text=The%20Nordic%20Region%20consists%20of,each%20of%20its%20countries%20here. Accessed November 10, 2022; The five Nordic countries and the three autonomous territories have also been evaluated as participants in the context of Nordic cooperation. See: Ministry for Foreign Affairs of Finland. (n.d.). *Nordic Cooperation*. https://um.fi/nordic-cooperation. Accessed November 10, 2022.

facilitation and mediation of issues as subject to global concern, and resolution of conflicts (Galluccio, 2021, p. 3). As following this approach, this study will draw attention to the framework of SD in the context of IR. This understanding will be exemplified by looking into the relationship between China and the Nordic countries in the Arctic, which might be enriching for the term SD as well.

In addition to facilitation and mediation of issues and resolution of conflicts, SD has also been connected with national image, reputation, and brand (Copeland, 2016, p. 629). Accordingly, scientific practices can be relevant with national prestige and status. As an example of status, China has become a prominent actor in Arctic affairs, and this process cannot be isolated from the role of scientific activities. On this account, the following aspects have been demonstrated in explaining the role of China and other Asian countries in the Arctic: "*[…] polar research programme, investment in natural resource extraction projects, and commercial ships occasionally transiting the Northern Sea Route (NSR) and Northwest Passage (NWP)*" (Bennett, 2015, p. 646). Research programs, investments in relevant projects, and commercial ships have thus played a catalyzing role for China's engagement in the Arctic region.

Drawing from such remarks, this study will be divided into four sections. In the first section, the contributions, definitions, and historical development of SD will be assessed. The focus will be directed to the functioning and role of SD as a conduit for the processes of integration and socialization in the international area. In the second section, the two-fold limitations of SD will be discussed at the national, as states, and at the individual, as practitioners, levels. It will be emphasized that such limitations, as components of SD, cannot necessarily be expected to dissolve, but rather managed.

In the third section, the increasing attention upon the Arctic region and the frameworks regarding Arctic affairs and governance will be explained. As reflecting the increasing attention upon the region, the objectives and approaches of China and reactions towards its Arctic policy will be elaborated. In the fourth section, the interactions between China and the Nordic countries will be assessed through the lenses of SD directed to the Arctic region. The approaches and priorities of the Nordic countries will also be briefly introduced. In this study, it will be revealed that China's SD and relationship with the Nordic countries might be

viewed as part of the efforts for its national image and influence strengthening and alliance-building strategies in the context of Arctic affairs and governance.

Consequently, this study will highlight Arctic marine environment protection as one of the critical areas that needs to be prioritized through the relationship between China and the Nordic countries in the context of the normative functioning of SD. This offering will be grounded on the need to reinforce the normative functioning of SD as a balancing mechanism against the limitations of SD and to contribute to the well-being of the Arctic marine environment through cooperation. Drawing from the framework of SD and bilateral and multilateral relationships, the motivation of this study will be oriented at investigating the forms of engagement of China, along with the relevant channels and fields in the Arctic context.

## The Conceptual Framework and Development of Science Diplomacy

In the Madrid Declaration on Science Diplomacy, SD is defined "*[…] as a series of practices at the intersection of science, technology and foreign policy*" (S4D4C, 2019). Accordingly, SD contributes to discussions and decisions about common global concerns and challenges. It also transcends international science collaboration by directly or indirectly advancing diplomatic goals (ibid., 2019). As a result of this, SD and international scientific collaboration cannot be confounded with one another and cannot be considered as interchangeable. Another definition has been derived from "*[…] set of practices that open up sustained channels of communication and cooperation for the main purpose of producing objective knowledge*" (Su & Mayer, 2018, p. 23). These definitions indicate the advancement of diplomatic goals and the production of objective knowledge as underlying components of SD. Of equal importance is that SD has also been evaluated as "*[…] a catalyst for political and social change*" (Galluccio, 2021, p. 5).

SD has been reflected through its instrumental and practical roles as affecting the external policy of the European Union (EU). In this regard, the use of SD has been connected with the prioritization of international cooperation associated with innovation, research, science, and technology (European Commission Directorate-General for Research & Innovation, 2016, p. 59). It is also affirmed that SD can be utilized to

encourage peaceful relations at different levels (ibid., 2016, p. 64). SD, as a soft power mechanism, can play a supportive role for such objectives, including peace, security, humanitarianism, development, conflict and crisis prevention, and the establishment of communication and trust (ibid., 2016, p. 74). In this broader context, SD can be considered critical to contribute to peaceful interactions, conflict prevention, communication, and trust. In addition to its instrumental and practical roles, the dimensions of SD entail various areas, including innovation, research, science, technology, and foreign policy.

The emergence of SD has been connected with global challenges related to the environment, well-being, and safety of human beings. In this process, the reinvigoration of international politics, soft power, and the diplomacy of influence have also been critical (Ruffini, 2017, p. 13). It is contended that SD might be defined as practices, which entail the interactions of actions between researchers and diplomats in the convergence of science and foreign policy (ibid., 2017, p. 16). The benefits of SD can be explained in terms of its facilitative role against global challenges; its interactive role in providing more productive and sustainable international relations; its supportive role directed to evidence-informed and resilient foreign policy; its diplomatic contributions for scientific activities; and its improving role in eliminating the barriers between different actors and policies (S4D4C, 2019).

SD can be illustrated by referencing to soft power and various forms of diplomacy of influence (Ruffini, 2017, pp. 13–15), or to trust-building in the international area (Caymaz, 2021; European Commission Directorate-General for Research & Innovation, 2016, p. 74; Su & Mayer, 2018). As an example of the trust-building functioning of SD, the exchange of scientific resources, infrastructures and data; scientific interactions; reinforcement of knowledge-based institutions, and spillover effects can be regarded as trust-building mechanisms for the presence of China in the Arctic (Su & Mayer, 2018, p. 24). In a broader context, trust-building role of SD can be considered as a response against global challenges. In the realm of Arctic governance, the participation and scientific contributions of the Arctic countries, the EU, and the Asian countries can be viewed as the initiation of a new form of Arctic governance (Caymaz, 2021, p. 16).

Such explanations link SD with responsive strategy and Arctic governance. From a historical perspective, the development of SD has been connected with national aspirations. During the period between the

1890s and 1920s, many countries, such as Germany or Japan, increasingly focused on science for the promotion of their reputation and influence. The Cold War period also witnessed similar ambitions, coupled with the act of rebalancing or restoring diplomatic relations and of extending specific norms, ideas, interests, and technologies as followed by the United States and Great Britain and by international institutions, including the International Atomic Energy Agency (IAEA) and the North Atlantic Treaty Organization (NATO) (Kunkel, 2021, p. 475). Despite this integrative framework, SD ultimately indicates the responsibility of national states. With that being said, the role of organizations and institutions cannot be disregarded (Ruffini, 2017, pp. 15–16).

The period following the Second World War has been evaluated as important for the interactions between science and diplomacy in terms of conflict reduction. In this process, the support of scientists and the instrumental role of international institutions were traceable (The Royal Society and The American Association for the Advancement of Science, 2010, pp. 1–2). As a result of this, it can be valid and sound to contend that SD encompasses various levels such as international, national, individual, and institutional, and various considerations as exemplified by concerns over national reputation, global influence, conflict reduction, challenges, and uncertainties in world politics. Diplomats, international institutions, nations, researchers, and scientists can be considered as prominent actors in the field of SD.

The integration or articulation of science into foreign policy has a longer history that predates the Cold War period. Nevertheless, the Cold War period has been emphasized for the establishment of the foundations of SD (Ruffini, 2017, p. 17). The Cold War period has been critical concerning the illustration of SD as practiced by nations and international institutions. In essence, three historical periods—the 1890s–1920s era, the years of decolonization, and the late Cold War—can be brought forward in engaging with the promotion of science and the role of scientists pertaining to IR and diplomacy (Kunkel, 2021, pp. 475–476).[2]

[2] For the historical development of science diplomacy, please see: Copeland, D. (2016). Science Diplomacy. In C. M. Constantinou, P. Kerr, & P. Sharp (Eds.), *The Sage Handbook of Diplomacy* (pp. 631–633), Sage Publications; See also: Berkman, P. A., Lang, M. A., Walton, D.W. H., & Young, O. R. (Eds.), (2011). *Science Diplomacy: Antarctica, Science, and the Governance of International Spaces*. Smithsonian Institution Scholarly Press.

Despite the political tensions, the Cold War period witnessed the effective use of SD (Turekian & Neureiter, 2012). Consequently, two analytical lenses regarding the atomic question and the role of science and technology in the sphere of the East and West blocks were decisive. In this process, issues related to nuclear proliferation and disarmament led to the convergence and dialogue of scientists from the two blocs. Ideological objectives also affected the utilization of science (Ruffini, 2017, pp. 22–23). In connection therewith, Jacobsen and Olšáková shed light on how much is yet to be understood for the history and instrumental emergence of science and diplomacy, especially since the inception of the Cold War (Jacobsen & Olšáková, 2020, p. 465).

Even at the critical times of the Cold War, the collaboration between scientists, both from the Soviet Union and the USA, was maintained in diverse areas. Hence, the sustainability of science diplomacy might be indicative of the transcendence of political tensions and ideological rivalries through scientific engagements. The formidable political and economic barriers could not prevent the establishment or sustainability of the contacts between scientists. Leading on from this, it is also emphasized that the conflict over Crimea and eastern Ukraine could not obstruct the joint works between the USA, and Russian scientists related to various fields and issues, including the Arctic issues (Copeland, 2016, p. 629). As a promising recent example, the Arctic Council also agreed for the virtual resumption of its Working Group meetings in a gradual process as of February 28, 2024. This critical step also ensures the reengagement of observers, including China and external experts in relevant meetings (Arctic Council, 2024).

The conceptualization of SD was primarily carried out by practitioners, often named as "science diplomats", who have been engaged in the implementation of SD. Hence, practitioners have affected the definitions, categories, and understandings of SD. As a result of this, there has been a gap between theoretical and practical perspectives in the study of SD (Ruffini, 2020a, para. 2–3). As connected with the efforts to reconcile the gap between practitioner-driven SD and its theorization, SD can be situated in terms of national interest and state, liberal states and international cooperation, and non-state and global governance-oriented approaches as derived from the theoretical realms of IR (Kaltofen & Acuto, 2018, pp. 15–17). Against this backdrop, the offerings of IR theories can thus be utilized in order to grasp and classify the underpinnings and objectives of SD and to compensate for its practitioner-driven conceptualization.

In *New Frontiers in Science Diplomacy: Navigating the Changing Balance of Power*, the dimensions of SD have been explained as science in diplomacy; diplomacy for science, and science for diplomacy. The informative and advising roles of science have been demonstrated for the term science in diplomacy with regard to foreign policy objectives. The term diplomacy for science has entailed the facilitator role of science with regard to scientific cooperation at the international level. The improvement of international relations through scientific cooperation, on the other hand, has been demonstrated for the term science for diplomacy (The Royal Society and The American Association for the Advancement of Science, 2010, p. 15).[3] The terms science informing diplomacy; diplomacy facilitating science, and science facilitating diplomacy have also been offered as the branches of SD. As an example, science facilitating diplomacy can be illustrated by the Arctic research stations; the Arctic Environmental Protection Strategy (AEPS) led by Finland in 1991, and the establishment of the Arctic Council in 1996 (Goodsite et al., 2016, pp. 647–648).

The dimension of science for diplomacy can be explained as "*[…] mutual learning and confidence-building through scientific cooperation*" (Bertelsen & Su, 2018, p. 151). In this regard, the objectives of science for diplomacy can contribute to learning and confidence-building. Such aspirations can also be relevant with the Arctic policy of China. It is argued that China's Arctic policy and its efforts to participate in political, economic, and scientific affairs reflect its aspirations to be accepted as a major power; to reach its goals; to be recognized as a legitimate stakeholder, and to cultivate connections with the Arctic nations. In this process, SD, as a power mechanism that has been skillfully used, plays an important role for the aspirations of China in Arctic affairs. It is also argued that the Arctic countries benefit from SD in the context of the integration and socialization of China in the Arctic region (Bertelsen et al., 2016, pp. 442–443).

The integration and socialization-oriented implications of SD might be considered as the reflection of the processes of mutual learning and

[3] For another interpretation regarding the terms science in diplomacy; diplomacy for science, and science for diplomacy, please see the following chapter: Bertelsen, R. G. (2020). Science Diplomacy and the Arctic. In G. H. Gjørv, M. Lanteigne, & H. Sam-Aggrey (Eds.), *Routledge Handbook of Arctic Security* (pp. 235–236). Routledge.

competition in the international area. In this regard, SD might be functional not only for the establishment of confidence, recognition, and trust in relation to national interests, but also for the integration and socialization of states (see Waltz, 1979, pp. 73–77).[4] Despite such contributions, there have been ambiguities and limitations concerning the conceptualization and practices of SD. Therefore, it is important to obtain a deeper understanding concerning the impacts of such ambiguities and limitations on the functioning of SD. The existence of these inherited ambiguities and limitations, which will be revealed in the following section, indicates the complex trajectory of SD.

## The Advancement and Dilemma of Science Diplomacy: The Opportunities for International Cooperation and the Arctic Marine Environment Protection?

As highlighted in the first section, there might be a confusion for the extent of the relevance of scientific cooperation in the practices of SD. Therefore, a distinction between SD and scientific cooperation needs to be demonstrated in order to avoid conceptual confusion. In this context, the direct relationship of SD with governmental interests and objectives can be emphasized in contrast to scientific cooperation (Copeland, 2016, p. 630).[5] The promotion of national considerations thus differentiates the term SD.

There can be challenges concerning the articulation of science into the sphere of diplomacy. In *China's Cold War Science Diplomacy*, which focuses on the international scientific activities and participations of

[4] This interpretation has been derived in connection with the examination of the state behaviors as appeared in the *Theory of International Politics* by Kenneth N. Waltz. For socialization, which also entails the processes of constraining, limiting and learning through interactions, and competition-oriented behaviors of states with regard to system's structure, please see the following publication: Waltz, K. N. (1979). *Theory of International Politics* (pp. 73–77). Addison-Wesley Publishing Company. In this regard, SD can be considered as relevant with such processes.

[5] For another study that highlights the difference between scientific cooperation and science diplomacy, please see: Łuszczuk, M., & Szkarłat, M. (2022). The International Arctic Science Committee (IASC) in the Changing Arctic. Between International Scientific Cooperation and Science Diplomacy. In N. Sellheim & D. R. Menezes (Eds.), *Non-state Actors in the Arctic Region* (pp. 15–41). Springer Polar Sciences, Springer.

China, starting from the Civil War period to the early 1970s as the early decades of the People's Republic, it is explained that the scientific engagements that entailed the support and choreography of the Chinese Communist Party (CCP), intertwined with propaganda and activism, were to be evaluated as a distinct form of "*science diplomacy*" (Barrett, 2022, p. 4).

In this regard, propaganda and activism reveal the connection between SD and national pursuits. It is postulated that the SD of China during the Cold War period was firmly affected by the ideological outlook of the CCP and the domestic and international circumstances that surrounded the country (Barrett, 2022, p. 5). Further to this, it is argued that China, as a fledgling state at the time, aimed to influence scientific cultures and structures at the international level during the Cold War period. Such a path was also followed by the United States (ibid., 2022, p. 8).

As another example, Engerman explains how there have been different agendas as "American Knowledge for Global Power", "American Knowledge of Global Power", and "American Knowledge as Global Power", in connection with American foreign relations and American foreign policy. Despite their differences, the aforementioned agendas can provide insights into understanding the global power and interests-oriented implications of knowledge directed to the American foreign policy context (Engerman, 2007, pp. 599–601). Taken together, SD can allow the trace of power and interest-oriented functioning of knowledge across different actors, periods, and spheres.

As highlighted before, the functioning of SD can be oriented at strengthening national image and influence, coupled with the efforts for alliance-building. Of critical importance is that the dilemma of SD can be derived not only from national interests, competitive/cooperative behaviors, and diplomatic approaches of states, but also from the particular alignments and values of scientists. In this regard, this study conceptualizes the term SD in terms of national image, influence, and alliance-building-oriented considerations and of its two-fold limitations as the dilemma of SD by recalling the chapter titled as "Objectivity, Value Judgment, and Theory Choice" by Thomas S. Kuhn. In this chapter, the criteria of accuracy, consistency, the scope, simplicity, and fruitfulness have been emphasized in order to determine the adequacy of a theory. Accordingly, science is based upon these criteria as affecting the choice and adequacy of a theory over another (Kuhn, 1977, pp. 321–322).

However, Kuhn explains how different personalities, interpretations, and convictions of scientists can affect the choice between competing theories. As a result of this, the choice has been dependent upon the mixture of these shared/objective and individualistic/subjective criteria despite the negligence of the latter in the philosophy of science (Kuhn, 1977, pp. 324–326). Kuhn contends that not just these criteria, but also the individual biography and personality of scientists affect the theoretical preferences and outcomes of scientific decision-making processes (ibid., 1977, pp. 329–330). Further to this, Kuhn suggests that "*[…] the criteria of choice with which I began function not as rules, which determine choice, but as values, which influence it*" (ibid., 1977, p. 331).

From this point of view, the criteria that appeared as objective might actually function as intersubjective. In this context, the connection between science and values demonstrates more holistic perspective towards the human essence. With that being said, the limitations associated to objectivity can not indicate putting it or the factuality aside. Consequently, we still need objectivity in the end (see Kuhn, 1977, pp. 337–339). Drawing from such remarks, scientific choices might not be in complete isolation from subjective preferences of scientists. As a result of this, scientific activities might function with regard to different interests and values resulting from the behaviors of scientists. Such interests and values can also be connected with national belonging and identity. Combined with the national pursuits of states, the decisions of both scientists and diplomats account for the advancements and limitations of SD.

As a result of this, there have been two inherited tensions in SD and in its actors as the reconciliation between the national priorities and scientific autonomy, and the articulation of universal truth claims within different contexts and discourses (Su & Mayer, 2018, p. 23). These tensions reflect the confronted complexity with regard to the agenda and functioning of SD. Considering the two-fold limitations as the dilemma of SD, the prioritization of national interests can affect the autonomy of scientific practices adversely, and the autonomy of scientific practices can be preserved and prioritized at the expense of the advancement of diplomatic goals. The prioritization of one of these paths or the pursuit of a balance between the two can be chosen. Nevertheless, two-fold limitations associated to such tensions reveal the inherited dilemma of SD.

The boundaries of SD can be detailed in terms of the politicization of science, which might lead to the prioritization of national interests over knowledge and the proliferation of scientists with diplomatic or administrative works, and the shifting mix of scientific disciplines. In terms of the shifting mix of scientific disciplines, Su and Mayer explain how climate science was effective for the involvement of China in the Arctic region. But there has been a shift from climate science to SD, following the Russian national flag at the North Pole seabed as planted by the Russian scientists. In this regard, it is contended that research projects of China are much closer to politics compared to natural science. The emphasis on politics has also been connected with research areas such as international law, sovereignty, and energy security surrounded by delicate or sensitive political questions (Su & Mayer, 2018, pp. 26–27).

The response to global challenges through SD has also been subject to criticism in terms of ambiguities and problems concerning the compliance among such actors as pursuing their own interests in an anarchic international area. The flaws associated with SD can also be observed through the validity of narratives as shaping the virtues of scientific research, norms, and the portrayal of scientists and as simplifying the roots of political conflicts. Accordingly, scientific activities and scientists cannot be isolated from insecurities and complexities that also affect political decision-making processes. Against this backdrop, it is argued that science can play an informative role, but cannot settle political disputes (Rungius & Flink, 2020, pp. 4–6).

Further to this, SD cannot necessarily indicate pacific ends and security (Copeland, 2016, p. 630). Such explanations address the limitations associated with the attributions, virtues, and relevant actors of SD and its figuration of the underlying roots of conflicts. Despite such limitations, the relevance of scientific cooperation and the security of the marine environment cannot be isolated from the functioning of SD.

As capable of illustrating these points, Article 144 and Article 145 of the United Nations Convention on the Law of the Sea (hereinafter, the UNCLOS) indicate the exchange and cooperation associated with technology and scientific knowledge and the effective protection of the marine environment and ecological balance in relation to the activities in the Area respectively (United Nations Convention on the Law of the Sea, 1982).[6]

[6] In the Article 1, 1(1) of the UNCLOS, *"'area' means the sea-bed and ocean floor and subsoil thereof, beyond the limits of national jurisdiction;* (…)". See: United

Further to this, the importance of cooperation in matters associated with marine science and technology; the encouragement of the development of scientific and technological capacity for such states parties seeking support in connection with various considerations, including marine environment protection and scientific research, and the improvement of conditions as favoring the transfer of marine technology have been demonstrated in Article 266 of the UNCLOS (United Nations Convention on the Law of the Sea, 1982).

As building upon the relevant provisions of the UNCLOS, the freedom and importance of marine scientific research and scientific cooperation have also been affirmed in the Agreement referred to as Biological Diversity of Areas Beyond National Jurisdiction (BBNJ) (see The Agreement under the United Nations Convention on the Law of the Sea on the Conservation & Sustainable Use of Marine Biological Diversity of Areas Beyond National Jurisdiction, 2023, Article 7(c)-Article 8(3)).

SD has actually played an underlying role for the UNCLOS and its institutions. It is argued that the implementation and progression of the UNCLOS can be explained by applying to ocean SD (Polejack, 2021). SD has also been connected with diplomatic, institutional, legal, and political demonstrations of the seabed politics at the UN. Robinson argues that the seabed politics and diplomacy efforts of the UN in the late 1960s–1970s need to be analyzed through SD. The tensions that emerged during the UN seabed committee and the UNCLOS III conferences entailed four areas related to the ocean: military space, science and knowledge expansion, resource, and environment that requires protection

Nations Convention on the Law of the Sea (1982, December 10). *The Division for Ocean Affairs and the Law of the Sea*, Office of Legal Affairs, United Nations, https://www.un.org/depts/los/convention_agreements/convention_overview_convention.htm [Accessed October 28, 2022]; As connected with the marine scientific research, marine environment protection, preservation, and the prevention of pollution, please see some of the directly/indirectly relevant provisions, within the [Article 21(1)(f)]; [Article 56(1)(b)(ii)-(iii)]; [Article 60(3)]; [Article 61(2, 3, 5)]; [Article 94(7)]; [Article 119]; [Article 123]; [Article 144]; [Article 145]; [Article 155(2)]; [Article 162(2)(w, x)]; [Article 165(1)]; [Article 165(2)(d, e, f, h, k, l)]; [Articles 192–199]; [Article 200–216]; [Article 217(1)]; [Article 219]; [Article 220(5)]; [Article 222]; [Article 225]; [Article 226(1)(b, c)]; [Article 229]; [Article 230(1–2)]; [Article 233–237]; [Article 240]; [Article 242–243]; [Article 246]; [Article 258]; [Article 263]; [Article 266]; [Article 269(a, c-e)]; [Article 277]; [Article 290(1)]; [Article 297(1)(c)] at the UNCLOS.

(Robinson, 2021, p. 151).[7] It can be interpreted that these areas also reveal the interconnected dimensions of SD as affected its development.

The Arctic region has been important in terms of the illustration of knowledge and research sharing and long-term transnational academic cooperation (Mayer, 2018, p. 23). Engaging with the Arctic region also requires special attention directed to the environmental and human safety. Safety risks have been connected with increasing marine operations in the region (Bianco & Svendsen, 2020, p. 12). These considerations grounded on cooperation, science, and the safety of the environment and human beings have been significant for the development of SD. Correspondingly, the Arctic region provides high level of compatibility with the underpinnings of SD that entail normative approachments as well.

Taken together, SD might be evaluated as one of the important frameworks in engaging with the development, progression, and implementation of the UNCLOS, the seabed politics, and with the increasing attention upon the Arctic region. Scientific interactions, as capable of supporting the processes of conflict and dispute reduction, the marine environment protection and preservation, along with the ocean affairs and governance-oriented implications of SD can be considered as especially critical in the Arctic context.

The Arctic, as a maritime area encompassed by the Arctic Ocean, regional seas, and coastal areas, is subject to increasing interests of major powers and political entities (Peng & Wegge, 2014, p. 288). In particular, the Arctic region offers a new dimension concerning the relationship between the Arctic countries and China as capable of affecting scientific, political, and economic connections between small Nordic countries and the Asian powers (Bertelsen et al., 2016, p. 445). In this regard, it is important to understand the interests of China, accompanied by different

[7] In the Article 1(3) of the UNCLOS, it is explained that *"'activities in the Area' means all activities of exploration for, and exploitation of, the resources of the Area; (…)"*. The International Seabed Authority, referred as the Authority in the Article 1(2) in the UNCLOS, is established for the organization and controlling of the activities in the Area, especially in connection with the administration of the resources of the Area. See: Article 157(1) in the UNCLOS. Further to this, the Authority is also responsible of acquiring technology and scientific knowledge regarding the activities in the Area, and of promoting and encouraging technology and scientific knowledge exchange directed to developing states. For this reason, scientific cooperation has been emphasized between the Authority and States Parties to the UNCLOS. See: Article 144(1)(2) in the UNCLOS.

attitudes and reactions. Following that, the role of SD and paths of cooperation can further be explored by shifting the focus to the relationship between China and the Nordic countries in the Arctic domain.

## The Importance of the Arctic Region and the People's Republic of China's Key Lines of Involvement

The Arctic region encompasses areas that entail both state sovereignty and jurisdiction and the areas that transcend national boundaries such as the high seas and international seabed area (Xinmin, 2019, p. 265). Within this context, the areas that are subject to sovereignty or national jurisdiction and non-sovereignty in the Arctic region can be explained as follows:

> "The Arctic is formed by its inhabitants and a diversity of species and resources, spread over land territories, marine zones, ice and air space subject to sovereignty (land areas, internal waters and territorial sea, and the air space over them as well as the bed and subsoil of its territorial waters) or national jurisdiction (contiguous zones, EEZs and continental shelves) and beyond national jurisdiction (high seas, the international seabed Area and the air space over waters beyond the outer limit of the territorial sea). The sovereignty and jurisdiction of States and their other competences are exercised in the Arctic, as everywhere else, subject to 'general' rules of international law." (Alcaide-Fernández, 2018, p. 285)

In support of these explanations, it is plausible to contend that exploring Arctic affairs and governance requires both state and non-state-centric perspectives. Accordingly, such perspectives might be analyzed through China's SD and interactions with the Arctic countries as limited to Nordic countries. In this process, the exploration of China's relationship with the Nordic countries may prove to be important given its negligence and identifiable gap in the literature. As highlighted, SD entails not only institutional and non-governmental frameworks, but also national state-centric considerations and dynamics. Policies and areas of cooperation of China reaffirm the mixed direction of SD in the Arctic region. With that being said, the normative implications of the UNCLOS associated with the Arctic marine environment protection need to be taken into consideration in bilateral and multilateral relationships. Such

an offering can be grounded on the increasing attention upon the Arctic region and on the aspirations of China oriented at presenting itself as a relevant actor with respect to the Arctic legal frameworks and ecological balance.

From a jurisdictional perspective, the Arctic region is comprised of the portions of Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, Sweden, and the United States. Finland and Sweden, as the Arctic countries, do not border the Arctic Ocean (Budzik, 2009, p. 1). Finland and Sweden can thus be considered as the Arctic countries without Arctic coastlines (Dodds, 2013, p. 30). In the *Declaration on the Establishment of the Arctic Council*, namely the Ottawa Declaration, these eight states have been referred to as the Arctic States and members of the Arctic Council. It is explained that the observer status in the Council, as a high-level forum, is open for or accessible by non-Arctic states, inter-governmental and inter-parliamentary organizations, and global, regional, and non-governmental organizations (Declaration on the Establishment of the Arctic Council, 1996).

China has obtained observer status in the Arctic Council since May 2013 (Chater, 2021, p. 1).[8] In line with the revised Arctic Council Rules of Procedure, China, as an observer, commits to recognize the Law of the Sea as part of the extensive legal framework that provides a solid foundation for the management of the Arctic Ocean (Arctic Council Rules of Procedure, 2013, p. 14).[9] The observer status in the Arctic Council has been evaluated as important for Asian countries, such as China, Japan, South Korea, India, and Singapore, sharing increasing focus on the Arctic region. The importance of the observer status in the Arctic Council can be elucidated through participation in shaping the future of the Arctic region accompanied by its economic and environmental impacts (Hong, 2014, p. 272). Accordingly, China aims to be involved in the regional governance by participating in the Council (Chater, 2021, p. 1).

[8] Please see the Kiruna Declaration that welcomes China, along with the India, Italy, Japan, Republic of Korea and Singapore, as new observer states in the Arctic Council: Kiruna Declaration (May 15, 2013). On the occasion of the Eighth Ministerial Meeting of the Arctic Council. Kiruna, Sweden, Arctic Council Secretariat. Available at Arctic Council: https://oaarchive.arctic-council.org/handle/11374/93. Accessed November 17, 2022.

[9] For other criteria in order to be accepted as an observer state in the Arctic Council, please see: Arctic Council Rules of Procedure (May 15, 2013). Criteria for Admitting Observers, p. 14. Available at Arctic Council: https://oaarchive.arctic-council.org/handle/11374/940. Accessed November 19, 2022.

Despite the legal and regulatory restrictions of the Council, the observer status of China has been evaluated as a legitimizing factor in order to be involved in the Arctic affairs. In this process, SD has been important for the observer status of China. In essence, SD has been effective for the attainment of the observer status (Pelaudeix, 2018, p. 3). The Nordic countries supported the participation of a range of Asian countries, including China in the Council, albeit with the restrictions and skepticism (Lunde, 2014, p. 39). Accordingly, Norway was not eager for the observer status of China in the Council. In this context, the emphasis is given to the incident of the 2010 Nobel Prize award for Liu Xiaobo. Dodds explains that the fears concerning the creation of a rival Arctic network of nations by China partly softened this position (Dodds, 2013, p. 32).[10] Strategic objectives of China have also been one of the reasons for concerns of the Nordic countries (Lunde, 2014, p. 44).

For China, being outside of the Arctic region cannot be indicative of being irrelevant to Arctic affairs and issues. In its white paper titled as *China's Arctic Policy*, published by the State Council Information Office of China, it is explained that the lack of territorial sovereignty in the Arctic region does not indicate that countries, outside of the Arctic region, do not have rights in the fields, including but not limited to scientific research, fishing, installation of submarine cables and pipelines, and resource exploration and exploitation with regard to treaties such as the UNCLOS and general international law, all of which, along with the Spitsbergen Treaty and other treaties, govern the Arctic affairs at the present (The State Council Information Office of the People's Republic of China, 2018).

Drawing from this white paper, the UNCLOS, international law, and the Spitsbergen Treaty have been emphasized as the legal frameworks for the engagement of China in Arctic affairs and governance. But still, China has been described as "*an Interpretative Power*" in the context of international law, which has echoed through its confident application of the

[10] For the impacts of the 2010 Nobel Peace Prize on the relationship between Norway and China, please see: Sverdrup-Thygeson, B. (2018). The Norway-China Relationship: For Better, for Worse, for Richer, for Poorer. In B. Sverdrup-Thygeson, W. Y. Lindgren, & M. Lanteigne (Eds.), *China and Nordic Diplomacy* (pp. 80–82). Routledge; In addition, the Nobel Peace Prize can be evaluated as important in the context of Scandinavian science diplomacy. See: Kulalı-Martin, Y. (2021). İskandinavya'nın Bilim Diplomasisindeki Rolü: Nobel Ödülleri Örneği. *Galatasaray University Journal of Communication*. Special Issue 6, pp. 57–74.

UNCLOS and the Svalbard Treaty. Such reinterpretive examples include the practices in the South China Sea and in the Antarctic (Liu, 2021, p. 4). Accordingly, this concern was made evident in the maritime claims of China in the South China Sea, which produces challenges concerning its compliant image with the UNCLOS (Peng & Wegge, 2014, p. 296).

As a reflection of this, it is asserted that China aims to influence the UNCLOS regarding the means of recognition of its maritime sovereignty entitlements and the advancement of maritime rights in the South China Sea. In this context, China seeks to transcend the conventional distinction between land and sea (Strating & Wallis, 2022). From another perspective that compares the approaches of China to the Arctic region and to the South China Sea, it is asserted that the approach of China to the Arctic can be characterized by globalization in contrast to its understanding of sovereignty boundaries in the South China Sea (Odgaard, 2024). With that being said, there are contradictions regarding the attributions and perceptions directed to the Arctic that concurrently correspond to global commons and the nearness. This contradiction can be considered as the reflection of China's spatial imaginary of the ocean. Climate change further reinforces the diffusion between territorial and globalist discourses of China (Bennett, 2015, pp. 655–656).

In this process, science has been evaluated as critical in the Arctic activities of China (Liu, 2021, p. 4). In relation to the Arctic context, it is argued that China has embodied such intense maneuver in the fields of diplomacy, economy, and research (Chen, 2012, p. 360). In China's Arctic policy, it is particularly demonstrated that "*the Arctic holds great value for scientific research. To explore and understand the Arctic serves as the priority and focus for China in its Arctic activities*" (The State Council Information Office of the People's Republic of China, 2018). Despite the narratives reflected in this white paper, there have been criticisms concerning the involvement of China in the Arctic region. The challenges against the Arctic strategy of China have been explained in terms of territorial sovereignty-oriented disputes by the Arctic states; skepticism for the intentions of China; challenges resulting from the natural environment in the Arctic region, and current technological limits of China (Hong, 2020, p. 7). Narratively, the emphasis is given to themes of governance, cooperation, research and participation rather than to security and military in this extra-regional white paper of China, which is mostly compatible with the Western discourse (ibid., 2020, pp. 9–10). It can be interpreted that

such narrative compatibility has also been designed to balance challenges and skepticism directed to the Arctic policy of China.

Scientific research can be considered as one of the critical areas in which China is closely involved in the Arctic region. It is demonstrated that the Arctic issues and affairs have a direct impact on the non-Arctic countries, including China, which shares interests with the Arctic countries as well. Accordingly, the involvement and active participation of China in the area of scientific research were marked by its membership in the International Arctic Science Committee in 1996. The scientific expeditions and researches of China have also strengthened its role in the region. Hosting the Arctic Science Summit Week and becoming an observer to the Arctic Council in 2013 have also been effective (The State Council Information Office of the People's Republic of China, 2018). Consequently, such forms of engagement underlie the utilization of SD by China.

Despite the scientific activities and compatible narratives, there have been negative responses and ambiguities concerning the engagement of China in the Arctic. The criticisms have also been explained in terms of the autocratic governance of China; the inadequate track record of Chinese companies, and the increasing maritime power of China in oceans, including in the Indian and Pacific Oceans. In this regard, the involvement of China in the Arctic region has been explained through security and military-oriented concerns. It is contended that the scientific and economic engagement of China might function to expand its influence and dominance in the region (Kopra & Koivurova, 2020, pp. 1–2).

The Arctic policy of China has also been affected by the impacts of the climate change. In its white paper, it is explained that climate change might provide both challenges related to global warming, sea level rise, heightened occurrences of extreme weather, and biodiversity degradation, and opportunities related to commercial utilization of sea routes and resource development, which might produce considerable economic and social impacts. It is also explained that the natural environment and changes in the Arctic region also affect China in terms of the climate, environment, and economics (The State Council Information Office of the People's Republic of China, 2018). The impacts of climate change have thus been demonstrated in order to justify the engagement and interest of China.

Understanding the approach of China to the Arctic region might also require to rethink about sovereignty boundaries and geography. Accordingly, China defines itself as "*a Near-Arctic State*" and as "*an important stakeholder in Arctic affairs*" (The State Council Information Office of the People's Republic of China, 2018). As a reflection of this, it is also argued that China affects regional identities, relationships, and political practices in the Arctic (Ingimundarson, 2014, p. 193). Further to this, Lanteigne contends that China attempts to develop an Arctic identity in order to be involved in the economic opening up of the circumpolar North (Lanteigne, 2020, p. 314). Combined with the development of the Arctic trade, investment, and scientific portfolios by China, it is argued that the distinction between the Arctic and non-Arctic stakeholders might be blurred (Dodds, 2013, p. 35). Therewith, China's diplomacy and relationship with the Arctic countries have equally been affected by its economic interests and concerns over its self-image, ideology, and geopolitical posture amidst challenges in terms of inadequate knowledge and unfamiliarity, which further necessitate conducting assessment and research in the Arctic venture (Peng & Wegge, 2015, pp. 237–238).

According to Bennett, the description of the Arctic not just as a "*region*", but as a "situation" also reflects the efforts of China to actively participate, to shoulder responsibilities, and to contribute to the Arctic affairs. Hence, the white paper of China can be interpreted as the pursuit of China to be seen as a responsible actor (Bennett, 2018). Such identifications and narratives have been evaluated not only as the reflection of China's efforts to legitimize and validate its engagement in Arctic affairs, but also as the demonstration of its ambition and power projection of a rising power (Bertelsen & Su, 2018, p. 149). The Arctic identity-building, as a dynamic process that may be subject to complications in connection with the globalization of the Arctic Ocean region, still continues for non-Arctic countries (Lanteigne, 2017, p. 91).

The legal and institutional frameworks have been important in the Arctic context. As an example, the Arctic Council has been evaluated "*[…]as the predominant intergovernmental forum for Arctic affairs*" (Koivurova, 2011, p. 363), with two primary objectives as environmental protection and sustainable development (Bloom, 1999, p. 712). In this regard, environmental protection has been a critical element of the Council and the UNCLOS. Along with the UNCLOS, the Arctic Council has been regarded as legitimate framework for the integration

and governance in the Arctic region (Ingimundarson, 2014, p. 184).[11] It should be remembered that in China's white paper, the commitment towards the UN Charter, the UNCLOS, the treaties on climate change and environment, and the International Maritime Organization (IMO)'s rules has also been emphasized (The State Council Information Office of the People's Republic of China, January 2018).[12]

In *The Ilulissat Declaration*, Canada, Denmark, Norway, Russia, and the United States demonstrated their commitment towards the legal framework of the law of the sea as well. In this declaration, dated May, 2008, it is declared that there is no need for the development of a comprehensive international legal regime regarding the government of the Arctic Ocean (The Ilulissat Declaration, 2008). Drawing from this declaration, five countries have found the present international law of the sea as sufficient to apply to Arctic affairs and a new comprehensive Arctic Ocean regime as unnecessary (Scovazzi, 2009, pp. 371–372).

But there have also been discussions regarding the strengths and weaknesses or the sufficiency of the law of the sea in engaging with the Arctic marine environment or Arctic Ocean (e.g. Korkut & Fowler, 2019; Rothwell, 2013). It is also important to emphasize that the United States is also not a party to the UNCLOS in contrast to other Arctic countries (Korkut & Fowler, 2019, p. 65). With that being said, Russia scrutinizes and reconsiders withdrawing from the UNCLOS at present (Vereykina, 2024).

[11] For more information about the international legal and political framework of the Arctic, please see: Jakobson, L. (2010, March). *China Prepares for an Ice-free Arctic* (No. 2010/2). SIPRI Insights on Peace and Security, p. 10. https://www.sipri.org/sites/default/files/files/insight/SIPRIInsight1002.pdf. Accessed November 12, 2022.

[12] For more comprehensive perspective regarding the legal framework of the Arctic, please see: Xinmin, M. A. (2019). China's Arctic Policy on the Basis of International Law: Identification, Goals, Principles and Positions. *Marine Policy, 100*, 266–267; For a comparison concerning the characteristics and frameworks of the Arctic and Antarctic, please see the following adapted table: Berkman, P. A., Walton, D. W. H., & Young, O. R. (2011). Conclusions. In P. A. Berkman, M. A. Lang, D. W. H. Walton & O. R. Young (Eds.), *Science Diplomacy: Antarctica, Science, and the Governance of International Spaces* (p. 307). Smithsonian Institution Scholarly Press. For another study, which suggests to develop a holistic perspective regarding the engagement of China in the Arctic and Antarctic through the integration of these regions in terms of polar research and polar context, see: Brady, A.-M. (2017). *China as a Polar Great Power.* Cambridge University Press.

In addition to concerns and ambiguities about the engagement of China and interpretations regarding the UNCLOS in the Arctic region, the Council has also been subject to discussions. It is explained that there are differences or divergences in the direction of the Council and in the regional narratives of the Arctic, which have been reflected by countries such as Russia and Canada favoring the importance of controlling territory in the Arctic, and countries such as the Nordic five and the USA, to a lesser extent, demonstrating more receptive attitude for outside involvement in the Arctic region. Bennett argues that China actually promotes both of these narratives, namely the territorial and more globalist directions to obtain legitimacy in the region (Bennett, 2015, p. 646).[13] There have also been further suspicions directed to the Council following Ukraine's invasion by Russia (e.g. Simpson, 2023).

From a Nordic perspective, the role of the Nordic countries also varies within the Council. While the roles of Norway and Iceland have been evaluated as pragmatic, the role of Sweden has been evaluated as more normative in connection with its relative detachment (The Institute for Security & Development Policy, 2016, p. 8).[14] It is also contended that the Arctic framework entails sub-hierarchies, which have been exemplified "*[…]: between the Arctic Five and the Arctic Three; between the Arctic Eight and the Indigenous populations; and between the Arctic Council*

[13] For a list of narratives, associated with the territorial and globalist dimensions, please see: Bennett, M. M. (2015). How China Sees the Arctic: Reading Between Extraregional and Intraregional Narratives. *Geopolitics, 20*(3), 654.

[14] However, the accession of Finland and Sweden to North Atlantic Treaty Organisation (NATO) can problematize this attribution regarding the relative detachment of Sweden. With that being said, Khorrami explains that NATO might provide a more qualified and enhanced venue for the conduction of high level Arctic-related talks, as exemplified by various defence and security topics, including the climate change, technological development, deterrence and maritime security. See: Khorrami, N. (2022, November 24). *Pending Finnish and Swedish NATO Membership and the Future Relevance of ASFR and CHOD*. The Arctic Institute. https://www.thearcticinstitute.org/pending-finnish-swedish-nato-membership-future-relevance-asfr-chod/. Accessed December 12, 2022.; Finland has become the 31st member of NATO as of April 04, 2023. See: NATO Parliamentary Assembly. (n.d.). *Ratification of Finland and Sweden's Accession to NATO*. https://www.nato-pa.int/content/finland-sweden-accession. Accessed April 12, 2023. Sweden also became a full member of NATO on March 07, 2024. See: The Government Offices of Sweden. (n.d.). *Sweden and NATO*. https://www.government.se/government-policy/sweden-and-nato/. Accessed March 08, 2024.

*states and the Observers*" (Ingimundarson, 2014, p. 185).[15] But still, the Council has provided cooperative mechanisms and agreements among the Arctic countries. Agreement on Enhancing International Arctic Scientific Cooperation, for example, has been important in order to increase cooperation in scientific activities concerning the development of scientific knowledge and expertise about the Arctic (Agreement on Enhancing International Arctic Scientific Cooperation, 2017).

The developments and alterations in the Arctic region have usually taken reference from the climate change. The impacts of climate change have been explained in terms of the increased accessibility of the Arctic region and its potential resources; alterations in the geopolitical landscape, and the increased international focus, which entails geographically distant countries such as China (Hong, 2014, p. 272). It is explained that the climate change has affected the inaccessibility of the Arctic region in terms of resource development, exploitation, and hydrocarbons from the seabed areas (Koivurova, 2011, p. 363). The importance of natural resources and shorter navigable sea routes has also been emphasized in engaging with the impacts of the climate change and the relevant objectives of China (Chen, 2012, p. 360).

Mineral resources, fisheries, forestry, scientific researches, including strategic space-related research, and shipping routes have been emphasized for the increasing significance of the Arctic region (Brady, 2017, pp. 9–10). Along with the climate change and potential for resource and transportation, the increased attention in the region has also been drawn by the political-economic globalization (Bertelsen et al., 2016, p. 445).

[15] Such challenges associated with the Arctic governance have also been accompanied by the Russian invasion of Ukraine, which led to the implementation of the unprecedented sanctions against Russia and boycott of the Arctic Council, as the foundation of the Arctic governance while serving as the facilitator of regional diplomacy, by the seven Arctic states. The Russian invasion of Ukraine thus affects the participation of Russia in the Council as one of the few remaining soft power venues for Russia. The diminishment of Russia in the Council has also obstructed scientific exchanges and cooperation in the Arctic region. See: McVicar, D. (2022, May 10). *How the Russia-Ukraine War Challenges Arctic Governance*. Council on Foreign Relations. Available at: https://www.cfr.org/blog/how-russia-ukraine-war-challenges-arctic-governance?amp. Accessed April 12, 2023. With that being said, there have also been more optimistic assessments about the future of the Council. For example, see: Edvardsen, A. (2024, February 29). The Arctic Council with New Decisive Step Forward. *High North News*. https://www.highnorthnews.com/en/arctic-council-new-decisive-step-forward. Accessed March 12, 2024.

From another perspective, Koivurova frames the engagement and competition of countries in the continental shelf areas through rationality rather than the impacts of the climate change. It is also demonstrated that the negotiation of the UNCLOS was conducted when there was only little awareness about the climate change. Hence, the development and direction of technology would be compelling to make submissions to the Commission on the Limits of Continental Shelf on behalf of their interests (Koivurova, 2011, pp. 366–367).

Under such circumstances, the widely held perception regarding the increasing impacts of the climate change upon the competition in the Arctic region might not be sufficient in understanding the interests and policies. In this process, the interests of China have also been subject to various approaches. It is argued that the interests of China are largely focused on the maritime issues in the context of Arctic affairs (Koivurova et al., 2017, p. 1). Infrastructure projects have also been emphasized as the interests of China in the far north (Chater et al., 2020, p. 50). As connected with the climate affairs, the rationales of China have also been explained through climate science, natural resources, and shipping routes (Heggelund & Han, 2016, p. 140).Examples also include commercial, academic, and military-strategic considerations in the context of the interests of China (The Institute for Security & Development Policy, 2016, p. 29).

It is estimated that the Arctic region holds about 22% of undiscovered conventional oil and natural gas (Budzik, 2009, p. 1). In line with this estimation, energy issues can also be evaluated as one of the focusing areas for China. In China's Arctic Policy, the emphasis is also given to the possible impacts of the utilization of sea routes, resource development and exploration in the Arctic region on the energy strategy and economy of China, as a major energy consumer (The State Council Information Office of the People's Republic of China, 2018). This statement also reaffirms the role of energy resources for China in the Arctic context.

The key interests of China in the Arctic region have also been reflected in terms of the improvement of capacity against the impacts of the climate change, the security of accessibility and affordability related to the Arctic shipping routes, and the promotion of the accessibility of China to the Arctic resources and fishing waters (Jakobson & Peng, 2012, p. 1). Drawing from all of these, there have been various aspirations and reasons for the involvement of China in the region. These aspirations have also been connected with SD. As another example, scientific endeavors and

projects of China can also be oriented at building its maritime power in the Arctic region (Bennett, 2015, p. 655). In a broader context, the dimensions of maritime security, nuclear security, climate change research, and natural resources can be considered as critical for the engagement of China into the polar regions (Brady, 2017, p. 15). Such explanations indicate that SD can also be utilized in order to canalize the maritime power of China.

Equally important, it is also contended that the engagement of China in the Arctic region might be evaluated as the reflection of a global change and power transition, which are not restricted to Arctic affairs (Bertelsen, 2020, p. 240). In this regard, the following drivers such as the climate change, post-Cold War geopolitics, and globalization/power transition have been demonstrated for the transformations in the Arctic region (Goodsite et al., 2016, p. 646). Theoretically, China's role in Arctic governance has been investigated through its approach to the UNCLOS in which attention has been directed to realist and liberal traditions in IR (Peng & Wegge, 2014, pp. 288–292). In building possible Arctic scenarios for the engagement of China, realist, liberal-institutionalist, and relational perspectives in IR have also been utilized (see Kauppila & Kopra, 2022).

The methods of China have been important in relation to its interests and aspirations. It is contended that the advancement of the bilateral diplomacy of China in the Arctic region entails two efforts as resources-oriented diplomacy and influence expansion through the improvement of relationships with five countries in North Europe (Hong, 2014, p. 274). In "China's Role in the Arctic: Observing and Being Observed", the same conclusion regarding the efforts of China in terms of resource acquisition/resources-oriented diplomacy and influence expansion has also been emphasized (Hong, 2020, p. 40). It is also emphasized that polar science and research have largely affected the Arctic policy of China (Heggelund & Han, 2016, p. 142). In "China's Bilateral Diplomacy in the Arctic", scientific activities have been demonstrated as probably the most important dimension of China's engagement in the Arctic (Peng & Wegge, 2015, p. 237). Drawing from all of these, SD has been an indispensable instrument for China's diplomatic approaches, learning, and the expansion of influence in the Arctic context.

In particular, research institutions, universities, and individual academics have been demonstrated among the Arctic actors of China. It

is emphasized that governmental entities, research institutions, universities and individual academics, and commercial actors might be evaluated as the Arctic actors for China. Examples related to research institutions include the Polar Research Institute of China (PRIC), the Shanghai Institutes of International Studies (SIIS), and the China Institute for Marine Affairs and Chinese Academy of Sciences (Jakobson & Peng, 2012, pp. 3–9). Research institutions have also been influential in the policymaking and national network in China. PRIC, for example, has been evaluated as a link between the policymaking of China and academia (ibid., 2012, p. 5). PRIC has promoted a national network through social scientists, research universities and institutes, covered various academic disciplines, including international Arctic cooperation, and promoted interdisciplinary and international approaches in Arctic affairs (Yang, 2012, p. 32).

Drawing from the documents and reports as submitted to the Arctic Council in 2016 and 2018, it is argued that the involvement and activities of China corresponded to three categories as follows: "*Active contributions to projects, informal contributions, and participation by national or group scientists*" (Chater, 2021, pp. 2–3). Bertelsen and Su also explain how universities and research institutions played an important role for the relationship and bilateral dialogues between China and the Arctic countries (Bertelsen & Su, 2018, p. 154). All of these activities and policies might be evaluated as the efforts of China to be involved in the Arctic region. In this regard, the subsequent section will explore China's relationship with the Nordic countries in the context of SD.

## Revisiting the Complex Trajectory of Science Diplomacy in the Context of the People's Republic of China's Approach to the Nordic Countries and Vice Versa in the Arctic Region

As expected, SD can be framed on a utilitarian basis. In this regard, the following categories have been offered for the functioning of SD as an alternative to the traditional taxonomy of SD: Advancement of national needs, emphasis on cross-border interests, and fulfillment of global needs while confronting challenges. Drawing from these categories as corresponding to different levels, SD encompasses not just the promotion of international science, but also the promotion of national needs

(Gluckman et al., 2017). By the same token, the mobilization of science can be connected with general interests of the international community and particular interests of nations (Ruffini, 2017, p. 101).

According to Ruffini, the mainstream understanding of SD neglects the competitive aspects and national interests. But it is important to understand the collaborative and competitive dimensions of SD (Ruffini, 2020b). With that being said, such aspects reflect the dual structure of SD, which has also been exemplified by the territorial and globalist narratives of China in the Arctic region (see Bennett, 2015, p. 646). The objectives of SD can be formulated in terms of accessibility, promotion, and influence (Flink & Schreiterer, 2010, pp. 669–670). The implications of science and technology can also be formulated in terms of attraction, cooperation, and influence in foreign affairs and diplomacy (Ruffini, 2017, p. 33). Taken together, the complex trajectory and objectives of SD might be subject to different and dynamic prioritizations.

The national implications of science can also be emphasized at the intersection of scientists and diplomats. The incorporation of science into the industrial and technical processes, national framing of science, the embodiment of such values that might jeopardize the ethics, impartiality, and integrity of researchers, the national preferences and nationhood of scientists, the influence of history, culture, and education upon the behaviors of scientists and scientific production, and the role of national belongingness and national identity cannot be overlooked (Ruffini, 2017, pp. 30–33).

For China, the research activities, scholars and practitioners, research institutions and centers, scientific contributions and participations, research stations, expenditures, and delegations in the knowledge-based institutions might be described as efforts to promote its national image, to strengthen its alliances, and to construct its identity as relevant and responsible actor in the Arctic context. Drawing from these remarks, the relationship with the Nordic countries can also be especially important for China in relation to learning, national image, and alliance-building implications of SD. For this reason, relationships with the Nordic countries can be seen as one of the important components affecting China's SD in the Arctic region.

The Nordic region plays an important role in the various spheres of the global community, including science. It is explained that the Nordic region has contributed to global peace, security, and environmental protection through the leading role of their citizens in various

international organizations (Nord, 2021, p. 5; see also Aktan, 2025, pp. 385–391). The positive image and proven record of track have been instrumental for the Nordic countries to obtain important posts within the bodies of the UN (Thorhallsson & Bailes, 2016, p. 302). The Nordic countries are members of the Arctic Council (Declaration on the Establishment of the Arctic Council, 1996).

The Nordic countries can also be brought forward in the context of the pursuit of SD by small states. Accordingly, the utilization of SD by Finland and Norway can be exemplified by the initiation of the AEPS and the establishment of the Barents Euro-Arctic Council and Barents cooperation, and the High North policy of Norway directed to Russia. These examples can be described as the demonstration of foreign policy and security interests of small and highly developed states located in critical geostrategic positions (Bertelsen, 2020, pp. 237–238). For Iceland, international cooperation for research has also been evaluated as important in relation to being a small state (Gunnarsson & Nielsson, 2019, p. 88).[16] Such assessments concentrate on the link between SD and small entities in the international area.

The Arctic region has been important in terms of cooperation between China and the Nordic countries (Heggelund, 2019, p. 35). In this context, it is important for China to improve its relationship with the Nordic countries, described among the status quo powers in the Arctic. It is contended that small Nordic countries, along with the USA, Russia, and Canada, need to focus on the management of interests of rising powers, especially China, in the Arctic region (Bertelsen et al., 2016, pp. 444–445). The Nordic countries have been important for China in terms of Arctic knowledge, experience, scientific research, and sustainable development. Cooperation in such areas can be functional for China to comprehend regional dynamics (Jian, 2017, p. 292).

It is also explained that the Nordic countries are prioritized as a gateway by China in the Arctic region (Parello-Plesner, 2021, pp. 34–35). For the Nordic countries, cooperation with China has been important due to the following offerings: Various benefits in terms of economic and

[16] For insights concerning the importance of small state diplomacy, the following chapter is recommended: Thorhallsson, B., & Bailes, A. J. K. (2016). Small State Diplomacy. In C. M. Constantinou, P. Kerr, & P. Sharp (Eds.), *The Sage Handbook of Diplomacy* (pp. 294–307). Sage.

social development; the introduction of a broader range of options; reinforcement of their strategic leverage, and the elevation of the position of small Nordic countries. China's role in the Arctic region also provides benefits regarding the delivery of capital, technology and infrastructure into the Nordic countries (Peiqing & Huiwen, 2023). Hence, there have been important underlying reasons for the bilateral and regional relationship between China and the Nordic countries.

In this process, scientific research and activities have also been quite relevant. The collaboration in the China-Nordic Research Center (CNARC) can be evaluated as the demonstration of the attributed importance of China to the Nordic countries in the Arctic region (Peng & Wegge, 2015, p. 242). CNARC has been elaborated for cooperation and scientific exchange between the Nordic and Chinese partners and units (Hong, 2020, p. 26). CNARC has also been important in terms of the potential for SD between the status quo and a rising power (Bertelsen, 2019, p. 263). Further to this, CNARC can be considered as an example of track two diplomacy with its ability directed to the conversion of scientific resources into soft power (Bertelsen et al., 2016, p. 453). From a Nordic perspective, CNARC has contributed to the understanding of China about Nordic Arctic issues (Nielsson, 2019, p. 63).

From a conceptual perspective, the Arctic SD can also be explained in terms of its supportive role for scientific cooperation amidst conflicts, its integrative role, especially for the Asian powers in Arctic affairs, and its contributive role for Sino-Norwegian relations. In this regard, it is maintained that science can be used to provide non-conflictual and non-provocative integration in Arctic affairs by both the Arctic and Asian states (Goodsite et al., 2016, pp. 648–649). In line with this perspective, the framework of SD also entails the integration of China and the promotion of relationships with the Nordic countries in the Arctic.

The cooperation between the Nordic countries and China has also been explained in relation to the geographical location of the Nordic region, which consists of small states and self-governing territories, and in relation to the construction of a blue economy passage reaching Europe via the Arctic Ocean. In this regard, it is contended that the uniqueness of the Arctic region and the accomplishments of the Nordic countries in the field of scientific research make scientific and technological cooperation as essential part of the joint construction of a blue economy passage. According to Yingqin, China and the Nordic countries have similar approaches in terms of maritime strategies and cooperation. As a

result of this, it is revealed there is a high level of consensus for the development of marine economy, sustainability of marine use, and promotion of cooperation in the realm of global ocean governance. Such compatibility has been considered as important for further cooperation in relation to blue economy passage (Yingqin, 2019, pp. 30–31).[17]

In China's Arctic policy, facilitation of connectivity, economic and social sustainability, and the development of the Arctic shipping routes have also been emphasized through the joint construction of a Polar Silk Road (The State Council Information Office of the People's Republic of China, 2018). Accordingly, the collaborative schemes parallel to the Belt and Road Initiative have also been emphasized with regard to the combination between the capital and equipment of China and the expertise and planning capabilities of the Nordic countries in the Arctic region (The Institute for Security & Development Policy, 2016, p. 30). Hence, scientific activities and cooperation might also be important for projects related to infrastructural connectivity.

It is contended that the Arctic region, as the illustration of the promotion of mutual trust through knowledge and research resources sharing and transnational academic cooperation, can be relevant for the successfulness of the Belt and Road Initiative as well. Arguably, scientific cooperation, as a form of soft power, is undervalued. With that being said, knowledge production is also hampered in China. The conditions listed as secrecy, compartmentalization, and top-down organization restrict the development of expertise-based policymaking in the context of the Belt and Road Initiative. Therefore, the case of the Arctic can be important for the advancement of the Belt and Road Initiative (Mayer, 2018, pp. 22–23; see also, Bertelsen & Su, 2018, pp. 155–157).[18]

The Nordic region has also been emphasized in the nexus of the competition between the USA and China. In this context, particular

[17] For the envisioning of blue economic passage as leading up to Europe through the Arctic Ocean, see: Xinhua. (2017, June, 20). *Full Text: Vision for Maritime Cooperation Under the Belt and Road Initiative*. Mengjie (Ed.). http://www.xinhuanet.com/english/2017-06/20/c_136380414.htm. Accessed December 15, 2022.

[18] For the differences between the Arctic and the Belt and Road Initiative, see: Bertelsen, R. G., & Su, P. (2018). Knowledge-Based Institutions in Sino-Arctic Engagement: Lessons for the Belt and Road Initiative. In M. Mayer (Ed.), *Rethinking the Silk Road: China's Belt and Road Initiative and Emerging Eurasian Relations* (p. 156). Palgrave Macmillan.

cooperation in the international industry and supply chains and the fulfillment of trustworthy and credible image, which has been rooted in the Chinese Confucian culture, have been demonstrated for China's relationship and practical cooperation with the Nordic countries and for its competition with the USA (Peiqing & Huiwen, 2023). Given these significances, China's SD and relations with the Nordic countries can be considered as especially important concerning maritime connectivity, transportation and shipping, along with the particular areas of cooperation and the implementation of Confucian values. With that being said, the approach of the USA, as a security provider for the Nordic countries, to China and issues related to human rights under the regime of Xi Jinping, coupled with the political systems-oriented differences and political distrust, have affected the perception of the Nordic countries towards China adversely (Forsby, 2022).

However, the Nordic countries can be important for China in improving its relationship with other Arctic countries and the Arctic Council. For example, Iceland's role in supplying the Arctic Circle Assembly, as demonstrating the functioning of SD, has been important for the convergence of various actors, including China (Bertelsen & Su, 2018, p. 155). The Nordic support has also been important for China in order to expand its capacity and expertise in the field of mercury research, which might also be relevant with the Arctic (Heggelund, 2019, p. 37). A glimpse of the bilateral relationships will also reveal the importance of the SD dimension pertaining to the interactions between China and the Nordic countries in the Arctic.

In terms of the bilateral relationships, Norway's approval regarding the establishment of the inaugural Arctic research station on Svalbard has been a triumph for China. Albeit this positive history, Norway was subject to intense criticisms by China due to the decision of Norway's Nobel Committee in 2010 (Doshi et al., 2021, p. 20). But in the Statement of the Government of the People's Republic of China and the Government of the Kingdom of Norway on Normalization of Bilateral Relations, there has been a resumption of normal relationship between the two sides. In this statement, trade, culture, science, education, and polar issues have been demonstrated as mutually beneficial and win-win cooperation fields (Norwegian Government Security & Service Organisation, 2016).

Leading on from this, the establishment of the Yellow River Research Station on Svalbard has been evaluated as one of the milestones that empowered China in the context of Arctic governance. In a broader

context, the expansion of the engagement of China has encompassed various areas in terms of geostrategy, commerce, science and diplomacy (Dams et al., 2020, p. 9). Scientific activities in Svalbard can be evaluated as a sense of national identity and belonging. From a constructive perspective, it is contended that scientific activities in Svalbard have strengthened the political presence of Norway in the Arctic region (Roberts & Paglia, 2016). Given the national implications of Svalbard, the importance of the establishment of the Yellow River Research Station can be further captured in the nexus of SD and China's relationship with Norway.[19]

In *Norway's Arctic Policy*, increasing maritime traffic has been one of the crucial areas regarding the importance of the Arctic region for Norway. It is explained that "*80% of maritime traffic in the Arctic passes through Norwegian waters*" (Norwegian Ministry of Foreign Affairs, 2014, p. 6). Examples associated with the importance of the Arctic region also include the seafood industry, tourism, mineral resources, the impacts of climate change, scientific research, the potential for oil and gas, cross-border traffic, monitoring by satellites, vulnerable environment, cooperation as exemplified by the Arctic Council, and human population (ibid., 2014, pp. 6–7). As connected with the research dimension of SD, Norway has a pioneering role in scientific publications related to the Arctic region. In this report, it is explained that "*Norway is ranked no. 3 in the world, after the US and Canada, in terms of the number of scientific publications in English on the Arctic*" (ibid., 2014, p. 7).

The national importance of the Arctic region and responsibilities of the Arctic states as maritime nations have also been reaffirmed in *The Norwegian Government's Arctic Policy* (Norwegian Ministry of Foreign Affairs, 2021). In this white paper, the support of Norway for cooperation with China has been rooted in its compatibility with international law and the structures of cooperation at the present. The cooperation with China entails various areas, including climate, environment, and science. It is also explained that "*there is a long tradition of dialogue between Norwegian and Chinese polar research groups*" (ibid., 2021, p. 22). Norway also supports the contributions of China in the Working Groups of the Council, especially in the fields of climate and environment (ibid., 2021, p. 22).

[19] For science diplomacy-oriented implications of Svalbard in securing and stringing the sovereignty of Norway, see: Caymaz, E., Büyüksağnak, Y. B., & Özsoy, B. (2022). Arctic Science Diplomacy of Norway: A Case Study of Svalbard. *Polar Science, 34*, 1–7.

As for the relationship between China and Finland, the emphasis has been given to economic and technological cooperation in the Arctic context. The fields oriented at intensifying economic and technological cooperation include, but are not limited to, marine industry, research, environmental protection technology, shipping, and maritime safety in the Arctic region (Joint Declaration between the People's Republic of China and the Republic of Finland on Establishing and Promoting the Future-oriented New-type Cooperative Partnership, 2017).

With that being said, China has been classified as a non-Arctic country with economic and strategic interests directed to the Arctic region. Accordingly, the particular interests of China have been classified in terms of natural resources, infrastructure, and transportation. It is contended that the efforts of China oriented at advancing its role may produce conflicts of interest and tensions. In *Finland's Strategy for Arctic Policy*, an integrated approach towards Arctic security can be identifiable. As a result of this, Arctic security cannot be isolated from the security of the Baltic Sea and the other areas of Europe (The Finnish Government, 2021, p. 18). The Russian invasion of Ukraine has also affected the image of China in relation to other Arctic countries. Regarding the relationship between Finland and China, it is explained that Finland reconsiders its positive pragmatist policy in its current form. Such a process can further obstruct projects and visions, which have already been subject to delays or failures (Puranen & Kopra, 2022).

In terms of the relationship between China and Iceland, a memorandum regarding research cooperation and exchange on Arctic affairs and issues was signed between the two governments. In this memorandum, mechanisms and fields of cooperation such as adaptation to climate change and sustainable development have been identified. In addition, the establishment of CNARC has been supported by the Icelandic Centre for Research (RANNIS) (China-Iceland Joint Arctic Observatory, 2012). The cooperation between China and Iceland can be evaluated as an example to deepen the cooperation between China and other Arctic countries (Weipeng & Xiaofeng, 2019, p. 151). In addition to scientific research cooperation, it is also explained that the investments in Iceland, coupled with the investments in Russia and Greenland, affected the presence of China in the Arctic region (Government Offices of Sweden, 2019, pp. 9–10).

The opportunities for collaboration between China and the Nordic countries can be explained in terms of the Arctic infrastructure development and the Arctic SD. In this regard, CNARC has been evaluated as an example of Arctic SD (The Institute for Security & Development Policy, 2016, p. 30). The main research themes of CNARC entail "*(1) Arctic climate change and its impacts, (2) Arctic resources, shipping and economic cooperation, and (3) Arctic policy-making and legislation*" (China-Nordic Arctic Research Center, n.d.). As reflecting another example for scientific cooperation, the inauguration and operation of the China-Iceland Arctic Science Observatory, as a joint project by Chinese and Icelandic research institute and center, can also be evaluated as important in contributing to scientific understanding of Arctic phenomena and polar research of China (Xinhua, 2018). In addition, the China-Iceland Arctic Science Observatory has become another base of China for its Arctic research (Weipeng & Xiaofeng, 2019, p. 151).

In *Government Communication*, which outlines the relations and approaches of Sweden to the increasing influence of China, the interests of China directed to the Arctic region have been explained by referencing the extraction of resources, climate and environment, infrastructure, and research cooperation. Combined with diverse areas of interest, China aims to deepen its influence in the Arctic region. In this regard, the emphasis is also given to the Northern Sea Route in terms of China's ambition oriented at becoming a major maritime power, at shortening transport times between Asia and Europe, and at reducing its dependence on the Strait of Malacca (Government Offices of Sweden, 2019, p. 10). Further to this, there has also been an emphasis on the military cooperation between China and Russia as follows: "*Deepening military cooperation between China and Russia requires increased attention, especially in Sweden's neighbourhood, including the Arctic*" (ibid., 2019, p. 15).[20]

[20] For an assessment of the objectives and priorities of Russia in the Arctic, see: Lipunov, N., & Devyatkin, P. (2023, May 30). *The Arctic in the 2023 Russian Foreign Policy Concept*. The Arctic Institute: Center for Circumpolar Security Studies. https://www.thearcticinstitute.org/arctic-2023-russian-foreign-policy-concept/. Accessed May 12, 2023; For a comparison of the basic principles of Russia in its policies as adopted in 2008 and 2020, see also: Klimenko, E. (2020, April 6). *Russia's New Arctic Policy Document Signals Continuity Rather than Change*. Stockholm International Peace Research Institute (SIPRI). https://www.sipri.org/commentary/essay/2020/russias-new-arctic-policy-document-signals-continuity-rather-change. Accessed May 12, 2023.

Following the tensions between Russia and the seven Arctic states, China has been evaluated as more suitable for the Arctic cooperation plans and strategy of Russia. In this context, opportunities associated to economy, energy security, and political influence-oriented interests can be beneficial for China. However, there are also challenges concerning the reflections of the Arctic split, vigilance, and mistrust, which can be directed to China in case of its deepening cooperation with Russia. For this reason, it is contended that China needs to pursue balance in its relations with other Arctic countries with no disregard for the promotion of collaboration and communication with Russia. Such considerations require to obtain Russia's trust, to have common interests with Russia, to adhere to the international norms, and to protect the environment. In this process, China also needs to ensure that its relationship with other Arctic countries remains as unharmed (Chen, 2023).

In *Sweden's Strategy for the Arctic Region*, the emphasis is given to the central role of China in terms of the climate and global environmental cooperation. Accordingly, these areas have been important in the Arctic region. In this strategy, it is contended that China acts selectively, especially in issues subject to its core interests, regardless of its emphasis on support for international law. Despite limited military actions in the Arctic region, the continuity between China's approach to the Arctic region and other parts of the globe in terms of its global ambitions and promotion of its presence, the gradual establishment of naval forces, and military cooperation with Russia as potentially directed to the Arctic military cooperation have also been demonstrated at the nexus of the opportunities and challenges resulting from the increasing influence of China (Government Offices of Sweden, 2020, p. 23).

China's relationship with Denmark, on the other hand, has been explained in terms of comprehensive strategic partnership compared to other Nordic countries. It is argued that there are various areas, including Arctic governance as capable of further developing bilateral cooperation. This partnership has been evaluated as "*a model for friendly cooperation between China and the Nordic countries*" (Weipeng & Xiaofeng, 2019, pp. 149–150). This partnership has also been described as an example of the pragmatist policy of Denmark as well (The Institute for Security & Development Policy, 2016, p. 10). More to the point, Denmark has been noted as one of the prominent countries in shipbuilding and shipping. Therefore, the development of Arctic transport corridors has been quite important for Denmark (Erokhin et al., 2018, p. 10).

In *Denmark, Greenland and the Faroe Islands: Kingdom of Denmark Strategy for the Arctic, 2011–2020*, the construction and equipment of ships and cooperation on maritime safety have been emphasized as critical in the Arctic region. With the increased level of navigation, maritime activity, and traffic, it is critical to focus on shipping and maritime safety with the incorporation of preventive measures. In this process, the minimization of marine accidents and mitigation of environmental impacts also need to be taken into consideration (Government of Denmark, Government of the Faroes, and Government of Greenland, 2011, pp. 16–17).

All of these aspects and considerations justify the importance of maritime-related dimensions of SD, which can be important for China's engagement and its relationship with the Nordic countries in the Arctic region. However, there have also been concerns regarding the capabilities and interest of China, including China's interest in Greenland that has been subject to concern by Denmark (Office of the United States Secretary of Defense, 2019, p. 114). The interest to Greenland can be explained in terms of its natural resources, its position, and the Arctic shipping routes (Seaman et al., 2017, pp. 50–51).

According to Brady, the polar activities and policies of China need to be examined in relation to its dynamic maritime strategy (Brady, 2017, p. 13). As reflecting the link between maritime strategy and Arctic policy, the construction of a Silk Road on Ice has been stated in Chapter 33 of China's 14th Five-Year Plan (2021–2025). In this plan, the importance of cooperation associated with the Arctic region has been exemplified by the ambition of China to construct a Silk Road on Ice. China has committed to follow the mechanisms and rules for global marine governance. Combined with the promotion of justice and equity directed to international maritime governance and the development of a maritime community as sharing a future, China has aimed to increase cooperation in various fields, including marine environment protection and scientific research. Of critical importance is that the security of maritime rights and interests has also been affirmed with no disregard for the quick and orderly formulation of the basic maritime law (National Development & Reform Commission of the People's Republic of China, 2023).

In this regard, China's maritime strategy can be considered as highly relevant for its Arctic policy. Further to this, the importance of maritime strategy can also account for its SD and relationship with the Nordic

countries. The Arctic policies of the Nordic countries have exhibited varieties. Hence, there is not an overarching "Nordic model" as prevailing in the Arctic endeavors of the Nordic countries (Nord, 2021, p. 8). Vasilii Erokhin, Gao Tianming and Zhang Xiuhua (Erokhin et al., 2018, p. 9) formulate the priority areas and expertise of the Nordic countries regarding the cooperation with China (Table 1).

Building on these points, SD might be seen as overarching and reflective framework regarding various areas as capable of affecting relationships between China and the Nordic countries. In a joint press release, titled as "Strengthening Sino-Nordic Cooperation", resulting from the meeting between the Ministry of Foreign Affairs of China and the Nordic Council of Ministers on May 25, 2017, the following areas have also been emphasized for the promotion of cooperation and development of new initiatives: Entrepreneurship and business in terms of green growth, maritime economy and bio-economy; sustainable development associated to various aspects about energy security, including reduction of emissions and clean energy, and to the establishment of green and eco-smart cities; science, research and education with regard to the Sino-Nordic Arctic Cooperation Symposium; people-to-people exchanges in various fields, and welfare policies (The Nordic Council & the Nordic Council of Ministers, 2017). These areas, which can be considered as relevant to the Arctic domain, also reveal the importance of scientific activities and exchanges in the realm of foreign policy.

This press release can be viewed as one of the examples that demonstrates the efforts for multilateral cooperation between China and the Nordic countries. Various forms of multilateral cooperation include the Sino-Nordic Relations Forum, the Sino-Nordic Young Champions Forum, the Nordic-China Innovation Cooperation Summit, the Sino-Nordic Arctic Research Center, the Sino-Nordic Think Tank Roundtable, the Sino-Nordic National Science Strategy Roundtable, the Nordic Environment Technology Cooperation Summit Forum, and the Sino-Nordic Trade and Economic Cooperation Forum. The relationship also extends to the multilateral cooperation agreements. Further to this, China has also pursued policies associated to communication and establishment of consensus with the Nordic countries by participating in Arctic-related activities, including the Arctic Circle and the Arctic Frontiers Conference (Weipeng & Xiaofeng, 2019, pp. 153–154). All of these efforts

**Table 1** Priority areas and expertise of the Nordic countries in the China-Nordic cooperation (Erokhin et al., 2018, p. 9)

| *Country* | *Priority Areas* | *Expertise* |
|---|---|---|
| Denmark | Self-sustaining growth and development | Exploitation of mineral resources |
| | | Exploitation of renewable energy potential |
| | | Knowledge-based growth and development |
| | Development with respect to climate, environment, and nature | Vigorous and ambitious knowledge building on climate change in the Arctic and its consequences in order to foster global and local adaptation to far-reaching change |
| | | Environment and nature management based on the best possible scientific knowledge and standards for protection |
| Finland | Construction and infrastructure | Offshore and maritime industries |
| | | Shipbuilding and shipping |
| | | Generation and distribution of electricity |
| | | Energy saving and energy efficiency |
| | Knowledge | Internationally-recognized expert in the Arctic |
| | | Knowledge-based service provider |
| | | Services and new business models for the Arctic |
| Iceland | Information society, human resources, and new opportunities | Access to a cost-effective telecommunications system with sufficient carrying capacity for the residents of the Arctic region |
| | | A hub for Nordic and Chinese institutions, companies, and research facilities |
| | Trade | Free Trade Agreements |
| | Energy | Development of renewable energy |
| Norway | Industry | Exploration and exploitation of oil and gas offshore fields |
| | | Fishing |
| | Business development | Economically, socially and environmentally sustainable business development |

(continued)

**Table 1** (continued)

| *Country* | *Priority Areas* | *Expertise* |
|---|---|---|
| | | Value creation based on the region's resources |
| | Infrastructure | Reliable, efficient and environmentally sound transport system |
| | | Secure and efficient power supply |
| | | Broad access to good digital infrastructure |
| | | Reduction of greenhouse gas emissions and local pollution, reduction of negative environmental impacts of infrastructure development |
| Sweden | Science and technology | A supporting country by providing services, scientific research, and public information |
| | | Human development |
| | | Research in the sphere of climate change and its effects on transport routes, industries, and people |
| | Economy | Promotion of free trade and industrial development in the Arctic |

and forms of cooperation also affirm the role of SD concerning bilateral/regional relationships between China and the Nordic countries in the Arctic region.

## Conclusion and Future Research

This study evaluates China's SD and its relationship with the Nordic countries in terms of national image promotion and renovation, influence strengthening, and alliance-building mechanisms. But still, this argument cannot exclude or invalidate the collaborative and normative implications of SD, as exemplified by Arctic science cooperation and legal/institutional frameworks associated with Arctic governance. On the contrary, this argument emphasizes national, strategic, and pragmatic objectives of SD as a departure point connected with the areas of cooperation, which can reinforce the normative underpinnings of SD. Combined with the dimensions and motivations directed to the Arctic region, such areas corresponding

to high level of compatibility between China and the Nordic countries (see Table 2) can be enriching for the term SD and bilateral/multilateral relations as well.

China's national interests and identity promotion-oriented approach through SD require a more balanced perspective regarding different objectives of SD with no disregard for the promotion of normative underpinnings. National, strategic, and pragmatic objectives as taken by China also indicate how the advancement of SD can actually be paradoxical in terms of the tension between national interests and scientific advancements. Nevertheless, the acceptance of the dilemma of SD does not mean that there can not be opportunities as capable of reinforcing the normative implications of SD and of contributing to the Arctic cooperation. The case of China and its relationship with the Nordic countries reveal why SD needs to be analyzed in connection with national objectives, interests, specific contexts, and specifying approaches. More nuanced and areas of cooperation-oriented assessments might be required in engaging with bilateral/multilateral relationships through the prism of SD.

The challenges and uncertainties regarding Arctic cooperation and Arctic governance can be observed through the impacts of the Russian invasion of Ukraine; the sub-hierarchies associated with the Arctic framework; the consideration of Russia for its withdrawal from the UNCLOS; and the impacts of Finland and Sweden's NATO accession. Such dynamics and developments also justify to transcend beyond the dualistic assessments and mindsets and to adopt holistic approaches. As a result of this, engaging with the underpinnings of SD should be conducive to develop holistic perspectives directed to the Arctic region. In this process, the normative implications of the UNCLOS need to be reinforced in relation to the well-being of the Arctic marine environment.

Climate, environment, and maritime policies can be considered as critical for China's SD and its relationship with the Nordic countries. With that being said, there is a need for further cooperation regarding the protection of the Arctic marine environment in connection with the increasing attention upon the Arctic region, observable challenges and uncertainties, the taxonomy of SD and the normative implications of the UNCLOS. This kind of an integrative perspective might be effective to broaden theoretical and practical implications of SD in the nexus of Arctic governance and marine environment protection, while capable of affecting national identity promotion and renovation of China in the Arctic region.

**Table 2** The dimensions, motivations and areas of cooperation between China and the Nordic Countries (Compiled and assessed by the author)[21]

| *Dimensions and Motivations in the Arctic Context* | *The Interests of the Nordic Countries* | *The Interests of the People's Republic of China* | *Areas of Cooperation Possibly with High Level of Consensus at the Present* |
|---|---|---|---|
| Climate and environment | + (Positive) | + | Consensus |
| Construction of a Silk Road on Ice | − (Negative) | + | Non-consensus in connection with delays and failures of projects |
| Contribution to the understanding of the Arctic and polar issues | + | + | Consensus |
| Economic, technological, infrastructural and transportational considerations | + | + | Consensus, albeit with challenges and obstacles |
| Further improvement of relationship with the Arctic countries and the Arctic Council | + | + | Consensus |
| Involvement in the Arctic regional governance | + | + | Non-consensus due to China's reinterpretation of international law |
| Maritime safety | + | + | Consensus |
| Natural resources | + | + | Non-consensus with regard to skepticism towards China |
| Non-conflictual integration of China | + | + | Consensus |
| Ocean governance | + | + | Consensus |
| Scientific exchange, knowledge and research | + | + | Consensus |
| Shipping | + | + | Consensus, albeit with challenges |
| Soft power | + | + | Consensus |

(continued)

[21] The information in this table has been compiled and assessed from the references as utilized by the author in this study.

**Table 2** (continued)

| *Dimensions and Motivations in the Arctic Context* | *The Interests of the Nordic Countries* | *The Interests of the People's Republic of China* | *Areas of Cooperation Possibly with High Level of Consensus at the Present* |
|---|---|---|---|
| Sustainable development | + | + | Consensus |
| The Arctic marine environment protection | + | + | Consensus |
| The management of China's interests and strategic objectives | + | – | Non-consensus |
| The promotion of its role as a responsible actor within the Arctic domain | + | + | Non-consensus with regard to concerns towards China |
| The promotion of national status and reputation | + | + | Consensus, albeit with challenges |
| The promotion of interests and strategic objectives | + | + | Non-consensus |
| The promotion of science diplomacy | + | + | Consensus |
| The promotion of small state diplomacy | + | – | Consensus |
| The promotion of track two diplomacy | + | + | Consensus |
| Understanding about the Nordic Arctic issues | + | + | Consensus |

Providing prospective evaluations towards the Arctic region can be challenging due to the conflicts, tensions, and controversial issues that disseminate throughout the world and Arctic affairs. In this context, this study recommends that the protection of the Arctic marine environment needs to be prioritized by the relationship between China and Nordic countries as bearing responsibilities in the context of Arctic affairs. The Arctic marine environment protection, as one of the prominent areas of cooperation, needs to be approached through responsive perspectives and

should not be neglected at the level of bilateral and multilateral relationships between China and the Nordic countries. Such considerations might be integral for further research that focuses on China's policies and relationship with the Nordic countries in the Arctic context.

SD plays a catalyzing role for China's presence and its relationship with the Nordic countries in the Arctic region. Given the importance of the climate, environment, and maritime dimensions resulting from SD of China and its areas of cooperation with the Nordic countries, Arctic marine environment protection might be evaluated as one of the crucial overarching areas that can lead to further development of relations while reinforcing normative underpinnings of SD amidst various tensions. Drawing from the information in Table 2, some of the selected areas can be emphasized for normative functioning of SD and cooperation. In this context, Arctic marine environment protection can play a facilitative role in relation to the normative implications of SD and to the overlapping areas of cooperation resulting from the priorities of Nordic countries and approaches of China.

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# Toward the Governance of Sustainable Arctic Science Cooperation

*Hiroyuki Enomoto*

## Introduction

What has remained in Arctic science, what has stopped due to geopolitical tension, what is being improved, and how do we think about future systems?

Global warming, environmental changes, and their impact on society and culture in the Arctic are rapid, and these impacts are not limited to the Arctic region but have become global issues. These aspects are part of the "Global action required for the Arctic" from the scientific perspective. In this context, the size of the influence must be determined, as well as the roles of the players and supporters involved.

The role of Arctic science in the face of the complex geopolitical situation in the Arctic from February 2022 onward is complex and challenging. Experts have also discussed international politics and the policies of each country's government. Although few scholars in the natural sciences are involved in these discussions, they continue to conduct research even in the face of obstacles. Field scientists await the reinstitution of cooperation in research activities and researcher and student

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exchanges. The scope of the problem goes beyond national science administrations and requires the influence of international organizations and information sharing through economic activity, faced by scientists at observation sites, private foundations, and indigenous organizations. This report summarizes the problems.

## Arctic Environmental Change

The Arctic is most commonly defined as the area north of the Arctic Circle. However, an even larger area is of interest when considering the scope of the impact. The range of natural and scientific influences transcends national borders and is connected to the atmosphere and oceans. The range of ecosystems is not limited by national borders. International collaboration is required, including cross-border observation and information sharing. More than two-thirds of the Arctic comprises the Arctic Ocean. With an area of approximately 14 million square kilometers, it is the smallest ocean in the world; however, it plays a vital role as an early indicator of global warming. Issues, such as the influence of environmental changes in the Arctic on society, response of local societies to such changes, and the involvement of the rest of the world, are global. The Arctic region borders the Eurasian continent, surrounding the Arctic Ocean, North America, Greenland, and other territories. It also has oceanic connections with the Atlantic and Pacific Oceans. It is also of industrial value, such as in maritime transport, connecting Asia with Europe and North America. Attention to the Arctic region has increased since 2000s owing to the emerging effects of global warming, as indicated by the Intergovernmental Panel on Climate Change (IPCC) 6th Assessment Report (AR6) (IPCC, 2021). To understand the current situation and make future predictions of the Arctic region, research in the entire Arctic must continue.

## Documentation of the Arctic Environmental Changes by Scientists

### *Beyond Eras and Regions*

The temperature in the Arctic has risen four times faster than the global average (Rantanen et al., 2022). The decrease in sea ice in the Arctic Ocean is a visible sign of global warming. Sea ice in the Arctic Ocean has

rapidly decreased, and by 2050, sea ice is predicted to practically disappear during the summer. The effects of global warming have extended to many areas of the natural environment (AMAP, 2021).

The long-term record of rapid warming in the Arctic dates to the early 1900s. Temperature records from drifting stations on sea ice in the Arctic Ocean north of 70° N served as primary data for this evidence (Frolov et al., 2005). The record of temperature rise in the Arctic that we focused on here was based on observations maintained throughout the two world wars and the Cold War. Even in an era when observational information could not be exchanged, observations were obtained in various places and records were preserved. Subsequently, upon becoming public information, these observations became the shared assets of humanity.

The analysis of these records has indicated that the rapid warming of the Arctic has occurred since the twentieth century. These records were used to investigate the causes, indicate the importance of monitoring, and conduct predictions for the future. This is the legacy of meteorological observation networks and those who conduct research in each country. The data were obtained from a combination of observational data from "North Pole" stations drifting in the Arctic Ocean, from observatories of Scandinavia, high-latitude areas of North America, and Siberia. Observations continued during the wars and Cold War of the twentieth century, and through integration, Arctic data were established and could help capture global changes. This has played a significant role in global warming research.

### *Collaborations Over Recent Decades*

There are many international activities of collaboration over the previous decades. During the International Polar Year (IPY) of 2007/2008, in the large Arctic research project "Developing Arctic Modeling and Observing Capabilities for Long-term Environmental Studies (DAMOCLES)," drift observations were conducted in the Arctic Ocean by the schooner yacht "Tara." Passengers from several countries participated in this research cruise, including Russian scientist.

The recent Synoptic Arctic Survey (SAS) was an observation campaign in 2020–2022 that mobilized marine research vessels from various countries to cover the Arctic region (Paasche et al., 2019). At this time, Russian icebreakers supported member counties observation in addition to Russia's national observation activities.

To the MOSAiC project for full-year long from Sept. 2019 to Oct. 2020 (www.mosaic-expedition.org), a Russian icebreaker was accompanied by the German icebreaker "Polarstern," and conducted observation activities for transportation and personnel changes—a platform for training programs for young people.

Last three decades were period of establishing academic community, such as cooperation over 30 years since the 1990s and many other dialogues, conversations, and forums (Rachold, 2022). There is the establishment of the Arctic Council (AC) in 1996, which has directions from the Arctic Environmental Protection Strategy (AEPS). To the environmental protection and long-term monitoring, accurate knowledge of science and cooperation is essential to facilitate diplomacy of environment and scientific cooperation. International Arctic Science Committee (IASC) was established in 1990, including non-Arctic countries. The science has been expanded from the regional to global connections.

## From the Arctic to Global

### *International Response Including non-Arctic Countries*

Information on Arctic change is essential for monitoring global warming. The Arctic was the first region to show signs of warming and is currently undergoing significant changes. The temperature rise in the Arctic has far-reaching effects that extend beyond the Arctic region. There is a growing understanding of the impacts extending from the Arctic to the rest of the world. Simultaneously, global cooperation is required to deal with this dire situation (ASM3, 2021). Only few observational data exist in the Arctic Ocean and calls for joint observations have been made in the past (Jung et al., 2016). The ARGO system, an automatic ocean observation system deployed worldwide, is yet to be deployed in the Arctic Ocean, which is covered with sea ice. Observing the Arctic has always been challenging; however, observations may become even rarer under difficult situations.

Recently, aircrafts have begun flying over the central Arctic Ocean and North Pole. Observations in the Central Arctic Ocean should be strengthened further. The SAS sought a time-based cross-section of the Arctic Ocean, and MOSAiC observed the Arctic Ocean year-round.

### *Arctic Ocean Connecting the Atlantic and Pacific Oceans*

The research cooperation system of the European Union (EU) has progressed toward the Atlantic side (e.g.; Horizon 2020, Horizon Europe, European Polar Board (EPB), EU-PolarNet, Eurofleets, Arctic Research Icebreaker Consortium (ARICE)). On the Pacific side, the Pacific Arctic Group (PAG) activities related to observations in the Pacific sector of the Arctic Ocean. And scientific dialogue between Japan, China, and South Korea are ongoing. By advancing observations from Asia to the Pacific side of the Arctic Ocean, the observations of the Arctic, Atlantic, and Pacific Oceans can be integrated.

A system in Asia that enables tie-ups with European observation communities, where joint Arctic observation operations are actively conducted, would be effective. The Asian Forum for Polar Science (AFoPS) is an Asian polar forum. Opportunities to exchange opinions across various channels are essential.

The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (Central Arctic Ocean Fisheries Agreement (CAOFA)) was concluded in 2018 and has been effective since 2021. This includes five countries in the Arctic, including Russia, and five countries outside the Arctic. The inclusion of Asia is also of strong interest. The Arctic Ocean will be connected from the Atlantic and Pacific Oceans, namely Europe and Asia. Siberian coast has an essential potential for connecting the way of both areas.

## The Current State of Arctic Science; Research, Operation, Monitoring, and Education

### *Scientific Categories*

What is the current situation of Arctic science activities, including those with Russia? Have all collaborative activities from Russia toward international science ceased?

Since February 2022, there has been an impasse in Arctic scientific cooperation requiring Russian involvement. Arctic science requires research-based aid from each country, as well as the exchange of scientists with Russia, conducting conferences, personnel exchange, joint observations, and information exchange. Many different scientific fields will play a role in such activities; thus, *Research, Operations, Monitoring*, and *Education* must be considered (Enomoto, 2022).

### *Research*

First, *Research* opens the horizon of science in environmental change as well as development of methodologies and establishing knowledge and scientist exchange. The standardized research will be continued by *Operation* or *Monitoring*. A major investment from the national budget was made for *Research*, enabling its advancement. When the outlook of *Research* becomes uncertain, people become reluctant to invest in activities related to the immediate short term. However, the importance of science and maintaining its activities must be understood from a long-term perspective. Nature Editorial's commentaries, July 21, 2022 issue states;

- Damage to research on climate change (Witze, 2022),
- The short-term decline in research projects but the need for long-term maintenance (Gained et al., 2022).
- The importance of keeping researcher's exchange channels open (Nature Editorial, 2022).

These conditions are still undergone, and researchers and research projects are trying to find resolutions (IUGG, 2023). Changing climate causes unpredicted new phenomena such as eruption from permafrost and methane release in Siberia, forest fire weather and impact to terrestrial and atmospheric then societal conditions. The research is strongly needed to find new conditions and natural systems, which will cascade impact to wider issues.

### *Operation*

The second aspect is *Operational* activities, which include observations and service activities related to infrastructure. This includes weather forecasts and disaster prevention information and helps maintain an information infrastructure that supports well-being and peace of mind in daily life. It protects people's lives and ensures the safety of society. The recorded information also serves as a record of the climate. As weather phenomena and environmental changes occur across national borders, each country must invest in stable budgets, equipment, human resources, and information transfer systems, which must be maintained over the long term.

*Maintaining Regional Climate Center*

Mechanisms have been established to implement *Operational* activities through international agreements, such as the World Meteorological Organization (WMO), as they are legally bound. Regional to the Arctic, the Arctic Regional Climate Centre (ARCC) network is based on the WMO's ARCC concept and comprises three sub-regional geographical nodes:

(i) the North American node,
(ii) Northern Europe and Greenland, and
(iii) Eurasian node.

Active contributions from all Arctic Council member states are made through the established structure-node and Eurasian node. The ARCC is currently in the demonstration phase. Russia has a vast responsibility for the Eurasian sector. It covers a wide longitude range and the central Arctic Ocean. Research and predictions covering this topic are made available not only to the countries responsible for publication but also to participating scholars worldwide (https://arctic-rcc.org/). The required and recommended features of the WMO's RCC and associated designation criteria are part of the Technical Regulations of WMO. These include operational activities for long-range forecasting (LRF) and climate monitoring, operational data services that support LRF and climate monitoring, and training in the use of operational RCC products and services.

ARCC's reports are publicly available and are a valuable resource that continues to operate in the Arctic even in difficult times. There are on-site efforts in each region, and there are cooperation activities that connect information internationally.

### *Monitoring*

Maintaining *Monitoring* activities in the pan-Arctic is urgent and a strong concern. Proposals for new monitoring items and the development of methods are closely related to *Research*; however, once established,

methods are maintained under the leadership and cooperation of monitoring. This was supported by cooperation from each country's environmental administrations. Continuing this work will be essential to address urgent changes in the Arctic environment.

The Arctic Council (AC) was established to address this concern and provide common benefits for all Arctic countries. The Arctic Council has an important reason and mission to uphold. Environmental changes have rapidly occurred in the Arctic. Therefore, continuous wide-area monitoring is necessary. In Siberia, there are concerns regarding the deterioration of permafrost and the release of methane gas, and many scholars from outside Russia have visited Siberia to conduct joint international research. The research group is International Science Initiative in the Russian Arctic (ISIRA) which is a Russian and international cooperative initiative to assist Arctic science and sustainable development in the Russian Arctic (Pavlenko et al., 2021).

Additionally, a commercial fishing agreement (CAOFA) exists in the central Arctic Ocean. Sustaining research is an urgent and significant issue. More ships have begun to pass through the Arctic Ocean, where sea ice is decreasing. Moreover, the number of icebreakers that can be used to survey an area has also increased. Such discussions are expected to configure and operate an international network that includes Asian research vessels.

*Bias in Observation and Forecasts*

The current strong concern is bias in observation and forecasts owing to Russia's absence in monitoring network. The International Network for Terrestrial Research and Monitoring in the Arctic (INTERACT) has promoted joint observations at observation sites over high latitudes in the Eurasian continent, covering a large area of Russia. Reports have shown that the observational information needed to understand the current situation and verify predictions is biased as observation points in Russia cannot participate (López -Blance et al., 2024; Nuwer, 2024).

This approach is highly desirable to evaluate the influence on pan-Arctic climate change data without data from the Russian region, which accounts for half of the Arctic land area. The focus of this study was on terrestrial ecosystems and their climatic environments. Furthermore, their effects on the upper atmosphere, oceans, and mountain glaciers must be investigated, although these effects may be lacking. Along with the observation technology developed over the past few decades, the open

data philosophy and distribution systems that we have built must also be implemented.

*Rescue Data and Keep Observations Alive*

In the Oceanographic monitoring, Nansen Amundsen Basin Observation System (NABOS) is one of the representative research activities, off the coast of Siberia, which was set-up to conduct long-term ocean monitoring for more than 20 years through scholars and research vessels from the United States and Russia, has been maintained by the United States and Russia since the end of the Cold War. This is a typical long-term observational activity (Pnyushkov & Polyakov, 2022). Mooring buoys have been distributed within Russia's exclusive economic zone (EEZ) and in the high seas north of the EEZ. To date, Russian icebreakers have conducted all the observation and maintenance activities. However, this cooperation paused by 2022.

In 2023, observations of the high seas were conducted using a U.S. icebreaker. Continuous observation within Russia's EEZ should be maintained, maybe by removing any concerns, or practical obstacles. The support from global climate monitoring is expected to be effective.

## Education, Investment for the Future

*Education* connects the activities of current researchers to the future and helps realize future dreams. Scientists are currently attempting to envision an ideal future. Students and young researchers (e.g., Association of Polar Early Career Scientists; APECS) want access to their future activities. This has also been supported by many countries. It is a small hope in the difficult political condition that numerous countries allow Russian students to study abroad.

The year-round drifting observations in 2019–2020 in the Arctic Ocean by Multidisciplinary Drifting Observatory for the Study of Arctic Climate (MOSAiC) included observations and training activities for young researchers. The Russian icebreaker Akademik Fedorov not only conducted replenishment operations to maintain the German icebreaker Polarstern, which was a drifting observation platform with an international observation team but was also responsible for the participation and training of young members, such as APECS. We hope that international educational activities will resume in the future. The chance for scholars of the next generation, who are responsible for the future, to board the

research vessel is not only an opportunity for short-term research but also the start of a long international collaboration throughout their research careers. In the field of observation, the knowledge, behavior, ways of thinking, and the underlying culture of researchers are evident. We must ensure that this opportunity continues. The APECS has declared that in 2022, research and training opportunities for young scholars will not be hindered by international politics. Young scholars have emphasized the importance of this opportunity.

## Resuming Observation Activities

### *Search for Clues*

The Arctic Council has been inactive since 2022; however, moves have been made to restart it since 2023. To resume activities, including those in Russia, remote meetings were held on February 28, 2024. It was a noble effort to coordinate the eight participating countries. Is it possible to create an even larger international appeal? Koivurova and Shibata (2023) summarized comprehensively the treaties and soft laws for Arctic issues and evaluated the availability for Arctic governance.

Can the world's academies and environmental measures move toward a new format? Implementation can begin with a narrow area or specific activity. The AC remained a soft-law consortium with a reputation for achieving mutual compromise. Cooperation was focused on a common interest–environmental conservation–which was the starting point. A successful initiative of the AC was the Arctic Science Collaboration Agreement (ASCA), which has been in force since 2018. It stipulates the exchange of research activities and data between countries. This was achieved through diplomatic discussions regarding the exchange of data and access to researchers working on the frontlines of observation sites. Diplomatic discussions with Russia are said to have been cooperative (Bloom, 2024; DGAP, 2023).

The Arctic Science Ministerial (ASM), held to treat scientific activities in the Arctic as a global issue to be addressed by many members, introduced plans for 28 countries/governments, 6 Arctic indigenous representatives and 16 international organizations. When conducting joint research in multiple countries, Norway was the most common partner, followed by Russia (ASM3, 2021). This shows that the observation area is not only vast with many plans for activities, but the countries also function

as partners in joint observations. A distinctive feature of ASM3 was that Russia proposed a project covering a wide area from eastern to western Siberia. Russia also sought to strengthen its connections with international observation networks outside Russia, such as the North American Air Pollution Monitoring Network, with several participating continents. These welcomed intentions for international cooperation have remained unimplemented.

### *Revisiting the Engagement*

Information obtained from extensive environmental research in Russia provides a comprehensive picture of diverse targets. Scientists called for the release and sharing of a large amount of Russia's data. However, Russia, which has invested many resources in observing vast areas, may not be satisfied with information being made public and shared without restrictions or conditions. Thus, mutual benefits are required. Revisiting the engagement may be useful. Until now, the need for a more straightforward joint observation and data distribution control is evident. Therefore, establishing a cooperative relationship with Russian researchers based on a good understanding of the situation is essential.

Before 2022, we were in search of a system that would not cause problems with the country's rules, and the situation for cooperation had progressed. Scholars learned to understand Russia's observation permit and data provision systems, confirm the necessary procedures, and implement them with the support of Russian collaborators. This was achieved through conversations between field observers working on the frontlines of observation sites. We hope that this study will be repeated in the future. Owing to the difficult circumstances of geopolitics, efforts are being made to publish papers using previously acquired data, collaborate with researchers across borders, and maintain student exchanges. Scholars need help visiting each other, implementing new observation programs, acquiring funding, and exchanging data.

### *View from Multiple Polar Sciences*

We can refer the view from the south and get prospects for possible improvement. Antarctic Research (Scientific Committee on Antarctic Research; SCAR) is ongoing, including that conducted by Russia. SCAR conducts scientific discussions, and the Council of Managers of National

Antarctic Programs (COMNAP) manages the operation of the observation stations and research vessels. The Antarctic Treaty has not recognized territorial claims by any country; therefore, the rules and operational mechanisms that involve all countries are in place. Comparing the activities of maintaining Antarctic observation equipment, as determined by the treaty, with those of observation in the Arctic, where territories exist and each country has sovereignty and initiative, is impossible. This is an excellent opportunity to apply the Antarctic system to the research and management in the central Arctic Ocean. The CAOFA contains ten countries participating in this regulation, including the Arctic and non-Arctic countries. This system, which is used in only a few countries, serves as an example of how to conduct research in Antarctica.

Research operators meeting in the Arctic have formed the Forum for Arctic Research Operators (FARO). FARO has 21 member countries, representing approximately 40 operators around the world. FARO looks like a similar group of COMNAP. However, as the name suggests, this is a forum, for freely exchanging information among research operators and provides a view of observations that lead to regular research and accumulation, such as monitoring (FARO, 2024). In addition to each country's unique activities, opportunities for mutual international use have been introduced. Logistical concerns encountered during observations have also been considered. The icebreaker construction plans, and operational statuses are shared. Observation systems have also emerged, such as the use of automated equipment, deployment of automatic weather observation and transmission stations, use of satellites, and maintenance of the Global Telecommunication System (GTS). The fiber optic cables passing through the Arctic Ocean are introduced as robust system for a regular observations system.

The Group on Earth Observations (GEO, https://earthobservations.org/) is hosted by the WMO as an observation call and data service (ArcticGEOSS; https://arcticgeoss.org/), which covers the Arctic region; and GEO Cold Regions Initiative (GEOCRI; https://www.geocri.org/) covers the cold regions. The deployment of the Global Atmosphere Watch (GAW) and Global Cryosphere Watch (GCW) observation points is essential for a highly accurate observation point network. The observation points were set up also in Russia. Satellite observation functionality is required as a backup for baseline observation points on the Earth's surface. The results of the campaign observations conducted as a reference supported stable cooperation through open data transfer.

Although individual activities and research institutions are still working to resolve the current observational problem, field institutions have maintained their activities. Although the data centers and networks established by the research project are stagnant, there is an infrastructure for information distribution; therefore, if a decision is made, this infrastructure can be realized soon.

## Toward the 5th IPY2032/33

### *Scientific and Technological Progress by IPYs*

The IPY is an international joint observation project of meteorology, geomagnetism, among others, centered on polar regions, which is conducted every 50 years. The first IPY was 1882–1883, when 14 weather stations near the North Pole conducted observations of ice, atmosphere, electromagnetism, geomagnetism, dawn, ocean currents, tides, structure, and motion. Additionally, more than 40 meteorological observatories worldwide cooperate to observe the IPY.

The second IPY was held during 1932–1933. After World War I, as telegraphs, radios, and telephones developed, and airplanes became more practical, a proposal to utilize these technologies was submitted to the International Meteorological Commission in 1927. During the second IPY, the possibility of exchanging weather information using these new technologies and their effectiveness in forecasting weather in each country were investigated. The purpose of this study was to investigate this issue. Forty-four countries participated, and all their information was collected.

The third IPY was scheduled to occur in 1982–1983 but owing to the rapid development of the natural sciences, it was moved forward by 25 years to 1957–1958; it encompassed more than just the polar regions. It developed into an international joint observation project on a global scale, and the name was changed to the "International Geophysical Year." Satellites were successfully launched in 1957 and satellite observations have significantly contributed to the field of polar science.

The fourth IPY 2007/08 covered two complete annual cycles from March 2007 to March 2009 and involved over 200 projects, with thousands of scientists from over 60 nations examining a wide range of physical, biological, and social research topics. This was also an unprecedented opportunity to demonstrate, follow, and become involved in cutting-edge science in real time.

### *Finding Gap by IPY*

The IPY is a joint initiative of the WMO and the International Science Council (ISC), which aims to realize the better observation and understanding of Earth's polar regions and emphasize their importance on the global scale. During the IPY 2007/08, some gaps were mentioned in research coordination and data sharing (Schiermeier, 2009). Since 2007, advances have been made in satellites, modeling, and analysis of past changes. At the time, the challenge was to create a functioning data archive, enabling scientists to access all data and observations collected during the fourth IPY. Since then, various data archives and systems for storing data have been established. The reliable storage of actual data must be achieved. Satellite technology has been developed since the IGY. In addition to the observations, the infrastructure for communication and data communication was established.

In the fourth IPY, the Data Management Committee identified options for establishing a fully integrated data sharing system. However, the polar research community aimed to maintain the overall momentum and enthusiasm, but this is still a work in progress. Although the fourth IPY was successfully held as a global event in 2007–2008, people hoped for better continuity.

### *Prepare for Next IPY2032/33*

Toward the IPY2032/33, the updated concept note for the fifth IPY 2032/33 was issued in November 2024 (https://ipy5.info/media/ziyjokqg/ipy-concept-note-rev-nov-2024.pdf). The WMO, ISC, University of the Arctic (UArctic), International Arctic Social Sciences Association (IASSA), APECS, and other global partners that represent both poles have been proposed.

The fifth IPY will be guided by a broad set of principles, including the following: Fostering international collaboration; Encouraging open data and open science; Striving for holistic, systemic, transdisciplinary research approaches; Producing knowledge for action with direct societal relevance; Co-producing policy-relevant knowledge and research and engaging with decision-makers; Including rights holders, stakeholders, and civil society in research processes; Committing to inclusive, diverse, and equitable research practices; Encouraging effective science communication, polar education, and public engagement. Ensuring balanced

involvement and information flow, areas of common interest, and knowledge exchange across Arctic and Antarctic polar science communities and networks. Co-designing research programs and co-producing knowledge across knowledge systems, with a particular focus on meaningful partnership between academic research and Indigenous knowledge holders, while making sure that the programs are building Arctic Indigenous Peoples' capacity to contribute and participate in a constructive way; and Engaging in capacity building for early career and as for previously unrelated disciplinary researchers and knowledge holders.

We look forward to introducing the latest technology and international collaborative operations emphasized by the IPY in the past. This concept note enhances the science to be led to collaboration with society and indigenous people. In addition to cutting-edge research technology, the spread of society will also be considered. We hope that the issues raised in the 5th IPY will improve and provide an opportunity to create a new research system.

### *IPY Products New Activities*

In the early years, the IPY aimed to utilize technological innovations, such as new technologies, for observations and research that connect polar regions. Various large-scale observational campaigns were conducted during IPY 2007/08. However, improvements in coordination are required to optimally combine multiple resources. IPY led to the formation of the Sustaining Arctic Observing Networks (SAON), which includes observation recommendations and plan coordination; the Arctic Observing Summit (AOS), which serves as a place to consider such matters.

APECS, which serves as an international network for young people, was also established by IPY2007/08. At that time, it contained approximately 1,400 members worldwide, but by 2024, it contains 5,000 members in 29 countries in 2024. APEC was born by IPY, and now APECS is working to drive IPY.

Polar Educators International (PEI) was also an initiative started after the IPY2007/08. PEI promotes an understanding of the polar regions in the educational field. The momentum and mechanisms (and legacy) generated by the IPY will support the next IPY. Therefore, more attention should be paid to the emergence of novel mechanisms.

Reinforcement and contribution are required prior to the next IPY. We hope that this will support the post-IPY era.

## Unbreakable Scientific Cooperation

### *The Bigger Picture*

Global warming is an issue that must be addressed globally and not by individual countries. To deal with the international challenges, we must pool the wisdom of humanity into monitoring, countermeasures, and cooperation. Global warming is a common problem for humanity. Scientists also believe that "everyone loses" if appropriate action is not taken (Kim Holmén, in Ruwer, 2023).

We require science, politics, constraints, new technologies, and industries to deal with global warming. Notably, although science has created a problem such as air pollution, global warming, it has a solution (Blue vs. White Arctic. Newton et al., 2016). There are many examples of science offering opportunities to interact with high-level politics. Internationally, G7 scientific meetings, G20 meetings, and opportunities exist for domestic proposals. The opinion of scientists at the Polar 2018 meeting was that opportunities from academic experts would influence policy-making. There is legitimacy in protecting culture and the future. Activities that protect human rights, opportunities, safety, and security were the main aspects discussed. The challenge faced by humans, who are known to be intelligent, is to organize these actions and escape this predicament.

The G7 Science and Technology Ministers' Communique (held at Sendai, May 12–14, 2023) states that the Arctic and Antarctic regions have been significantly affected by climate change. And it also stated that polar research plays an increasingly vital role in addressing this urgent climate issue. The G7 supports international cooperation in polar research. Observations can be strengthened by sharing various data, and human development resources and capacities can be emphasized through international observation platforms. The involvement of indigenous people is essential, and Arctic research should be conducted through their partnership. Long-term research relationships are built on trust, respect, and mutual interest (CAO, 2023).

The statement is powerful and included all items to be implemented. Then, the search for individuals who can work in science, diplomacy, domestic administration, and industry continues. The channel

for dialogue was maintained without closure, even during the Cold War. In comparison, this channel was closed, and it was said that the current situation with Russia seems to be worse than that during the Cold War. However, the intent to a scientific common goal will be different from that during the Cold War. Scientists and networks have also emerged during last 30 years. Science has been often tested under challenging political conditions, but the dialogue was continued. The conversation (e.g. Arctic Circle Assembly, also Arctic Circle Japan Forum) regarding whether science can help resolve such political difficulties has continued (Konyshev, 2023). The One Planet-Polar Summit, namely, the first international summit on glaciers and poles, was held in Paris between November 8 and 10th, 2023. It was organized by the Paris Peace Forum and brought together scholars and scientists in glacier and polar sciences from over 40 countries. The summit remembered the late Dr. Claude Lorius, a French pioneer in ice-core research, who passed away in March 2023 and was instrumental in promoting collaboration between France and the former Soviet Union, even during the Cold War, leading to successful Vostok core drilling. Some people have suggested methods to improve the current situation by simulating his achievements. Finding new ways to address the challenges at hand, incorporating past experiences, and thinking about the future of the Arctic will provide new avenues for addressing environmental science for the entire planet.

Furthermore, the role of positions, such as the United Nations (UN), WMO, and ISC, in dealing with issues from a global perspective is paramount. During this challenging time, actively playing a role in dealing with these challenges is the driving force for the next generation. The current on-the-ground response activities and their records are valuable. The cycle specified in the IPCC AR7 has begun (IPCC, 2024). The environmental data of the entire Arctic must be updated, including the large Russian area, to aid Working Group (WG) I, which serves as scientific evidence for WGs II and III. The IPCC will be led by UN, the IPY will be led by ISC and WMO, by those who can call international cooperations.

### *Establishing New Cooperations*

We will be able to enhance new cooperation for collecting data. There are examples of collections that have confirmed the quality and length of data, not only from working institutions but also from papers published by scholars (GEBA, https://geba.ethz.ch/). Even today, for the objective

of sharing data, collecting, and recording data from individual research activities and published papers are effective. What private companies are involved in Arctic transportation and related industries? Ships and coastal facilities are influenced by environmental conditions. However, they also influence the environment. Will such industries be included in observation and data-sharing networks?

More essential participants should be included, coproduction with indigenous people, locals, and the private sector. A collection of marine data continuously accumulated during World War I and II exists at the Kobe Marine Meteorological Observatory, known as the "Kobe Collection." After World War II, data accumulation through international observation ships became a mainstay. However, in the previous period, data from commercial and fishing vessels, in addition to observation ships, made significant contributions to data accumulation.

A unique activity was the construction of the "Tara Polar Station". Activities beyond these decades have been envisioned. In 2006–07, "Tara" conducted drifting observations in the Arctic Ocean and proposed a new type of future activity. How can international research be conducted? What types of corporate policies and innovations in the private sector and foundations can be realized, not limited to countries that face international issues? Such actions will help make decisions based on high-level decisions.

### *Industrial Activities and Local Communities*

Industrial use of the Siberian Arctic coast as a shipping route has increased. The data from this region can be used for scientific research and industrial applications. Information on scientific observations is adequate for transportation activities, and observations and reports by ships involved in transportation activities will contribute to scientific observations. A contract between the two is a new endeavor. A system that avoids conflicting effects among transportation activities, environmental protection, and benefits is effective. Dialogues between both parties and the inclusion of a valid contract are effective. A resilient system that enables the collaboration of scientific and industrial activities is essential. CAOFA was signed by five Arctic and non-Arctic countries for business operations and marine surveys for 16 years, including Russia. A treaty has been established, a period of action has been set, and has begun to be implemented; thus, immediate action is required.

### *Community Participation*

Even if the scale is small, cooperative relationships between areas where research activities are conducted, and the residents are effective. Even when visiting a survey area is difficult owing to the spread of the COVID-19, residents have been able to cooperate with observational activities in many cases. Such activities strengthen the understanding of scientific research, cooperation, training of local experts, community-based monitoring (CBM), and decision-making mechanisms based on the obtained results. When the movement of people is hindered by certain barriers, the observation system can operate independently in the region, and the collaborators and residents who work there can create a solid and sustainable scientific system. There are examples of methods to train residents to become collaborators and experts, such as in Alaska's nature conservation and Greenland's marine resource management. Therefore, government agencies must support construction and maintenance activities.

Even when issues, such as international political instability or infectious diseases, lead to isolation, creating a system that enables local communities to act independently will make the system more resilient. Preparation for various challenges is better than waiting for calamities or disasters; this will help communicate, establish cooperation, train, engage in mechanisms, and share the results. Therefore, preparing for future problems is essential. Resident research requires prior application, explanation, and sharing of results. However, the development of trust is essential before the joint analysis of the results, and expectations and requests for further research from indigenous people must also be considered. There are several examples of this trial; although this may be a small example, we can expect it to increase by increasing its visibility and learning from it. The collection of such small implementations would be beneficial.

### *The Fourth International Conference on Arctic Research Planning (ICARP IV)*

ICARP IV is promoted as an Arctic activity linked to the fifth IPY. ICARP IV considers plans for the next ten years, starting from 2025. This period also included the years of IPY preparation and implementation. ICARP IV will compile proposals in March 2025 and consider their implementation in 2026. The ICARP was conducted three times every ten years. ICARP IV is different from previous conferences. It will focus on the process of

creation rather than the convergence point of deliberating and publishing the finished product. We hope that more people will participate in this process. The ICARP aims to realize the joint consideration of these issues and develop an essential plan (https://icarp.iasc.öpublications/publications-icarp-iv).

## Analysis of the Future Action

Geopolitical tensions have stalled research in the Arctic. In this report, we have investigated this situation. Special cultivation cooperation efforts have been made over the past 30 years, and scientific cooperation plans for the next decade, such as ICARP IV and the 5th IPY, are being discussed. The IPCC AR7 cycle has begun.

- Although it is difficult to predict the progress of the situation at the level of individual researchers, there are large-scale organizations such as the ISC, which calls for these long-term international plans; the UN, which promotes activities that lead to rules; and the WMO and its coordination and projects, which are involved in the implementation of regional regulations. It requires action.
- As an essential regional effort, WMO's ARCC network is maintained by eight Arctic countries. The operators are in charge of weather observations in the Arctic and never rest. Can this partnership be expanded to include environmental monitoring and campaign observation?
- Looking beyond the Arctic regions, AC Observer includes 13 countries and 14 institutions and 12 NGOs of the world ready to support AC. Twenty-four countries participated in the International Arctic Scientific Committee, and 28 countries and regions participated in the 3rd Arctic Science Ministerial held in 2021.
- Centralizing this cooperation in areas where ACs are involved is possible. ISC and UN are encouraged to focus on time frames such as IPY and IPCC.
- Investment from Asia is also emerging in Arctic science. Research investment and icebreaker participation from Asia is also planned. The Science of the Atlantic and Pacific Oceans will be connected over the Arctic Ocean by linking Asian activities with those already underway in Europe. After SAS and MOSAiC, mobile observations can be added to Russia's drifting observations that were recently

initiated. This will lead to the construction of research systems such as CAOFA, which has a 16-year target period for activities that will last until the 2030s.
– In the IPY2007/08, coordination of observation and data sharing were raised to be improved. ARCC's activities are being consolidated into the Arctic Data Center. Additionally, data centers for GEO and other projects worldwide are ready to be connected theoretically.

It can be analyzed that there is a mechanism to review and proceed with the current possibilities for restarting observations. Finally, science planning should recognize the essential partnership between the private sector and communities of diverse stakeholders.

## Conclusion

Arctic scientists are considering future priorities and systems of action, even under the current complex geopolitical situation. Technological developments in information exchange systems and remote observation systems can be expected through the IPY; the development of artificial and automatic technology and an increase in the number of observation icebreakers are expected to occur. Diversity, which is not limited to scientists, has become more vital in cultural and social industries, such as strengthening the participation of indigenous people in the Arctic.

ICARP IV and the fifth IPY are being discussed; The research topics have been focused, however, the major challenge is the creation of a research system for a new era. Such a system must be based on communication systems and the direction of collaboration among scientists since the Cold War. The world has faced the problem of COVID-19 since 2020 and cooperation has been suspended since 2022 owing to the Russia-Ukraine war (Hilde et al., 2024); thus, scholars have struggled to find ways to sustain science (Nuwer, 2023). We fear that various divisions will disrupt science-related communication. We hope that the dialogue among scientists built over the past 30 years since will maintain and encourage dialogue in the run-up to the IPY.

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# China's Evolving Priorities and the North Sea Route: The Long Game

*Desmond Molloy*

## Introduction

In early 2022, expectations were optimistic for the gradual opening of the North Sea Route (NSR) as ice melts, raising new opportunities and tensions, operating smoothly under the rules-based cooperation of the Arctic Council. Until February 2021 it was broadly assumed in the West that the adherence to UNCLOS, IMO and the collaborative cooperation between members of the Arctic Council could prevail. This was in light of mutual benefits as regards the economic opportunities offered by the NSR; an alternate trade route from the Pacific, mineral extraction in the Arctic, search and rescue collaboration in perilous conditions, climate change cooperation, collaboration amongst indigenous peoples, and a forum for non-confrontational negotiation under the auspice of the Council, such as the agreement on a fishing moratorium in the Central Arctic Ocean. Russia had certainly built up its fleet of Arctic Icebreakers to over forty, positioning itself well to service the route, escorting shipping from the Pacific to the North Atlantic through the Bering Straits, a route

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from East to West sixty percent the distance of the sea route through the Suez Canal. It has been reinforcing the ports, including Severomorsk, the home of its Northern fleet, along the NSR to enhance security and to capitalise on the necessary services for a major increase in shipping. Indeed, it has also been recommissioning its Cold War military posts, as well and commissioning new ones, more than 475 sites, along the route, to well protect its mineral assets, LNG and oil amongst others, and opportunities, and to address any emerging threat in the High North as its natural defence, the ice, is diminishing. Where Russia reinforces, the West must prepare. NATO has responded by staging some of its biggest Arctic warfare exercises in decades. While a war in the Arctic is unlikely in light of the inhospitable conditions, it could be the northern frontier of a broader war theatre (Economist, 2022).

China has staked its claim in the High North, conscious of the changing environment and potential geopolitical and economic importance, in announcing itself as a "Near Arctic State" in 2018. It had sent signals in 2013 when the cargo ship *Yong Sheng* transited the Baring straits to Rotterdam. It has since been establishing itself through trade, primarily fish and extractive minerals, and scientific research especially with Iceland and Greenland, technical collaboration with Finland and a research station in Norway's Svalbard. Its vision for engagement in the Arctic crystallised in 2017 with the publication of "Visions for Maritime Cooperation Under Belt and Road Initiative" where it expressed its desire to extend the BRI through the Arctic and to connect China to Europe through the NSR, reducing distances, time and costs. A further obvious benefit is in avoiding the strategic chokepoint of the Malacca Straits, through which 80% of China's shipping currently sails. This was followed rapidly by its white paper, "China's Arctic Policy" where it declared itself a "Near Arctic State" (Milagros, 2023).

In this chapter we will consider China's twenty-year presence in the Arctic and compare it to Belt and Road Initiative engagement with small states in its own backyard, Southeast Asia. We review how the impact of Russia's February 2022 invasion of Ukraine is reflected in China's emerging attitude and behavior towards its engagement in the Arctic, and particularly in the NSR, in an evolving context.

## China's Presence in the Arctic

Molloy, in a series of presentations to University of Akuryri in Iceland; PRIO and UiT Alta, both in Norway, in November 2021 entitled "Small states in the Presence of Power: Comparative perspectives of China's engagement with Small States in the Nordic Arctic and Southeast Asia," emphasised that while China has been present in the Arctic for the past twenty years (Clingendael, 2020; Harper, 2022), it was concurrently developing its engagement in the NSR, its "Polar Silk Road", in collaboration with Russia. In mid-2022, it had invested more than $90bn in Arctic infrastructure, including in financing Russia's extractive infrastructure in the High North, taking LNG from the Yamal peninsula both from depots on the NSR and through new pipelines (Economist, 2022). Further it has been investing in multi-use ports and airfields, enhanced collaboration in scientific research and has initiated the integration of satellite navigation systems to monitor movements into the Barents Sea and sharing intelligence, surveillance and reconnaissance data. China clearly wants a seat at the Arctic table (Grady, 2022; Harper, 2022) In a meeting between Xi and Putin in early 2022, Xi declared a "limitless friendship" between China and Russia. The West was not alarmed. This kind of rhetoric is expected. Despite China's expansionist aggression in the South China Sea, insisting on implementing the mythical Nine-dash Line; its failure to observe the ruling of the Court of Arbitration in the Hague on this issue and its saber-rattling regarding Taiwan, it was predicted that it would abide by the rules-based order in the Arctic. Currently China seeks an "open Arctic" where it can do business beyond Russia as an aspect of its Polar Silk Road and has little interest in establishing military bases in the Arctic (Grady, 2022) With this objective it sends "emissaries, entrepreneurs and mediators, including Chinese nationals, Norwegians, Icelanders, Swedes and Americans" (Harper, 2022). The seven Western states, members of the Arctic Council, assumed that it would continue to be in Russia's interests to operate the NSR within the bounds of the agreed rules of the Council. In light of the cautious "bromance" between Putin and Xi, both likely to rule for decades more, and the achievement of Xi's Polar Silk Road ambitions, China would play ball.

Iceland, shunning the EU, signed a Free Trade Agreement with China in 2015, focusing on the EU sticking point, fish. Iceland has also shared intellectual property in geothermal technology in addition to research

partnership. China was the number three destination for islandic exports valued at $158 million in 2022, the bulk of that being fish, as part of a GDP of $28.4 billion. Imports from China same year were $903.5 million, primarily electrical equipment, machinery, vehicles and clothing (U.N. Comtrade, 2023).

Greenland has dealt in fish, natural resource extraction and held discussions in consideration of uranium, rare earths and infrastructure. The Greenland semi-autonomous government pulled back from heavy engagement only after NATO, the United States concerned for its strategic interests, both in terms of uranium, rare earths and the location of Pituffik Space Base, formerly called Thule Airbase, and Danish direct intervention. Greenland exports to China in 2022 were valued at $367 million, approximately 98% of this being fish, with a GDP in the region of $2.25 billion. Imports from China were less than $1 million (Trading Economics, 2023; UN. Comtrade, 2023). For both Iceland and Greenland, the fish trade with China represents a significant percentage of GDP. Finland had been planning partnership with China and Russia in the laying down of the Arctic Connect communications cables through the NSR, with growing NATO concerns regarding its intelligence gathering implications. This project was suspended for "further feasibility assessment" in May 2021. Finland in February 2022 has alternately announced a partnership with Japan for such a cable from Japan that will have nodes to Alaska, Canada, Ireland, Norway and Finland (Submarine Cable Networks, 2022).

## BRI in China's Backyard

In November 2021 the seminar series focusing on the NSR in Iceland and Norway noted that Russia has great expectations for the impact of NSR on its economy, especially in the development of Siberia. In addition to gas depots at Sabetta in Yamal, amongst others, trans-shipment depots at Kamchatka on the Pacific side, and the Power of Siberia line to China, in an integrated system, Russia was also intent on controlling the flow of Arctic gas to Europe and Turkey through various pipelines including the now defunct NordStream 2, trans-Ukraine pipelines and TurkStream. It would concurrently cash-in on, and/or generate extraordinary inflation in the price of gas to leverage the benefits of longer-term contracts that would lock-in the supply-chain, rather than accepting Europe's preference and lower commitment of purchasing on the spot-market. To continue to

benefit smoothly from this system, and to capitalise on the wide range of benefits from NSR, the West assumed that Russia would need a stable and predictable rules-based order, as offered through the norms of the Arctic Council, UNCLOS and IMO.

In the 2021 seminar tour it was considered how China dealt with smaller states within its immediate sphere of influence, its backyard, and a particular pragmatism was identified in addressing self-interest through power asymmetry while dealing with states individually, in accordance with the status of their leadership. This, in the absence of a cookie-cutter approach while avoiding working through the regional economic cooperation organisation, ASEAN, that, notionally, might have come some way to balancing the useful asymmetry. This is well illustrated in the analysis of the promotion and partial implementation of the High-Speed Railway for SEA project that has been an integral part of Xi's BRI vision and which is receiving close official attention. Lampton et al.'s *Rivers of Iron* (2020) investigated the issue in their analysis of the progress of this massive BRI infrastructural project in SEA by focusing on the grand vision of the high-speed railway network (HSR) integrated to greatly enhance commercial and human connectivity and to build a new economic corridor through seven Southeast Asian countries, small states relative to China, back to Kunming in China .

Three North/South parallel Goods Conventional lines and Passenger High-speed lines are envisaged running from Kunming in Yunnan Province, a hub for distribution throughout China, in the East to Hanoi and down the coast of Vietnam to Ho Chi Min City and linking West to Bangkok through Phnom Penh; in the center; from Kunming through Laos down to Bangkok and in the West from Kunming down through Myanmar, Mandalay to Yangon, and linking to Bangkok. Then south from Bangkok down southern Thailand through the Malay Peninsula to Singapore. These are extraordinary infrastructural ambitions of great strategic importance as trade corridors for China and Southeast Asia, but not necessarily commercially viable as independent entities for any of the seven small states in light of population densities, GDP PP and goods traffic predictions, unless the network is duly completed (Lampton et al., 2020).

Even with seven small states integral to the success of the network, Beijing, by long established policy, does not negotiate collectively, but deals bilaterally with each small state, allowing associated debt management opacity. It takes account of the prevailing system of governance in

each state and the potential support or resistance to the project. Beijing moves slowly and carefully with a long-term strategic vision. What we learn from *Rivers of Iron*, is that Beijing, despite having the power and resources asymmetry in the region, does not hold all the cards that allow it to push its intentions through rapidly. Beijing cares about international public opinion. It is dealing differently and delicately with each of the seven small states. Counter-intuitively, Lampton et al. (2020) tell us that the progress of the BRI project is not dependent on the level of authoritarianism versus democracy in any of the small states, noting anyway that the states of ASEAN are often referred to as the "Club of Dictators". They tell us that the critical elements that dictate how smoothly the response to infrastructural inducement partnership is rolled-out in each small state is based on the level of the *legitimisation* and/or *power pluralisation* experienced by the relevant government in each state.[1]

We see that Laos, a land-locked poor country with ambitions to become a middle-income "land-linked" country, with totally centralised authority, has little concern for bottom-up pressure and where the legitimising issues are muted. Laos has grabbed the infrastructural inducements enthusiastically, incurring extraordinarily high-risk Chinese state and private dept, with little chance of an early return on investment. Even so, it is noteworthy that, despite Lao difficulties in servicing its debt, being 87% of its GDP in 2022, China defers interest payment rather than debt forgiveness (Economist, 2023, September; McReady, 2023). In this case, it seems that China's main concern is not the return on investment but the strategic importance of passing the HSR through Laos in order to complete the central lines. For Laos, it is the opportunity to be part of the major trade corridor, hence the self-entanglement in extraordinary debt. The Lao leg of the HSR is complete, however the network extends only 3.5 kilometres into Thailand from a total of 253 kilometres to Bangkok (Lampton et al., 2020).

The Malaysia to Singapore leg has been suspended, kiboshed by recalibration and a new viability analysis during Mahathir's second coming; a

[1] Legitimisation—How ruling political elites legitimise their domestic rule (Prioritisation of National goals [e.g., development legitimisation versus identity-nationalist legitimisation]).

Power Pluralisation—How political power is distributed across the ruling class and different segments of the society (Contributing elements Democratic versus authoritarian and inter-elite dynamics).

demonstration of forthright assertiveness after the exposure of the corruption of the Najib government. This suspension undermines the viability of the whole project … but China is playing a long game.

For then Prime Minister Prayut in Thailand, a military, then quasi-military government since 2014, with hopes of strengthened political legitimisation, the impact of Chinese infrastructural investment within the context of development and identity legitimisation is a delicate one. Further, Thai politics is quite decentralised amongst powerful elites and trade unions, so that the power-pluralisation is a further constraint on his decision-making capacity. Even with Bangkok as a central hub, Prayut was cautious, and progress is limited to 3.5 kilometres on the Lao border… just a hint of commitment.

Vietnam, forever suspicious of China and vexed by the South China Sea territorial disputes is keeping its powder dry and holding back, largely playing the identity card in preserving regime legitimacy, though Xi is now reaching out regarding the issue.

Myanmar is more complex again. Having suffered a military dictatorship for over forty years until 2011, Myanmar then saw a brief opening-up on the path to democracy and is now cast-back into a brutal and highly contested feudal military dictatorship. In launching the transitional government in 2011, one of the early actions by President Thein Sein, a General in "sheep's clothing," was to suspend the publicly contested BRI project, the Myitsone Hydroelectric Scheme in Northern Kachin State. This was much to China's chagrin, having already invested several billion US dollars in preparatory work. Through this Thein Sein was demonstrating the independence of the new transitional government from Chinese influence and signalling a new legitimate democracy.

With multiple conflicts rampant in the peripheral border areas of Myanmar and a stuttering peace process under development, in 2011 work started, amongst other BRI projects, on the China-Myanmar Economic Corridor (CMEC); a BRI infrastructural project of great strategic importance to China. A pair of LNG and Oil pipelines were built running from the Chinese operated deep-sea port/Special Economic Zone under construction at Kyaukpyu on the Bay of Bengal in Rakhine State, through Central Myanmar to Northern Shan State and on to Kunming in Yunnan Province. The pipelines are flowing and construction of a parallel rail line, augmenting the CMEC, is underway. This is Yunnan Province and China's shortest route to the Indian Ocean allowing

it to bypass the strategic chokepoint of the Malacca Straits for some of its essential goods and hydrocarbons.

Further, with limited information available, a series of seven hydroelectric schemes is projected along the Salween River from Northern Shan, through Kayeh to Kayin States along the Eastern frontier bordering Laos and Thailand, to the Andaman Sea in Mon State. This is at a time when the military coup of 1 Feb 2021 has heightened conflict through Myanmar, but especially along the route of CMEC and along the Salween River. While work was suspended due to the Covid pandemic, it has recently recommenced. China, seeking predictability for the implementation of BRI, the security of its strategic interests and caring about public opinion, to early 2023 has been hedging its bets by not demonstrating explicit direct support or directly legitimising either the military junta or the opposition government in hiding, the National Unity Government (NUG). While ostensibly favouring the military junta, China has not specifically said so, and claims to be seeking peaceful resolution and a return to the democratic path, specifically under ASEAN guidance. Particularly, China wants no foreign, specifically Western, interference in Myanmar.

However, it is notable that since early September 2021, Chinese aligned ethnic armed groups were pushing far into Southern Shan State along the Salween River, against more Western aligned ethnic armed groups in an apparent effort to control, and presumably protect, the path of the CMEC and access to the proposed dams.

In early and mid-2023, China, together with Japan's Special Envoy for Reconciliation in Myanmar and Chairman of The Nippon Foundation, a Japanese philanthropic organisation, Yohei Sasakawa, facilitated informal ceasefires between the Arakan Army, the predominant ethnic armed group in Rakhine state, home of China's deep seaport and the path of its pipelines between the Indian Ocean and Yunnan Province, and the military junta. Presumably. a protection deal for the pipelines is operating.

The path of the CMEC between Shan and Rakhine runs through Berman, the Myanmar Buddhist majority, heartland where the towns tend to be controlled by junta forces, and the countryside teaming with diverse opposition armed groups, Peoples Defence Forces, where savage war with frequent atrocities ensue. However, In mid-2023 when the Chinese Foreign Minister visited the Commander in Chief of the junta in the administrative capital, Naypyidaw, it was becoming clear that rather than further hedging, China was seeing its interests, and its CMEC, better

served under junta protection together with quasi-proxy ethnic armed groups, rather than aligning with the opposition government in hiding, the NUG. In the second half of 2023, this hedging has moved towards greater confidence in the capacity of the Chinese orientated ethnic armed groups of Northern Shan in protecting its interests, rather than the junta. Pragmatism reigns.

Where small states are fragmented, dominant elements within sub-state terrain have leverage as regards their engagement in BRI in the short and medium term, and Chinese interests are strategic and ultimately about power projection in the long term. China plays the long game. Further, China is conscious and careful of the collective capacity of the South-east Asian regional cooperation organisation, ASEAN. This is reflected in how China used, one of its proxies in ASEAN, Cambodia, to control the agenda by preventing discussions on the South China Sea issue during that country's Chairmanship of ASEAN in 2012.

## China in the Arctic: A Primary Node Vision

Liisa Kauppila (2022) tells us that:

> whether viewed as a risk or an opportunity, […] non-Arctic China's increasing interest in the High North- and its national plan to build a Polar Silk Road as part of its Belt and Road Initiative – is perhaps the most transformative feature shaping the future of the Global Arctic

She interprets China's perspective of the Arctic as a "primary node of the global economy." She describes China's "primary node vision" that "seeks to (re)position the country at the center of global flows in order to secure the continuation of economic growth at home." This approach organises its economic engagements on a regional basis; […] "distinct 'spaces of flows,' dynamic systems that connect China with major corners of the world, […] This perspective challenges the predominant Euro-centric reading of space." (Kauppila, 2022), a perspective that does not view China as an external actor in the Arctic and exploits broader acceleration of globalisation. For China, in addition to a possible alternate trade route, the Arctic is a source of major mineral resource deposits, hydrocarbons and rare earths; rich fishing grounds; a locus of focus for critically important scientific research, on climate change, fish stocks and ice dynamics, etc., for technological exchange. Small Arctic states are

also envisaged as end-users for Chinese investment and surplus industrial capacity. These attributes, if realised, combine to raise the opportunity to foster win-win economic scenarios, hopefully to contribute to a vibrant Chinese economy that will raise all ships (Kauppila, 2022).

Threats to these ambitions, even having committed to abide by the existing rules-based order, UNCLOS, IMO and the Arctic Council as regards the NSR, and having gained the confidence of national governments in the Arctic states through the application of soft power, remain. Obstacles include the potential for social resistance from citizen, political activists on human rights, climate change issues, and opposition to the latent "finlandisation" towards China in light of potential leverage of debt-traps, strict legislation in the Arctic states and cumbersome bureaucracy (Kauppila, 2022).

## Arctic Small States and China

The relevance of these perspectives for Arctic small states in the context of Chinese engagement in the opening of the NSR is clear. Clingendael in its *Presence Before Power* (2020) has articulated many of the factors. China has been planning for its place in the opening of this new trade route, "The Arctic Silk Road," and an aspect of "an explicit geopolitical purpose within the context of China's geo-economic expansion, maritime ambitions and its changing relations with U.S. and Russia," (Clingendael, 2020) for more than two decades. Quietly engaging and building partnership with small states in research and trade, particularly with Iceland, Greenland, and Finland, it is already present.

As regard US strategic interest in Greenland, Trump suggested to his advisors in 2018 that the solution might be for the United States to purchase Greenland from Denmark. This might not have been as outlandish an idea as it appears as in the nineteenth and early twentieth century the United States, having had a strong claim on at least part of Greenland, had suggested the same.

China has further projected its intensions for greater engagement in Iceland by building a large embassy, even if only 5 diplomats were accredited in 2020… what Clingendael (2020) suggests might be a *Potemkin presence*; creating an illusion of interest to draw attention from other intensions.

China is interested and will, at minimum, exploit the benefits of the new NSR as a trade corridor and source of energy. It is already engaged

here with Russia in purchasing huge amounts of natural gas and LNG from the Yamal fields, with long-term contracts and shared investment.

At least until early 2022, most Arctic small states have been comfortable to deal with China while operating within the context of a rules-based order. These states are generally liberal democracies with solid development and identity legitimacy and pluralisation of governance, (Lampard et al., 2020), so they have the capacity to be receptive and also to frequently recalibrate their engagement with China regarding infrastructural inducement. On the other hand, despite recent sound policy guidance regarding the importance of engagement in the Arctic, specifically from the Wilson Centre's Polar Institute *in Navigating the Arctics 7 Cs, (2021)* US is behind the curve in the Arctic and playing "catch-up". Globally, in a polarised international environment, US' future influence is in doubt. Currently at political war internally in a broad crisis of confidence in the political system, seen by many in Europe as the lunatics versus the terrified, it has, up to recently dropped the ball of effective foreign policy and its relationship with both Russia and China; particularly so as regards naval power projection in the Arctic. It may now, in light of the deteriorating relations with both Russia and China, be seeing a strengthening NATO and pick up that dropped ball. In 2011 it deactivated the 2nd Fleet covering the East Coast of US and the North Atlantic. However, in light of the emerging Sino-Russian collaboration and China's increasing presence in the Arctic, it reactivated the 2nd Fleet in 2018. Still, recovery will not be easy and "catch-up" will take time. Concurrently, in the second half of 2023 we see the efforts of the current Democratic administration under Joe Biden, notably in his speech to the opening of the 78th UN Generally Assembly in September 2023, reach out, toning down talk of "de-coupling" to a less confrontational "de-risking," in an attempt to reduce tensions with China. These tensions rising from the great power competition globally, also point to concerns regarding the emergence of a bipolar order in the Arctic, what Bertelsen (2022, pp. 478 and 479) refers to the division of the "Arctic into a US and Chinese bounded order with the Nordic and North American Arctic within the US bounded order and the Russian Arctic in the Chinese bounded order."

Small Arctic states, as a result of the focus on the NSR, are now drawn from the global periphery into the centre of attention and are gaining leverage. Initially, they considered how they could capitalise on the growth of the NSR through trade, passing trade and entrepot/servicing

facilities in the context of a rules-based order under the Arctic Council. Now, with the Council "paused", the environment is unpredictable and security considerations come to the fore. Ships of the Chinese fleet are already undertaking Freedom of Navigation sorties in Arctic waters in collaboration with the Russian Navy, notably in the Bering Sea adjacent to Alaska, replicating the justification for Western Freedom of Navigation sorties in the South China Sea. How soon before Chinese Aircraft Carrier groups, probably in collaboration with Russian naval resources, are transiting the Bering Straits into the Central Arctic Ocean and on to the North Atlantic, just as the US carrier groups roam the seven seas? NATO may now have woken up.

## And then, Ukraine Happened…

On 24 February 2022, following its 2014 occupation of part of eastern Ukraine, the eastern half of the Donbas and the annexation of Crimea, that had drawn ineffective Western response, Russia launched a massive invasion of Ukraine. It didn't go as Putin had planned and has ground on into a protracted full-scale war of attrition with the Ukrainian defence delivering beyond all expectations. The West has taken a stronger line. Russia was to take the Chair of Arctic Council in 2022. The Ottawa Declaration of 1996 that founded the Council, specifically states that it will not deal with military security issues. Despite this, rather than convene the Council under Russian chairmanship, in light of launching this war of aggression, the seven Western members decided to "pause" the Arctic Council. And so it remains in March 2024 with cooperation between the western states and Russia, including regarding climate change research and other scientific cooperation, in hiatus. Further, Norway drew a sharp response from Russia when it sanctioned Russia from sending goods to the Norwegian territory of Svalbard despite a 1920 treaty that allowed Russia to exploit national resources in Svalbard, and the fact that it is the home of many Russian settlements (Economist, 2022). Russia expressed its anger at "being left out in the cold" by formally withdrawing from the Barents Euro-Arctic Cooperation, the official body for inter-governmental cooperation in the region, in mid-September 2023. It blames the other member states; Denmark, Finland, Iceland, Norway and European Commission, which had suspended cooperation with Russia after the 2022 invasion of Ukraine, for the collapse of Barents cooperation architecture (Nilsen, 2023).

With Russia controlling vast swaths of the Arctic and being adjacent to all of the NSR, it is difficult to see how such a "pause" can turn out well for the West. It had appeared that adherence to the rules-based order of the Arctic Council would be in Russia's interests, covering collaboration in areas such as mineral and fish extraction, control of shipping, search and rescue services and critically, environmental issues with global warming effecting the Arctic, "the canary in the mine," at three to four times the national average (Economist, 2022).

Since 2014, the Russian base for its Arctic fleet, Severomorsk on the Kola peninsula in the Barents Sea, the most biodiverse and rich marine ecosystems in the Arctic region with some of the world's biggest fish populations, has seen a huge uptick in military and commercial marine traffic. Growing dependence and collaboration between Russia and China will see this activity increase, combining to threaten the environmental balance along the NSR. The threat is augmented by the intensification of open-cast mining in the Murmansk region, the ignoring of international environmental protection standards on the Kola peninsula, and related marine transportation of toxic ores. There is the absence of concern for the livelihoods and traditions of the deer-herding indigenous people, whose interests, along with other environmental, social and cultural concerns, were somehow represented at the Arctic Council (Last, 2023).

Following the "pause" of the Arctic Council, the signals coming from Putin are that he expects to manage fine without this encumbrance, with freedom to exploit and control as he sees fit. "… Increasingly isolated from the global economy, Russia has accelerated its efforts to open the region to commercial activity," particularly inviting investment from China, India, Turkey and the Emirates. In April 2023, after its suspension from the Arctic Coast Guard Forum, Russia signed a "cooperation agreement with the Chinese Coastguard to police its northern coastline." While China sees the pause as "regrettable and a risk to soft security" (Devyatkin, 2023), it may offer China an alternative route to "assert itself as a Near Arctic State" (Last, 2023). With seven of the Arctic states, the "A7", now members of NATO, Lanteigne (2022) talks of the emergence of "two Arctics", NATO versus Russia and China. The implications of such bifurcation are of concern to China, which has economic and scientific ambitions beyond Russia in the Arctic. It must walk a narrow line between its continuing engagement with Russia, in terms of that "limitless friendship," and not appearing to the international community,

especially small Arctic states, to support the invasion of Ukraine. This position of "quasi-neutrality," and the avoidance of associated sanction regimes targeting Russian companies is already impacting on the fortunes of "Polar Silk Road" (Lanteigne, 2022).

The invasion of Ukraine; the collapse of the semblance of a "rules-based order" in the high north, melting ice and the growing impact of great power competition may be an eye opener for the EU regarding its need for stronger engagement in the Arctic. The visit of the president of the EC, Ursula von der Leyen together with the Danish PM, to both Fareo Island and to Nuuk, the capital of Greenland, with an appropriate retinue, regarding the abundance of green technology raw materials, 25 of 35 essential elements, points to the growing relalisation within the EU of the strategic importance of the Arctic. She will open a EU permanent office in Nuuk (Bryant, 2024). The warm reception received in both Tórshavn and Nuuk indicates an understanding by their governments of a need for diversification from dependence on fish and "derisking" as regards Chinese interest in other extractive natural resources while still courting the necessary capital investment.

## Impact of Ukraine on Chinese Arctic Policy

How these new circumstances might suit China is somewhat opaque and a major focus of analysis. The Covid pandemic and current economic stresses on the Chinese economy have slowed down its engagement in the Arctic. However, the withdrawal of Western capital, particularly in the Russian extractive industries, opens the door for Chinese investment. While cautious of the long-term nature of return on investment due to the unreliability of predicted timeframes regarding the receding ice in the NSR, with current estimates that it may be ice-free by 2040 to 2059 (Milagros, 2023, citing Smith & Stevenson, 2013). Dozens of ships were stranded in early ice in 2022 (Last, 2023). China undertook no transits of the NSR after February 2022. However, it is still financing the Power of Siberia 2 pipeline to carry LNG from Yamal to China, amongst other Chinese SOE investment including in the Arctic LNG 2 pipeline.

Concurrently, Russia is increasingly becoming more dependent on Chinese technology to build LNG tanker ships and infrastructure (Economist, 2022). Russia can well be wary as China's influence and leverage grow as it ascends to the zenith as a Global Superpower in competition with United States, the top-dogs in an emerging multipolar

world of Great Powers, as Russia's aspirations for top-dog status diminish with its poor military showing in Ukraine and the subsequent economic stress.

Prior to the invasion of Ukraine, and the pausing of the Arctic Council, the results of a SWOT analysis of potential gain for small Arctic states from the development of the NSR, and Chinese engagement, were firmly in the Opportunities quadrant. Clingendael (2020) wisely advised that Europe, specifically the EU, needed to reengage in Iceland and Greenland, and *vice versa*, in order to capitalise on these opportunities. This made sense. In the short term it saw research and economic benefits. Medium term, Europe and small Arctic states could collaborate in preparing to exploit growing competition between China, US and Russia. In the long term, Europe, through building geostrategic engagement in the High North together with small Arctic states, could contribute to regional security. In the event of the reactivation of the Arctic Council, it could contribute to confidence-building measures as small Arctic states did during the first Cold War. Now, there is the potential for the emergence of a new round of aggressive Great Power competition, a new, hopefully, cold war, this time NATO and allies versus an alliance of China and Russia.

Western suspicions that China may have had advance knowledge of the Russian invasion of Ukraine, despite its efforts to appear as a neutral party and potential mediator, are raised. This is suggested by Miles and Collins (2022), through an analysis of its strategic natural gas and LNG purchasing patterns in the period immediately before the invasion. It was buying aggressively. After the launch of the invasion, it is benefitting further, as are India and Turkey, from surplus supply and discounted prices in light of sanctions on European import of natural gas and LNG. While several benign scenarios that could account for this are explored, the most likely one, despite vehement denials, is that China knew. Further, the massive increase in import of Russian gas by China is matched with an increase in its export of gas internationally, especially to Europe. This raises the question if China is reexporting Russian gas to Europe, profiting from discounted prices, circumventing European sanctions, while providing resources to Russia to perpetrate its war? (Hale, 2023; Harper, 2022).

A further suggestion in support of such a hypothesis is that the invasion might have been seen as in China's strategic interests in that the success of

Russia's revanchist escapades in Ukraine may have offered a useful precedent for China's possible use of force against Taiwan (Miles & Collins, 2022). Such possibility would cool the warmth of the welcome for China into small Arctic states.

## Evolving Chinese Policy Towards the Arctic post-20th CCP Congress

From China's perspective, its entry into the Arctic is belatedly seen as a threat by the US to its leadership in the Arctic and it is determined to limit it. The great power competition is spreading into the Arctic. For China, the Arctic is the western end of the "Polar Silk Road" and it will not be excluded. It says that rather than a quest for power expansion, it enters the Arctic…

> …on the basis of mutual respect, cooperation, win-win and sustainability, abides by the universally recognised norms of international law, and has a right to participate in Arctic governance. (Guo & Chen, 2023)

It is an aspect of Xi's great vision for "a community of shared destiny for mankind." It says that while great power competition is indeed ramping up, "China and Nordic countries are complimentary in their international industries and supply chains" rather than in competition. It says that unlike US, China keeps its promises… it's in its Confucian culture. It says that it offers massive trading options, sources of investment and greater leverage for Nordic states, giving them the option to play-off one side of the great power competition against the other to optimise benefits, as already evidenced by increased US investment in the Arctic (Guo & Chen, 2023).

The genie is out of the lamp as regards the globalisation of trade and even the US cannot disengage or "decouple" from trade with China. 2022 saw a record high of $690.6 billion trade between both. As such, to attempt to disengage in the Arctic would threaten this trade and would be to cut off one's nose despite one's face. Thus, what position is the US in to "order" Nordic states to limit trade with China. Nordic states should take an independent line and act in their own best interests (Guo & Chen, 2023).

Arctic policy as restated by Xi at the 20th Chinese Communist Party CCP Congress in October 2022 reemphasise commitment to a:

> …Cooperation Triptych, […] the development and investment in science, the endorsement of the concept of community with a shared future, and multilateral governance" [without] substantial change from the 2018 policy and sticking to cooperative measures to not further destabilise Arctic international relations (Volpe, 2023)

While acknowledging the new global challenges for China, heightening great power competition, a faltering economy and the negative impact of the Russian/Ukraine war on international relations, restated Arctic policy demonstrates a commitment to continuity by endorsing international cooperation in the region. The focus is to be on Arctic scientific research in collaboration with the regional governance mechanisms such as the Arctic Council Working Groups and International Arctic Science Committee. With research in mind, a third Chinese Arctic icebreaker is scheduled for completion in 2025. The commitment will be demonstrated by the post-Covid resumption of work in their Svalbard and Iceland located research stations. Such work can be undertaken even with the Arctic Council, of which China is an observer, "paused". While there are hopes that the Arctic Council may resume work in Spring 2024, what can be achieved by China may depend on the outcome of the Russian/Ukraine war and the resurgence of a Cold War mentality (Volpe, 2023).

The Congress endorsed economic globalisation and shared benefit platforms in the Arctic through the establishment of "blue economic corridors." Analysts concede that in the short to medium term, such blue economic corridors are dependent on the "privileged bilateral relations between China and Russia." In promoting the legitimacy, under UNCLOS, to equal rights for all parties to share in international waters, it seeks to share access to the Central Arctic Ocean in a status where no state can exert sovereign rights. It notes that it is a signatory to the Agreement banning illegal fishing in the Central Arctic Ocean in legitimising such a claim. In promoting multilateralism China emphasises the major contributions that it can bring to the table in the Arctic, e.g. through Silk Road Fund, BRI, and the Asia Infrastructure Investment Bank (Volpe, 2023). The general message is that China is committed to multilateralism, cooperation and economic mutual benefit in the Arctic. Despite the rising global tensions, it is hopeful that such commitments can assuage the concerns of Arctic small states regarding Chinese motives, allowing them to embrace collaboration towards a win-win relationship.

China's policy in the Arctic cannot be taken in isolation of the heightening tensions within its own backyard, particularly reflected by the "wolf-warrior" approach of bellicose aggressive bullhorn diplomacy and military posturing towards its disputes in the South China Sea and towards the stated ambition to absorb Taiwan into the PRC by the centenary of its founding, 2049. With a faltering economy and predictions of a difficult domestic environment, some scholars and analysts, such as Richard Haas, Michael Beckley, Hal Brands and Kurt Campbell, are predicting an "Era of Stagnation" for China. In such circumstance, Xi might "even try to escalate territorial disputes against Japan or the South China Sea claimants as a way of redirecting attention away from the economic situation" (Taylor Fravel, 2023). It may embrace "aggressive nationalism" to the extent of launching a diversionary war if China does not achieve adequate growth and sufficient resources to service that "shared prosperity" necessary to hold a population of 1.4 billion people under control. In such analysis Xi would be applying the age-old strategy of uniting a nation through the generation of heightened jingoistic populist nationalism in identifying an unjust threat to its ambitions in the South China Sea and with Taiwan, and in stating its claim to exceptionalism as a great power (Taylor Fravel, 2023). Reinforcing such predictions, Biden, after his September 2023 visit to India and Vietnam, restated his belief that "there is something wrong with the main tenet of Xi's economic policy," that primary tenet being the commitment to "shared prosperity" (Nakazawa, 2023).

However, there is little historic precedent of China ever turning to diversionary war to draw attention from domestic woes. It didn't happen during various ethnic or political upheavals and unrest over the past ninety years. It didn't happen during Mao Zedong's Great Leap Forward or the Cultural Revolution. China has been more inclined to sign non-aggression pacts with recalcitrant external neighbours and to deal with internal dissent with an iron fist. Indeed, the Tiananmen Square dissent lasted only days under Deng Xiaoping, as did the more recent dissent in cities frustrated with the Covid lockdowns under Xi. China goes to war to express its resolve, not to divert internal attention. It has sufficiently advanced internal surveillance security systems to deal with internal dissent rapidly (Taylor Fravel, 2023).

Xi may well be expressing such resolve in relation to the Taiwan and South China Sea Issues. As tension evolves together with great power

competition, it will be in China's interest to support the Russian militarisation of the Arctic, to avoid major diminution of Russia's status as a great power so that it can hold the military attention of NATO and Europe, reducing the resources that they could turn towards East Asia while China gets on with its ambitions there. China is faced with a balancing act in not appearing to support Russia unquestionably as regards its invasion of Ukraine, while concurrently convincing the Arctic states of its commitment to economic and non-threatening scientific engagement in the Arctic and climate action, with win-win outcomes. It has to do this while well exploiting its relationship with Russia and optimising its benefits from the stress into which Russia has driven itself. The outcome of the 2024 US Presidential elections may have a significant bearing on Chinese options in these matters.

Despite the calming expressions of soft power in restating its Arctic Policy at the 20th CCP Congress, many Western analysts call for increased caution and claim a clear duel-purpose, both civilian and military intelligence gathering, of much of Chinese ostensibly economic and scientific engagement in the Arctic (Grady, 2022; Milagros, 2023; Volpe, 2023) The publication in October 2022 by the US of its new Arctic Policy, significantly enhancing US and NATO presence and profile in the Arctic, is indicative of just how seriously US has belatedly started to take in China's interest in the Arctic. In its new *U.S. National Strategy for the Arctic Region* it endeavors to significantly enhance US and NATO presence and profile in the Arctic. Here it explicitly cites China as a regional challenger. It sees that Russia's invasion of Ukraine has strained Arctic diplomacy and alleges that Russia is challenging Freedom of Navigation in the NSR. Indeed, Russia has claimed the entire NSR to be within its territorial waters and is imposing strict constraints on shipping planning to use the route; advanced registration, tariffs, escorts by Russian icebreakers and Russian pilots on board (Devyatkin, 2023; Lanteigne, 2022). This is occurring as collaboration with Russia and China is seen to strengthen in the Arctic.

## Conclusions

China, in collaboration with Russia, appreciated the potential importance of the NSR in contributing to its Primary Nodal Vision twenty years ago. It began building trade, research and social relations with small Arctic states under to banner of Xi's "Polar Silk Road" as an aspect of BRI.

The informal intergovernmental architecture of Arctic states, led by the eight member states of The Arctic Council; US, Canada, Iceland, Finland, Norway, Finland, Russia and Denmark including Greenland, offered a comforting environment based on Nordic collaboration and a facilitating rules-based order to permit win-win relationships in the exploitation of the NSR as a trade route. Such collaboration includes research and commercial engagement with Arctic states, and collaboration on climate change beyond the obvious access to Russian hydrocarbons in Siberia. Despite assertiveness in its own backyard as regards the South China Sea and Taiwan, China seeing the advantages of engaging in the rules-based order, declared its claim to a "seat at the table" as a "Near Arctic State," in 2018.

China has a policy of negotiating with individual countries rather than with regional bodies. In reviewing its engagement in BRI infrastructural projects in Southeast Asia, we can see, despite its lens of Primary Node Vision, a pragmatism and patience in pursuing its objectives. It does not threaten national sovereignty and progresses stealthily in efforts to minimise national resistance to its expanding power projection through creating far-reaching trade corridors, by-passing strategic chokepoints and developing degrees of suzerainty through host states voluntarily entered debt. How evolving great power competition may curtail China's ambitions remains unclear. However, China has time.

NSR, through proximity, falls de-facto under the control of Russia, which has reinforced that claim by militarising the route. China having declared its "limitless friendship" with Russia in 2022, Russia invaded Ukraine. It is disputably assumed that China was not expecting this invasion, just as it is noted that China has profited from the diversion of Russian discounted gas and other hydrocarbons from the sanctioned European market. Likewise, it is noted that a successful Russian invasion may have offered a precedent for China's plans regarding Taiwan.

The seven western members of Arctic Council "paused" activities. US, already awakening to the increasing engagement of China in the Arctic, has driven the strengthening of NATO which has now accepted membership of Finland and Sweden in response to the invasion of Ukraine. US is gradually scaling-up its capacity in the Arctic to address what it sees as China's incursion into its somewhat neglected backyard. China, conscious of the new assertiveness of NATO, and Europe, is hedging its bets regarding the invasion. Despite that "limitless friendship," Xi has suggested that he could mediate as regards the invasion of Ukraine.

China still sees the potential of its engagement in the Arctic, despite the "pause" in the rules-based order and is intent on staying engaged. It remains cognisant of the unpredictability of timelines for the full opening of the NSR, the dominance of Russia there; is exploiting its relationship with Russia and having restated its 2018 Arctic policy at the 20th CCP Congress, is biding its time. China is playing the long game.

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# China in the Arctic Governance System in the New Cold War Era

*Liisa Kauppila and Sanna Kopra*

## Introduction

Since February 2022, many observers have ominously declared the world to have entered the era of a New Cold War. As an ideological battle between authoritarianism and liberal democracy, this phase of global politics is argued to have divided the international community into a Sino-Russian camp and the United States-led West. While Russia's illegal war against Ukraine and the flexing of its nuclear muscles has indeed fuelled this narrative, the rhetoric has been advanced in United States' policy circles at least since the Sino-US trade war began in 2018 (Smith, 2023, June 7). Although Chinese leaders have sought to thwart the narrative by firmly condemning any type of bloc confrontation (e.g., Reuters, 2023, September 6), their "no limits" partnership with Russia (President of Russia, 2022) and "neutral" position on the war have clearly contributed to the construction of the Cold War dichotomy. Therefore,

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although the idea of a New Cold War is clearly dangerous and possibly a self-fulfilling prophecy, the narrative seems to grow ever more influential and is increasingly likely to shape the dynamic of great power and international relations for now.

Undoubtedly, the New Cold War dichotomy also affects the Arctic governance system, a set of Arctic and non-Arctic states, nonstate actors, intergovernmental organisations and companies interconnected in distinct ways to discuss and mould regional affairs (see Wilson Rowe, 2018).[1] Clearly, the halting of the work of the leading regional forum Arctic Council due to the break-up between Russia and the "Arctic West" is the most important implication of this changing dynamic. Yet, given China's strong regional foothold, also the increasingly troubled Sino-Western and tightening Sino-Russian relations will inevitably affect the management of Arctic affairs. In fact, it is not an exaggeration to argue that—along with the Russo-Western relations—Sino-Western and Sino-Russo relations constitute some of the key *leverage points* of the Arctic governance system: spots in a system in which minor shifts in one element may transform everything else (Meadows, 1993/2009).

In this chapter, we scrutinise the role of China in the post-February 2022 Arctic governance system. More specifically, we focus on the *material and ideational inputs*—investments/capital, knowledge, political conditions, normative considerations and so on—that China continues to bring into the system under the circumstances of the new-found great power rivalry and we analyse how they are transformed into *outputs,* regional practices, norms and standards, defining how things are managed in the Arctic of the New Cold War era. We divide our analysis into three core dimensions of the Arctic governance system—environmental, economic, and military—and shed light on China's influence in related processes now and in the short- to medium-term future.

The structure of this chapter is as follows. We begin with a short description of China's entrance to the Arctic governance system to illuminate the pre-February 2022 dynamic in the region. We then proceed onto the actual analysis of China's influence in three subsystems of Arctic regional governance in the post-February 2022 environment. Finally, we conclude by discussing how China's policy choices in the Arctic, especially

[1] A system is a "a set of things—people, cells, molecules, or whatever—interconnected in such a way that they produce their own pattern of behaviour over time" (Meadows, 1993/2009).

concerning its relations with Russia and the Arctic West, may shape the future of the Arctic governance system in the New Cold Era and beyond.

## China in the Arctic Governance System Before February 2022

During the Cold War, the Arctic was governed through very few multilateral arrangements and treaties, most notably the Svalbard Treaty (1920), the Polar Bear Convention (1973), and the United Nations Convention on the Law of the Sea (UNCLOS) (1982) (Wilson Rowe, 2018, p. 28). When Russo-American relations gradually thawed, and Mikhail Gorbachev gave his famous speech in Murmansk in 1987, Arctic governance began to evolve into a more comprehensive system. In 1991, Finland organised the first Arctic ministerial meeting, where the eight Arctic states[2] adopted a multilateral, non-binding Arctic Environmental Protection Strategy that brought environmental aspects into the heart of the Arctic governance system. Most importantly, the 1991 meeting started the 'Rovaniemi Process' that in 1996 led to the establishment of the Arctic Council (AC), an intergovernmental regional platform that also recognises Indigenous peoples' organisations as key actors of regional governance (e.g., Graszyk & Koivurova, 2015). During these years, China's role was limited to providing input by participating in international Arctic science cooperation—and being one of the original signatories of the Svalbard Treaty.

Since then, both international organisations and the AC have played a key role in processes that mould regional practices and standards in the Arctic. The discussion and decision-making at such institutions as the United Nations (UN) and the International Maritime Organisation (IMO) have given an equal standing for both Arctic and non-Arctic countries, including China. This means that all UN and IMO member states have had the chance to negotiate and vote for such highly Arctic-relevant conventions as the UN Declaration on the Rights of Indigenous Peoples (2007), and, more recently, the International Code for Ships Operating in Polar Waters (Polar Code) (2017) and the Agreement on the Conservation and Sustainable Use of Marine Biological Diversity of

[2] Canada, Denmark (Greenland), Finland, Iceland, Norway, Russia, the United States and Sweden.

Areas Beyond National Jurisdiction (BBNJ Agreement) (2023). Although China's input was not significant, for example, in the drafting of the Polar Code (Eiterjord, 2020, May 26), including global institutions in the Arctic governance system is generally favoured by many Chinese experts who support China's vision of the global Arctic (e.g., Guo & Yao, 2015). For the same reasons, China welcomed the invitation of the five littoral Arctic states to participate in the negotiations on the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (The Arctic Fisheries Agreement). The treaty was adopted in 2018 and entered into force in May 2021 after China had ratified it.

The decision-making power in the AC, in turn, has been limited to the Arctic states, although Permanent Participants and observers can also observe and comment on these processes. China first entered the platform in 2008 as an ad hoc observer and then, together with other East Asian countries Japan, South Korea and Singapore, as an observer in the Kiruna Ministerial meeting in 2013. This gave Chinese scientists a chance to provide input to the Council's working groups and task forces in producing scientific assessments that serve regional decision-making on issues related to sustainable development and environmental protection. Although China's input in these processes has been limited (Smieszek et al., 2020), many Chinese researchers have underlined the discrepancy between the AC's exclusive nature and the global nature of the climatic changes faced by the region. More specifically, it has been argued that the impacts of the melting sea ice and thawing permafrost extend all the way to China, making it necessary for the country to sit at all those tables where regional affairs are negotiated (e.g., Yang et al., 2015). These voices are further strengthened by general arguments underlining China's great power status, which makes it necessary for the country to shoulder responsibility for global challenges (State Council Information Office of the PRC, 2023).

In the 2010s, the Arctic governance system also began to be concerned with discussing and negotiating sustainable ways of harmonising countries' economic interests in the region. Clearly, this shift was motivated by the findings of the US Geological Survey (2008), which underlined the Arctic's potential as a "last frontier" for fossil fuels in the Circum-Arctic resource appraisal of undiscovered oil and gas resources. Moreover, a series of successful test sailings on the Arctic sea routes, the launching of a pioneering Arctic liquefied natural gas (LNG) project in Russia's Yamal (Novatek, 2014, 2016), and the decision to start another one in the

Gydan Peninsula (Humpert, 2019a, April 29) enhanced business actors' confidence in the region's potential. The establishment of the Arctic Economic Council (AEC) in 2015 illustrated this shift on an institutional level.

Overall, the above-mentioned activities enhanced the ability of many Chinese actors to indirectly mould regional economic practices and norms in a direction that favours their own interests. Investments and engagement in economic projects gave the participating Chinese companies, investment vehicles and banks granting the loans an instrumental role in deciding what types of projects can be carried out in the Arctic—and under which conditions they can be realised (see Pami & Jaakkola, 2015). In a similar vein, although the Chinese state clearly does not regulate economic activities in the Arctic itself, the Chinese government's policies, guidelines, and recommendations guide Chinese companies' overseas economic activities and, therefore, count as input in processes that shape the regional business norms in the Arctic.

In January 2018, China took a major step in providing normative input to the Arctic governance system by publishing its first Arctic strategy document that specified Chinese principles, policies and practices for Arctic cooperation. Although the country's decision to underline the principles of "respect, cooperation, win-win result and sustainability" (尊重, 合作, 双赢, 可持续) did not bring anything surprising to the regional discussion, the strategy also underlined China's 'near-Arctic state' status (State Council Information Office of the People's Republic of China, 2018). In this way, China made a powerful statement to advocate the global nature of the Arctic challenges and underlined its standing in the regional governance system—as a country with a legitimate right to mould the regional norms and practices. Especially the United States has criticised this move, most notably by former Secretary of State Mike Pompeo in his unusually outspoken Rovaniemi Ministerial Meeting speech (2018) that already echoed the spirit of the New Cold War (Pompeo, 2019).

## China in the Arctic Governance System After February 2022

Although the New Cold War narrative had influenced global politics and the regional dynamic of the High North for quite some time, February 2022 marked a major watershed in the Arctic governance

system. Russia's massive attack on Ukraine in February 2022 was clearly the most crucial single event that alone almost immediately hampered multilateral discussion on regional affairs. However, China's refusal to condemn Russia's war, and more still, siding with the country in a joint declaration published just weeks before the attack (President of Russia, 2022) somewhat deepened the crisis: it gave Russia a partner whose economic leverage allows it to fight a lengthy war that will complicate Arctic regional collaboration for years to come. Moreover, China's continued collaboration with Russia also means that Russia has an alternative partner with whom to develop its Arctic areas and set up regional arrangements (see Edvardsen, 2023a). At the same time, China's strategy of balancing between Russia and the Arctic West has clearly damaged China's already deteriorating reputation among Western countries. This, in turn, further complicates those forms of Sino-Arctic West collaboration that have given China a chance to have a say in regional affairs.

In this section, we divide the post-February 2022 Arctic governance system into environmental, economic and military issues. We scrutinise Chinese material and ideational inputs to those processes that create regional practices and norms. In doing so, we focus on change and continuity and pay particular attention to power relations since they play a crucial role in defining how inputs transform into outputs in systems (Meadows, 1993/2009). In this way, we seek to demonstrate that, despite being an external state in geographical terms, China plays an increasingly influential role in the making of the Arctic governance system.

### *Environmental Governance*

Soon after Russia launched a massive attack on Ukraine in February 2022, the seven other Arctic states decided to pause their participation in the official meetings of the AC, which Russia chaired at that time. Although some work in the AC's working groups has continued since Norway's chairmanship began in May 2023, there are currently no significant regional forums where all Arctic states or China and other non-Arctic states could negotiate more ambitious environmental norms and practices for sustainable Arctic activities. Since these changes are not in China's interests, the Chinese government has expressed its willingness to support Norway in restoring the multilateral environmental dialogue under the Council's auspices (Pan in Edvardsen, 2023, April 28). At the same time, it has emphasised that the AC without Russia is not an idea supported

by China (Gao, 2022c). In that way, it has sought to make normative input that prevents a permanent fragmentation of the Arctic environmental governance system—something that resonates with many Western researchers' call to resume collaboration in terms of sharing data on the effects of climate change, for instance (e.g., Nuwer, 2023, October 11).

Due to the limited dialogue at the leading regional institution, the most important platforms for China to contribute to Arctic environmental governance are currently global arenas, especially the UN. Many, if not all, international treaties and negotiations that directly or indirectly shape environmental governance in the Arctic continue their work normally under the realities of the New Cold War. For example, as Russia has not violated the United Nations Framework Convention on Climate Change (UNFCCC), it can be expected to continue to take part in international negotiations on climate change. The same applies to China, and the two countries have also pledged to jointly "reaffirm their commitment" to the Convention and "to the goals, principles and provisions of the Paris Agreement" in their joint statement in February 2022 (President of Russia, 2022). Moreover, China has made efforts to provide leadership in international climate governance by, inter alia, increasing the ambition level of its climate policy, investing intensively in renewables and clean technology, and advancing South-South climate cooperation, especially in the field of adaptation (e.g., Qi & Dauvergne, 2022). In addition to investments in accelerating the global green transition (e.g. World Bank Group, 2022), China has provided normative input to global environmental governance by advancing the notion of great power climate responsibility and developing its own green imaginaries for global futures, such as the concept of ecological civilisation and a community with a shared future for mankind (Kopra, 2019). It is noteworthy that China has also contributed clear input to the processes that define how the Arctic Ocean is governed by being among the early signatories of the abovementioned BBNJ treaty. On the other hand, it has not made any input to international efforts to reduce black carbon—a state of affairs that bears great significance for the governance of the Arctic region.

Yet the rising tensions between the West and the East make international environmental cooperation increasingly troublesome, which clearly hampers both Chinese and American efforts to shape global norms and practices. In particular, the momentum for Sino-American great power leadership for climate change mitigation which emerged in the early 2010s quickly disappeared with the election of Donald Trump as the US

president in 2016 and the launch of the trade war between the United States and China in 2018. While climate change continues to be the most likely driver for Sino-American cooperation today, it is not (yet) considered a part of high politics. Hence, climate cooperation can be relatively easily sacrificed in case of political disputes over states' core interests, as demonstrated by China's cancellation of the US-China working group on methane emission reductions, clean electricity, circular economy and climate action in cities in response to the leader of the US house of representatives Nancy Pelosi's visit to Taiwan in summer 2022 (Lo, 2022). As the Taiwan question constitutes a core interest for China, any steps towards deepening ties between the United States and Taiwan can be expected to cut the relaunched Sino-American climate cooperation (cf. Ministry of Foreign Affairs of the People's Republic of China, 2022a; US Embassy & Consulates in China, 2023), creating hurdles for effective global and Arctic environmental governance.

In addition to global arenas, informal forums of Arctic environmental governance have enhanced their relative significance in the absence of collaboration at the AC. From the Chinese perspective, the most important of these "science meets politics and business platforms" is Iceland's annual Arctic Circle Assembly. In the 2022 and 2023 gatherings, representatives of Chinese institutions participated in five and eight sessions that touched upon issues of Arctic environmental governance. The exact topics varied from the protection of the Arctic Ocean to the abovementioned Arctic Fisheries Agreement. Since Russian participation in these events has been made difficult for the time being, the Chinese decision to take part in the discussions indicates the country's inclination to accept, but not advocate, an Arctic governance system in which it can balance between two clusters of states—at least for the time being.

Furthermore, bilateral and minilateral science meets politics and business platforms continue to offer China a chance to make inputs in processes that shape regional environmental practices. The China-Nordic Research Center, a network established by four Chinese and six Nordic universities and other research institutions in 2013, continues dialogue on environmental protection—and other aspects of Arctic governance—between Chinese and Nordic scholars. While the network's other activities have remained limited since the outbreak of the COVID-19 pandemic, it organised the 8th China-Nordic Arctic Cooperation Symposium in Guangzhou in December 2023 under the theme of sustainable development. The symposium was not open to Russian institutions, although

the Chinese organisers could have maintained the symposium's traditional open-door policy that has attracted several Russian stakeholders each year. This decision further indicates an understanding of the necessity to accept a temporarily divided Arctic—if China wants to continue shaping regional norms and practices through dialogue.

With Russia, China is eager to enhance bilateral Arctic cooperation and advance environmental affairs with and without the AC, as underlined by the Arctic representatives of both countries in September 2023 (Edvardsen, 2023a). The same message was also conveyed by Presidents Xi and Putin in their February 2022 joint declaration, as they expressed their willingness to "continue consistently intensifying practical cooperation for the sustainable development of the Arctic" (President of Russia, 2022). In practice, the countries have focused on initiating scientific collaboration that supports the moulding of regional environmental practices. For example, a Russian-Asian consortium for Arctic research was established in 2022 to develop joint projects on sustainable development (Edvardsen, 2023b). Moreover, the two countries are also preparing an agreement on research cooperation at the planned Snezhinka International Arctic Station on the Yamal Peninsula focusing on climate change, biotechnology, artificial intelligence (AI)-driven solutions and other environmentally friendly materials, technologies, and systems for smart communities in Russia's Yamal-Nenets Autonomous Area (Investment Portal of the Arctic Zone of the Russian Federation, 2023).

### *Economic Governance*

In the post-February 2022 environment, the most sudden input shaping the Arctic economic governance system has been the setting up of economic sanctions against Russia. The purpose of these penalties is to "weaken Russia's ability to finance the war and specifically target the political, military and economic elite responsible for the invasion" (Council of the European Union, 2023), and a wide front of Western and East Asian countries have issued their own lists of restrictive measures. These include, for instance, the Arctic Seven, Japan and South Korea. Although Novatek, the independent Russian energy corporation that holds a majority stake in the Yamal LNG and Arctic LNG 2 projects, or its frontman Leonid Mikhelson, have not been sanctioned per se (as of November 2023), the EU sanction measures have since April 2022 included the provision

of materials and technologies used in the production of LNG in Russia (European Commission, 2023). The US sanctions list from September 2023 also covers a wide range of Novatek's subsidiaries, suppliers and operators (Office of Foreign Assets Control, 2023), and the EU and US penalties on Russian banks have made any financial transactions difficult since the beginning of the war (European Commission, 2023; Office of Foreign Assets Control, 2023).

Although the exits of some companies from the Russian Arctic have been delayed, and some Western stakeholders bound by penalties continue their project operations on a limited scope (e.g., Baruch et al., 2023, October 19), the sanctions scheme has clearly been a Western attempt to define the norms and conditions under which economic projects can be realised in the Arctic. However, given that China argues it "opposes illegal unilateral sanctions" (Permanent Mission of the PRC to the UN, 2022) and no secondary sanctions—penalties targeting those companies that collaborate with the sanctioned parties—have so far been set, despite Ukrainian requests (Abnett et al., 2023, April 13), Chinese companies have been able to continue their operations in Yamal LNG and the Arctic LNG 2 projects. Most notably, they have continued to supply the projects with capital and crucial components without which the Arctic LNG 2 Project would have stalled (Humpert, 2023, May 22). In this way, the Chinese government and the Chinese companies have been in a crucial position to define the political conditions under which international Arctic economic projects may operate.

Representatives of the Chinese government have also provided parallel normative input to the Arctic economic governance at the above-mentioned informal science meets business and politics forums. For example, at the Arctic Circle Assembly 2022, the Chinese delegation repeatedly and quite strikingly emphasised those forms of Russo-Western Arctic economic collaboration that were not halted because of the war (e.g., Gao, 2022a, 2022b). Although the argument was clearly at odds with the fact that very few modes of collaboration had continued, the message to the audience was clear: China's desire is to return to Arctic economic and science collaboration that engages all major stakeholders, including Russia. To some extent, and although the Arctic West community clearly condemns Russia's war, such inputs can be powerful since the sanctions result not only in major economic losses but also in less sustainable business practices, as world-leading technologies and partners are no longer available.

Although Arctic institutional arrangements have been more significant in shaping environmental practices than regional business norms, it is worth noting that the AEC has been able to continue its workings despite Russia's war and Western sanctions on Russia by making some changes in the status of its Russian members (AEC, 2022a, 2022b). However, since no Chinese entity is part of the Council, the country cannot currently provide input for harmonising best business practices in the region through this platform. Given that the AEC does accept non-Arctic Asian members, as the Korea Shipowners Association's case illustrates, this state of affairs may also change in the future. Similarly, China can also seek to influence those global arenas that shape Arctic business practices. For instance, in 2015, the World Economic Forum developed the Arctic Investment Protocol, guidelines for responsible investment in the Arctic (WEF, 2015). Furthermore, the Global Agenda Council on the Arctic, which was the working group responsible for the report, included a Chinese representative from China Ocean Shipping Group Co (COSCO). Yet another channel for China to advance its views on Arctic economic governance is to rely on such multilateral authoritarian groupings as the BRICS (Brazil, India, China, and South Africa) countries—especially since Russia has already expressed its willingness to extend its collaboration with these partners to the sphere of Arctic science (TASS, 2023, April 6).

As explained above, also the Chinese government's policies and guidelines regarding overseas investments can be considered input to the processes shaping regional business practices. In addition to the above-mentioned policy on economic sanctions, Xi Jinping's flagship project the Belt and Road Initiative (BRI) offers an illustrative example of this. Given that many Arctic investments fall within the scope of the BRI, the conditions and norms set for the initiative are naturally diffused to the Arctic, too. Over the past few years, these have centred around environmental standards (e.g., Ministry of Ecology & Environment of the PRC, 2017a, 2017b) and public health guidelines, which were introduced to the BRI after the outbreak of the coronavirus pandemic in the early 2020s (see Kopra & Nojonen, 2020).

In addition to the inputs that China has been able to contribute to the New Cold War Arctic economic governance, it is also worth mentioning those great power rivalry-related changes that potentially limit Chinese companies' ability to access the region—and hence restrict the indirect

role of Chinese actors in defining regional business practices. Most importantly, the late 2010s and the early 2020s have witnessed a clear wave of state intervention in the investment policies of most Arctic countries. The United States took the lead in this development by issuing the Foreign Investment Risk Review Modernization Act (FIRRMA), which gave the state more tools to block deals based on national security. In contrast, the EU's FDI screening framework (EU, 2019/452) started the process of amending or reestablishing national FDI controls in such Nordic Arctic states as Finland, Denmark and Sweden. In addition, Canada and Norway have taken steps to strengthen the state's control over certain types of investments. Although the real impact of these legislative changes varies significantly across the Arctic and even among highly similar socio-economic contexts, these changes are generally making it more or less complicated for Chinese investors to enter the Arctic markets—even if it is only because the markets are becoming more unpredictable rather than clearly more difficult to access (Kauppila & Cappelin, 2023).

Perhaps more restrictive than legislative changes are the worsening attitudes towards Chinese investments. While this shift in public opinion has been a trend across the Western Arctic at least since the trade war started in 2018, Russia's attack on Ukraine has clearly deepened general mistrust in authoritarian states, contributed to the riskification of economic interdependence and raised awareness of dependency on China (Mattlin et al., 2023). Although these perceptions have clearly guided the above-mentioned investment policies in some countries, they matter on a more general level as well: companies, politicians and countries may be less willing to accept Chinese investments since they expose them to extensive media scrutiny. An illustrative example comes from Finland, where two major Chinese battery investments are planned and debated intensively, both for the investments' pros and cons (e.g., Koivisto, 2023).

### *Military Governance*

The most dramatic change in the post-February 2022 Arctic governance system is the enhancement of interconnections between military actors. While it is self-evident that military issues are not discussed or negotiated between all key actors of the New Cold War Arctic, new multi- and bilateral partnerships have clearly been formed and existing ones strengthened. Perhaps most importantly, Finland and Sweden abandoned their traditional neutral foreign policy approach and applied for membership

in the North Atlantic Military Organization (NATO). Finland became a member of the organisation in the spring of 2023, and Sweden joined the NATO in March 2024. China's input into this process has been normative: it has underlined its in-principle opposition to NATO enlargement (e.g., Ministry of Foreign Affairs of the People's Republic of China, 2022b; Global Times, 2023, April 10).

Given that seven out of eight Arctic countries are now NATO members, the organisation's influence in the Arctic governance system will be enhanced substantially. Although the formulation of NATO's Arctic policy guidelines has been difficult due to the diverse interests of its members, the High North has strategic significance for the alliance (NATO, 2022, p. 4), and the organisation is currently making material inputs into the system by building up its regional capabilities (e.g., Buchanan, 2022). Since NATO views not only Russia but also China as a security challenge—and clusters these two in the same camp—the Arctic expansion of the alliance certainly diminishes China's room for manoeuvre at a regional level, leaving Russia as the only plausible partner for Beijing's Arctic military and paramilitary aspirations (e.g., Puranen & Kopra, 2023).

Despite their historic distrust, China and Russia have organised joint naval exercises since 2012 (e.g., Paul, 2019) and have continued to do so after the former attacked Ukraine in February 2022 (e.g., Moscow Times, 2023, July 23). Similarly to the consolidation of NATO's regional role, such an input into the system contributes to the normalisation of the presence of foreign armies in the territories of sovereign Arctic states. Moreover, it raises concerns about China's future military role in the High North. These speculations have also been fuelled by the landmark memorandum of understanding on strengthening maritime law enforcement cooperation signed by the Federal Security Service of Russia and the Chinese Coast Guard in the spring of 2023 (Nilsen, 2023, April 25). Russia also invited a Chinese delegation to participate as an observer in Arctic Patrol 2023, a large-scale exercise in the Barents Sea (Ibid.).

In addition to joint military exercises with Russia, China's inputs into the Arctic military governance remain limited—despite a consensus among Chinese security experts that the Arctic region is strategically important to the party-state (Puranen & Kopra, 2023). Currently, China's building of Arctic knowledge and capabilities to operate in harsh polar conditions contributes to the normalisation of external actors' buildup in the High North, and investments in science and technology are crucial

inputs into these processes. Especially important in this regard are China's attempts to expand satellite coverage in the Arctic and strengthen underwater communications from BeiDou, China's own navigation system, to its submarine fleet (Humpert, 2019b, September 4). Moreover, China is developing a series of heavy icebreakers that will reduce its dependence on the assistance provided by the Russian icebreakers (Chinese Ministry of Transport, 2021). Although all these developments are also relevant for expanding China's scientific and economic activities, various security officials from the Arctic West have emphasised the risks of these dual-use technologies (e.g., Finnish Security & Intelligence Service, 2020; Office of the Under Secretary of Defense for Policy, 2019; Swedish Security Service, 2020). These developments inevitably contribute to China threat theories and shape the Arctic governance system by tightening the Arctic West bloc and leaving less room for new forms of Sino-West Arctic cooperation on sustainable economy and environmental protection.

Due to the intensifying great power rivalry, new types of inputs into the Arctic military governance have also become more common. Since 2015, Russia has applied an increasing number of coercive hybrid actions against the Arctic West, especially on the Finnish-Russian and Norwegian-Russian borders (Mikkola et al., 2023, p. 7). Similarly, speculations about potential Chinese hybrid-influencing operations in the Arctic have increased over the past years. In October 2023, Finland's National Bureau of Investigation announced that based on evidence and data, Newnew Polar Bear, a Chinese vessel, is believed to have caused the damage to the Baltic Connector, a major underwater gas pipeline linking NATO states Finland and Estonia (National Bureau of Investigation, 2023, October 24). While it is unlikely that the Chinese government would orchestrate such an input into the system, the government's unwillingness to clarify the case publicly certainly damages China's image as a benevolent regional stakeholder in the eyes of the Arctic West, making regional cooperation increasingly troublesome.

## Conclusion: Future Trajectories

The post-February 2022 Arctic governance system looks very different from the times when the Arctic was viewed as an exceptional "zone of peace" in the international system. Although Russia's war of aggression has not spread into the Arctic, it has resulted in various material and normative inputs—sanctions, military buildup and so on—that shape

the system's dynamic radically. Similarly, although the Sino-US rivalry is perhaps less visible in the Arctic than in some other regions, related global events and responses—such as investment screening in the Nordic countries—inevitably glide into processes that generate regional norms and regulations. As we have analysed in this chapter, China's material leverage and global role as a great power are making Chinese inputs in the processes of Arctic environmental, economic and military governance particularly influential. We have also demonstrated that this influence spreads through China's interactions with the Arctic West and Russia. Hence, changes in these relations—leverage points—are likely to continue to alter the dynamic of the entire system. Therefore, we conclude this chapter by considering how China's policy choices in the Arctic, especially concerning its relations with Russia and the Arctic West, may shape the future of the Arctic governance system in the New Cold Era and beyond.

Due to China's status as the world's largest carbon emitter, its input into Arctic environmental governance through the UN climate negotiations will continue to be decisive in the years to come. If China's relations with the United States improve, the two great powers could foster their great power leadership in global climate politics. In contrast, a tightening Sino-Russo relationship cannot be expected to provide a positive input into Arctic environmental governance because Russia has historically been very reluctant to increase the ambition level of its climate policy or environmental standards of (Arctic) economic practices. In the context of the AC, however, China's chances of providing normative and material input to Arctic environmental governance can be expected to remain limited, as new, broader criteria for the AC membership are unlikely to be introduced in the New Cold War Era or its immediate aftermath. Yet, China can shape regional dynamics by launching new scientific cooperation projects with both Russia and the Western Arctic. The impact of worsening Sino-Western and Sino-Russo relations would both, in turn, result in less Chinese input into the processes of Arctic environmental governance in either global or regional forums—which would clearly be harmful to the environment and the climate, especially if Chinese companies nevertheless continued to take part in regional business projects.

Given that China's leverage in the Arctic economic governance comes mainly from its investments, an improvement in the Sino-Arctic West relations could result in enhanced—or at least sustained—Chinese engagement in the European Arctic. In the most optimistic scenario, Chinese companies could also enter new projects in Canada and the

United States—at least in less sensitive industries. Moreover, under such circumstances, China could possibly begin to influence the making of regional business norms under the auspices of the AEC and be better positioned to do so in global economic institutions. If the relations worsen, the outcome would be quite the contrary, and there would be fewer interactions between Chinese and Western Arctic economic actors both regionally and globally. Consequently, China's overall footprint in regional economic practices would be less visible.

Tightening Sino-Russo relations, in turn, could allow China to invest more heavily in the Russian Arctic, giving Chinese stakeholders a more substantial role over the principles and regulations of Arctic business projects in the fields of energy and transport. Yet there would be limits to this development unless the Western countries also lifted their sanctions on Russia. Despite China's enhanced self-sufficiency in advanced technologies, China alone cannot yet provide the needed knowledge and equipment for new LNG projects and shipping schemes, for instance. Worsening Sino-Russo relations, in contrast, would significantly diminish China's ability to make material inputs into the Arctic economic governance, as the investment prospects offered by the largest Arctic country would be difficult to compensate elsewhere in the High North. However, this could enhance levels of normative input: China's decision to withdraw from Russian energy projects would redefine the political conditions under which Arctic economic projects could be operated, as China would no longer save Russia from the effects of the Western sanctions.

While China's role in the Arctic military governance has so far been relatively limited, the party-state's future inputs can be expected to be most critical for the future of the entire Arctic governance system. If China chooses to increase its military cooperation with Russia, the Arctic governance system's division into two distinct entities will probably intensify. This would speed up rearmament in the Circumpolar North and close the door to resuming environmental and economic collaboration under the AC and beyond. The spillover effects on international peace and security would be very negative. As the risk of a military conflict between China and the United States would grow in such a scenario, China would have a strong incentive to provide further material input to Arctic military governance via developing its submarine fleet and nuclear deterrent, for instance—actions that would speed up the vicious cycle of a global arms race. In contrast, if China's relationship with the United States improved, its interest in contributing to Arctic military governance could decrease.

Finally, the above-mentioned future trajectories underline that the current status quo—a scattered Arctic governance system with two sets of interconnected like-minded actors—is not written in the stars. In contrast, Arctic governance is an open system that can renew itself through novel inputs. These triggers may well emerge regionally or globally, and clearly, China playing the part of a middleman constitutes a possibility. Such a development would, however, necessitate China adopting a leadership role that it is only very gradually learning to take—and which is both increasingly hard and welcomed in the New Cold War world.

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# A Shelf Approval Deconfliction Mechanism for Activities on the Overlapping Extended Continental Shelf Entitlements in the Central Arctic Ocean

*Ekaterina Antsygina and Cornell Overfield*

## The Regime of the Continental Shelf under the United Nations Convention on the Law of the Sea and Problems Created by the Doctrine of Inherent Rights

The geological continental shelf refers to the relatively shallow submerged prolongation of the landmass. A "broad" continental shelf can extend a considerable distance from shore (continental shelves beyond 200 M are referred to as extended continental shelves (ECS)), compared to continental shelves that drop off into the deep sea relatively quickly. Common

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causes of a broad continental shelf include major river mouths and submarine features. In the Arctic, the many north-flowing rivers of Eurasia and North America have contributed to the formation of broad shelves under the Arctic Ocean. Submarine features, particularly the Lomonosov and Alpha-Mendeleev Ridge Complex, also play a prominent role in extending Arctic continental shelf entitlements.

The United Nations Convention on the Law of the Sea (UNCLOS)[1] recognizes exclusive coastal states rights and jurisdiction with respect to the legal continental shelf (United Nations, 1982). The legal continental shelf is defined in Article 76, with an option of establishing the outer limits at the distance of 200 M (regardless of the presence of a geological continental shelf), or beyond that limit (if a state has a wide continental margin) with the application of complex formulae and constraints depending on the distance from the foot of the slope, water depth, soil depth, and distance from shore. The coastal state's rights are primarily economic. A coastal state enjoys exclusive rights to exploit and explore all the resources of the continental shelf, as well as the exclusive right to authorize and regulate drilling on the continental shelf for all purposes, the exclusive right to construct and authorize construction of artificial platforms and islands, the right to regulate, authorize and conduct marine scientific research, and the right to give consent for the delineation of cable routes, and to control dumping. The right of the coastal State to exploit resources of the continental shelf corresponds to the obligation to protect the marine environment.

Because the scientific criteria in Article 76 are complex, the outer limits of the continental shelf beyond 200 M are harder to determine than those of the distance-based maritime zones. This creates indeterminacy in ocean governance as a coastal state and other actors might have different views on whether an area in question is a continental shelf or seabed and subsoil beyond the limits of national jurisdiction (the Area). A coastal state's rights may exist, but their extent is difficult to ascertain using charts since the determination of the ECS limits requires highly technical data and

[1] United Nations Convention on the Law of the Sea (Montego Bay, 10 December 1982, in force 16 November 1994) 1833 UNTS 396.

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the application of formulae and constraints of Article 76. Thus, coastal States-parties to UNCLOS must determine the outer limits of their continental shelves beyond 200 M (if there are any) and submit scientific data supporting the limits to the Commission on the Limits of the Continental Shelf (CLCS) to identify the limit of national jurisdiction. This process is known as delineation, which is the unilateral process of establishing the continental shelf's outer limits. The obligation to delineate in accordance with Article 76 (paras. 4–8) arises only if a State Party to UNCLOS intends to establish final and binding outer limits of the continental shelf that extends beyond 200 nautical miles. Within 200 M, a coastal state unilaterally establishes outer limits based on the distance from the coast.

The CLCS established by UNCLOS has an important but nuanced role in ascertaining the extent of the ECS' entitlements. The CLCS considers data submitted by a coastal state against the criteria set out in Article 76 to make a recommendation on the outer limits. The CLCS' findings are a recommendation, not a binding act (Article 76 (8) of UNCLOS). It remains up to the coastal state to define the outer limits of its continental shelf. Conforming with the CLCS recommendation, however, makes the limits final and binding on all States Parties to UNCLOS. As Proelss (2009) concluded, the establishment of the ECS outer limits in contradiction to the CLCS recommendations affects only the relationship between the CLCS and a coastal State. The CLCS does not have the power to contest coastal States' outer limits, so the primary consequence of the deviation from the recommendations is not being able to establish final and binding outer limits (and thus not being able to get international recognition to the extent of its ECS). Until now, States that received unfavorable recommendations have elected to resubmit data to the CLCS. Examples include Russia, Barbados, Cook Islands, Argentina, and Iceland. Such international recognition of States' jurisdiction over the ECS and solidification of their sovereign rights beyond 200 M is the main objective of States involved in the delineation (Government of Canada, n.d.).

At its current pace of maximum of 4 recommendations a year, and considering the COVID-19 pandemic, the remaining submissions will likely take 20 years to process. Considering that since 2001 the CLCS issued 36 recommendations and that 66 submissions are pending in the queue (and states can still submit new information), recent submissions, such as Canada's, will be considered in 10 years in the best possible scenario. Most likely, it will take 18–20 years to consider all the

submissions present in the queue today (Antsygina, 2022). Even then some submissions may remain unconsidered because the CLCS will not examine submissions contested by a concerned state if there is a dispute (Para. 5 (a) of Annex I to the CLCS Rules of Procedure) (United Nations, 2008). The CLCS can consider submissions when several states' submissions cover the same area, provided all states do not object to such a consideration but the CLCS will not delimit any overlap. Final delimitation is left to the coastal states with the overlapping entitlements. Delimitation is the process of establishing lines separating the spatial ambit of coastal State jurisdiction over maritime space where the legal title overlaps with that of another State (Tanaka, 2006).

Even before the CLCS issues a recommendation (or before a coastal state makes a submission to the CLCS), coastal states enjoy jurisdiction over continental shelves stemming from the doctrine of inherent rights that is a part of customary law (International Court of Justice, 1969). Under this doctrine (which equally applies to ECS), rights over the continental shelf exist *ipso facto* and *ab initio* and do not require any occupation, express proclamation, or even the deposit of charts showing the shelf's outer limits. Article 77 (3) of UNCLOS explicitly mentions that no proclamation is required to assert rights over the continental shelf—in contrast to other maritime zones.[2] Although Article 84 of UNCLOS provides that states must give due publicity to charts or lists of geographical coordinates of the outer limits of their continental shelves, failure to do so would not preclude a state from enjoying its rights over the continental shelf. Yet, such a failure would be a violation of an obligation to make known the exact limits of its jurisdiction.

Judicial decisions of domestic courts also support the right of a coastal State to exercise jurisdiction over the ECS pending delineation of the outer limits. In *R v. Perry* (Provincial Court of Newfoundland & Labrador, 2003), the Provincial Court of Newfoundland and Labrador considered the case of Captain Michael Perry charged with a violation of s. 4 (2) of Canada's Coastal Fisheries Protection Act, R.S.C. 1985, c. 33, for fishing or preparing to fish in a portion of the continental shelf beyond the limits of Canadian fisheries waters for a sedentary species of fish (sedentary species belong to the resources of the continental shelf and hence are within the exclusive jurisdiction of the coastal state). At the time of the

[2] Proelss argues that, unlike the continental shelf, states should claim the EEZ to enjoy jurisdiction over it, based on UNCLOS negotiating history and state practice.

offence, Canada had not published the outer limits of its continental shelf. As the Court noted, "…the exclusive economic zone is relatively easy to discern. It was marked on all the maps tendered in evidence before the court. The question that is more troubling is the interpretation of the definition of the continental shelf and the effect of Canada's claim to it as against the world" (p. 9). It further concludes that the Oceans Act establishes the operative definition of the "continental shelf" as the seabed and subsoil of the submarine areas of Canada which extend beyond the territorial sea, and which form the natural prolongation of the land territory of Canada. The Court did not consider the extent of the continental shelf, it rather stated that this would only be necessary if the Court was forced to consider whether the accused was fishing at or near the boundary of the continental shelf, which was not the case since the accused was nowhere near the outer limit of the Canadian shelf. Hence, Arctic States with pending CLCS submissions can already exercise sovereign rights over the continental shelf independently of the delineation procedure. They have concurrent jurisdiction and any activities violating these sovereign rights would be and have already been deemed illegal.

Until CLCS recommendations are issued, and outer limits are established by a coastal state on the basis of these recommendations, areas included in the CLCS submission are to be treated as ECS according to the doctrine of inherent rights. This can potentially lead to the exploitation of the resources of the Area by coastal states asserting excessive ECS outer limits. A concerned state party to UNCLOS may contest the status of the areas included in the submission to the CLCS based on its interest in the Area.[3] The fact that the outer limits were established in violation of formulae and constraints of Article 76 can be demonstrated by expert opinions pending the issuing of the CLCS recommendations, but this might create a situation when an international tribunal would perform some functions of the CLCS. In order to avoid any discrepancy between the recommendations by the CLCS and its ruling, international tribunals would prefer to wait for the recommendations, or, at least, not to make conclusive decisions on the outer limits of the shelf (Antsygina, 2022).

[3] The Area refers to the deep ocean floor beyond national jurisdiction that cannot be appropriated. The Area and its resources are considered the common heritage of mankind under UNCLOS Article 136.

See also *Delimitation of the Maritime Boundary in the Indian Ocean (Mauritius/Maldives)*, Judgment, ITLOS Reports 2022–2023, to be published (International Tribunal for the Law of the Sea, 2023.

Hence, there might be problems with challenging the excessive ECS claims of coastal States pending the CLCS recommendations. Even after a state receives an unfavorable recommendation, it can resubmit data to the CLCS in order to convince the Commission in its position thus prolonging the situation when certain areas are considered as its ECS. In the latter scenario, however, courts might feel more comfortable to conclude on the violation of Article 76 since their position would align with the CLCS recommendations.

## Extended Continental Shelves in the Central Arctic Ocean: Domestic Regulation by the Arctic Coastal States

In the Arctic Ocean, all five coastal states appear to be entitled to a continental shelf that extends beyond 200 M, and all but the United States have made submissions to the CLCS (discussed below). Each of the Arctic coastal states has laws and regulations that stake jurisdiction and governance over these entitlements.

The United States has asserted jurisdiction over its continental shelf since 1945. The exclusive right of the United States to utilize and conserve natural resources of the shelf was asserted in the Truman Proclamation long before UNCLOS was adopted (United States, 1945). Current provisions can be found in Title 43, Chapter 29 of the US Code, which defines the continental shelf to be "all submerged lands lying seaward and outside of the area of lands beneath navigable waters" that "appertain to the United States and are subject to its jurisdiction and control." The Chapter extends various US laws, including the US Constitution to the covered regions, and also sets out an exclusive right to consider, approve, and regulate exploration and development of marine resources on and in the shelf. In 2023, the United States announced limits of its continental shelf beyond 200 nautical miles in the Arctic, as well as six other regions (United States Department of State, 2023). In the Arctic, the US shelf hews to the 1990 US-Russia border in the west, and features considerable overlap with Canada's entitlement in the east. The northern-most portion of the US claim overlaps slightly with part

of the Russian entitlement across the Lomonosov Ridge (United States Department of State, 2023).

Prior to the 2023 announcement, the United States exercised jurisdiction over its extended continental shelf. US research guidelines described that the United States extended continental shelf by naming several submarine features-the Chukchi Shelf, Chukchi Borderland, Canada Basin, and Nautilus Basin (Government of the United States, n.d.).

In September 2020, the US president announced that the exercise of jurisdiction over marine scientific research will be conducted to the extent permitted under international law over its EEZ and its continental shelf (United States, 2020). Previously, the United States acknowledged that international law allowed coastal States to exercise jurisdiction over marine scientific research in their respective EEZ, but stated that the United States had chosen not to do so to the fullest extent permitted under international law in an effort to encourage scientific research (United States, 1983). This demonstrates that coastal states have started to consider enforcing their jurisdiction in the ocean to the maximum possible extent, that is, the outer limit of the ECS (Antsygina, 2021).

Canada has exercised jurisdiction over the continental shelf beyond 200 M before it has filed submissions to the CLCS and its laws imply acceptance of the doctrine of inherent rights, including to the Arctic shelf. The Oceans Act defines Canada's continental shelf as "the seabed and subsoil of the submarine areas…that extend beyond the territorial sea of Canada throughout the natural prolongation of the land territory of Canada" (para. 17(1)). The law specifically asserts jurisdiction over Canada's entitlement *ipso facto* and *ab initio.* Paragraph 17(2) notes that Canada's continental shelf extends to its maximum extent regardless of whether regulations are made under subparagraph 25(a)(iv) describing the continental shelf's outer limits. This means that the provisions of the Ocean Act on the rights to resources already apply to Canada's entire shelf-whether within or beyond the 200 M. Canada requires foreign researchers to seek consent from the Government of Canada at least 180 days prior to the commencement of research activities on the continental shelf, or vessel entry into waters under Canadian jurisdiction or sovereignty, whichever comes first (Government of Canada, n.d.).

Russia asserts jurisdiction over its continental shelf beyond 200 M. The Federal Law 187-FZ of 1995 defines Russia's continental shelf as extending "at a distance of 200 nautical miles from the baselines" or, if the continental margin extends beyond 200 M, to "the outer boundary

of the continental shelf coincides with the outer boundary of the submarine margin of the continent, determined in accordance with the norms of international law" (Article 1). On its continental shelf, Russia stakes its sovereign rights to exploit and explore the resources of the shelf, to authorize and regulate all drilling activity on the continental shelf, to construct and exercise jurisdiction over artificial islands, installations, and structures. Russian law also stakes jurisdiction over marine scientific research, marine protection, and preservation of the marine environment in connection with the exploration or exploration of the continental shelf, and pipe- and cable-laying (Article 5 of 187-FZ) (Russian Federation, 1995).

Denmark has also asserted jurisdiction over its entire continental shelf. The Continental Shelf Act currently in force claims exclusive exploration and exploitation rights to the living and non-living resources of the shelf, as well as rights to regulate construction of installations on the shelf and safety zones around them, it also requires a Danish permit for any pipe- or cable-laying. (Sec. 4). However, the law does not define the continental shelf or its limits (Danish Ministry of Climate, Energy and Utilities, 2018).

Norway has asserted rights and jurisdiction on its entire shelf. The 2021 Law on Norway's Continental Shelf defines Norway's shelf as extending "to the outer edge of the continental margin, but not less than 200 nautical miles from the baselines from which the width of the maritime territory is measured" (Art. 1). A series of other laws require foreign persons to obtain permission from Norwegian authorities to extract resources and conduct marine scientific research on the continental shelf as defined in the 2021 law. The 2021 law also requires the King to establish the outer limits based on CLCS recommendations. These provisions make it binding for Norway to follow the CLCS recommendations and eliminate the discretionary power of a coastal state to deviate from the recommendations. These changes are, most likely, connected to the fact that Norway already received CLCS recommendations that satisfied the interests of Norway (Norwegian Government, 2021).

## Submissions to the CLCS Regarding the Central Arctic Ocean

Based on the CLCS submissions to date, most of the Arctic seabed is subject to at least the jurisdiction of one coastal state over the continental shelf (Schofield & Potts, 2008).

Currently, Canada, Denmark, and Russia are in the process of delineation of their extended continental shelves. Almost the entire Arctic seabed consists of their ECS. As Fig. 1 demonstrates, there are overlaps of the areas included in the submissions of Canada, Denmark, and Russia on the Lomonosov Ridge, Amundsen, Podvodnikov, and Makarov Basins; Russian and Canadian continental shelves overlap on the Chukchi Borderland, Mendeleev Rise, and Alpha Ridge, Danish and Russian continental shelves overlap on the Gakkel Ridge, as well as the Nansen Basin. Despite the existing overlaps of the ECS entitlements, the States were able to agree not to object to each other's submissions, so the CLCS can proceed with the consideration of their submissions. The mutual support on the delineation demonstrates the cooperative approach of the Arctic States despite the presence of some disagreements due to the planting of the Russian flag near the North Pole and a sudden decision of the then-prime minister of Canada Harper to include the North Pole in the Canadian submission (Riddell-Dixon, 2017).

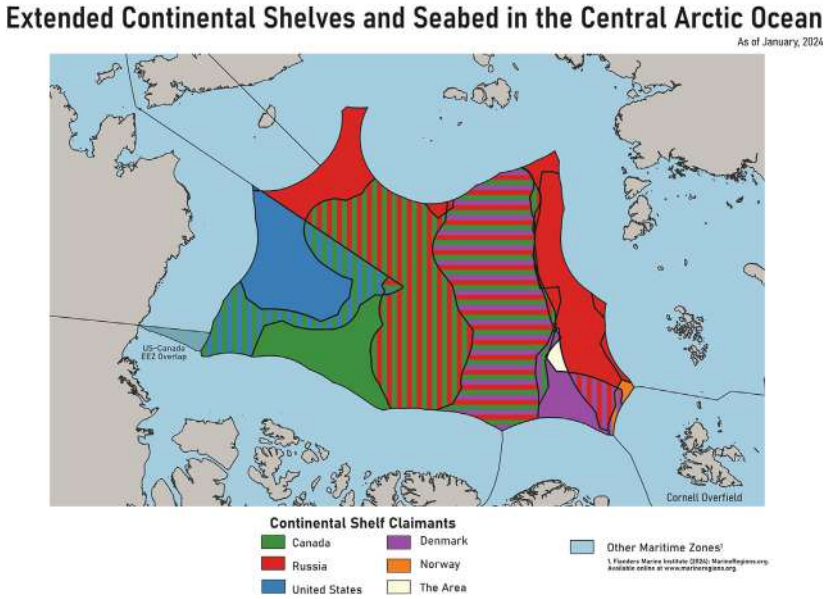


**Fig. 1** Areas of Overlapping ECSs between Canada, Denmark, and Russia (Author of the map: Cornell Overfield)

On February 6, 2023, Russia received favourable recommendations from the CLCS in respect to the Arctic Ocean. In short, the CLCS recommendations support the outer limits suggested by Russia in all areas except the Gakkel Ridge. According to the CLCS, the Lomonosov Ridge, Mendeleev-Alpha Rise, and Podvodnikov Basin are submarine elevations that are natural components of the Russian continental margin (para. 106), but the Gakkel Ridge is not morphologically connected with the Laptev Sea continental slope and cannot be classified as a submarine ridge according to article 76 (para. 73). The CLCS recommended Russia to make a new partial revised submission regarding the southern part of Amundsen Basin (para. 120), and Russia filed a revised submission concerning the southern part of Amundsen Basin on February 14, 2023, to which the CLCS gave favorable recommendations on 8 August 2023 (para. 31) (Commission on the Limits of the Continental Shelf, 2023a, 2023b). Russia also did not give up on the Gakkel Ridge, and on 30 October 2023 submitted to the CLCS new information on the limits of the ECS in the Area of the Gakkel Ridge thus adding approximately 300,000 sq km to its entitlement (Russian Federation, 2023) (Fig. 2)

This means that Russia follows the delineation procedure established by UNCLOS and prefers to establish final and binding outer limits based on the CLCS recommendations. This also means that there will be a small Area in the Arctic around the Amundsen Basin, and that International Seabed Authority governance and associated concerns about internationally-controlled deep sea mining and potential environmental damage in the Arctic might come into play in the future.

The CLCS has yet to issue recommendations of the Canadian and Danish submissions, but it is likely that these states will also receive generally favorable results. On 19 December 2022, Canada submitted an addendum to the CLCS expanding the area of its 2019 submission to maximize the overlap with Russia (and Denmark), most likely in order to shape delimitation negotiations or adjudications. Denmark made a submission to the CLCS in 2014 with respect to the Lomonosov Ridge, Gakkel Ridge, Amundsen Basin, Podvodnikov Basin, and Makarov Basin. Denmark did not include the Alpha-Mendeleev Ridge Complex and Chukchi Borderland in the submission, although the Executive Summary specifically mentions that they are morphologically continuous with the landmass of Greenland (but do not belong to submarine elevations as Denmark asserts), so Denmark can potentially file an addendum to its 2014 Submission in respect to the Alpha-Mendeleev Ridge Complex if it

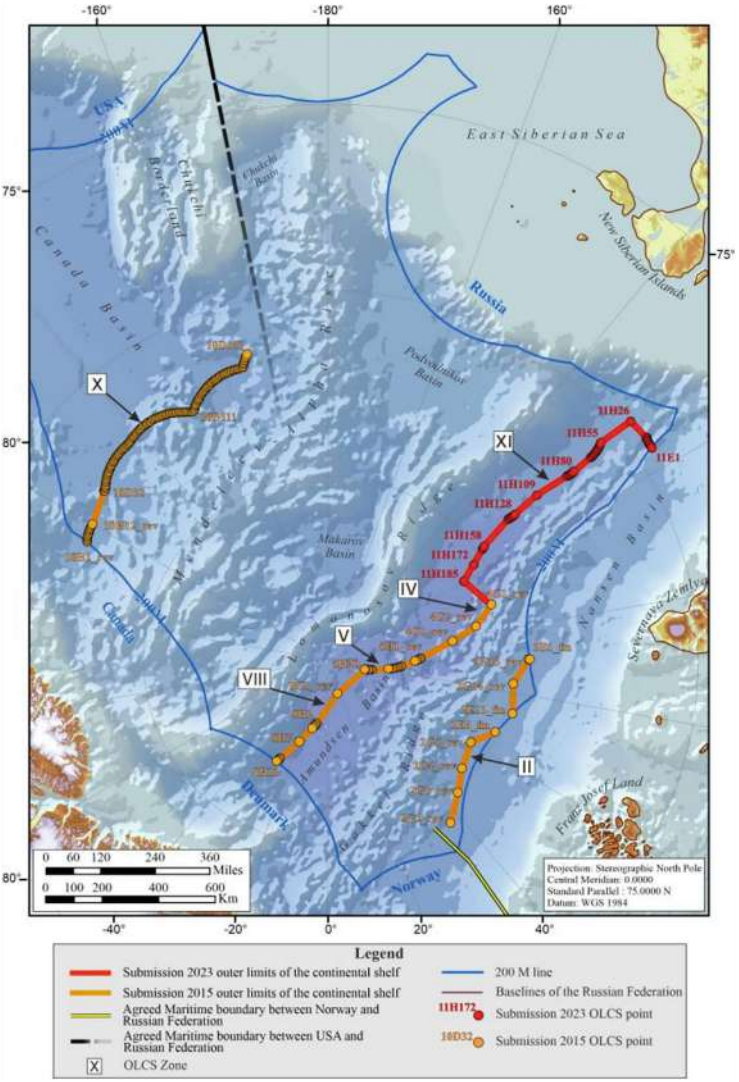


**Fig. 2** The outer limits of the Continental Shelf of the Russian Federation in the Arctic Ocean

changed its position on the nature of this submarine feature (Government of the Kingdom of Denmark, 2014).

Canada, Russia, and Denmark have generally maximized their Arctic shelves and their mutual overlap in their CLCS submissions and addenda is based in law but incentivized by the looming delimitation process. The size of the area relevant to the delimitation influences the outcome of the delimitation, whether accomplished via negotiations, adjudication, or arbitration. The most likely way to identify the area relevant to delimitation in the Arctic would be to include the area of all the overlapping entitlements beyond 200 M combined (Antsygina, 2022). Therefore, it is beneficial for the States with long relevant coasts (like Canada and Russia in the Arctic) to increase the area of the overlapping entitlements. In negotiations, a larger area with relatively similar overlaps ensures that mutual compromises will likely lead to an equitable result that is also politically palatable, since it maximizes the amount of area that a counter party "concedes." In arbitration or adjudication, asymmetric submissions—where one state adopts a maximalist position while the other pursues a minimalist approach (as was the case in the Arctic until Russia's 2021 addendum)—can result in the minimalist state receiving a smaller share of the continental shelf. This outcome is particularly likely if only established entitlements, rather than potential ones, are included in the calculation of the relevant area. However, for a tribunal it might be quite hard to identify the potential entitlements since it does not have enough scientific data and knowledge to establish the outer limits of the ECS (International Court of Justice, 2021). Thus, there is a risk that the CLCS submissions would be treated as claims of states in the dispute. In a simplified way, the bigger the area of overlap, the bigger the share of the shelf a state with the longest coast can potentially get as a result of delimitation. It is important to note however that having a longer coastline does not automatically grant a state a larger share of the continental shelf. The delimitation of maritime boundaries is governed by principles of equity and is subject to a variety of geographical and legal considerations.

While Canada and Denmark's approach of including areas certain to be assigned to Russia in delimitation (and *vice versa*) is a useful tool for negotiations, it could create problems prior to delimitation. Due to the doctrine of inherent rights, all claimant states have rights over the overlapping ECS that they can exercise prior to the delineation and delimitation. To abide with the obligations not to jeopardize or hamper the reaching of the final agreement of Article 83(3), Canada, Russia, and Denmark

will need to coordinate the activities on the overlapping entitlements (discussed below).

## Cooperation over Overlapping Entitlements Pending Delimitation

The doctrine of inherent rights implies that a coastal State may exercise its sovereign rights on ECS, even in the areas of the overlapping ECS entitlements, pending the finalization of the delineation of the outer limits. Following the reasoning of the Special Chamber of the ITLOS in the dispute between Ghana and Côte d'Ivoire (International Tribunal for the Law of the Sea, 2017), a coastal state's activities in the area of the overlapping shelves, even in an area which is subsequently attributed to another state, cannot be considered to be in violation of the sovereign rights of another state if those activities were carried out before the delimitation. This was also confirmed in the recent decision of the ICJ in the Somalia v. Kenya case (International Court of Justice, 2021, para. 203).

Pending delimitation, coastal states with overlapping continental shelf entitlements carry obligations set up by Article 83(3) which prescribes that:

> [p]ending agreement as provided for in paragraph 1 [delimitation agreement], the States concerned, in a spirit of understanding and cooperation, shall make every effort to enter into provisional arrangements of a practical nature and, during this transitional period, not to jeopardize or hamper the reaching of the final agreement. Such arrangements shall be without prejudice to the final delimitation.

There are two obligations following from these provisions: to make every effort to enter into provisional arrangements and not to jeopardize or hamper the reaching of the final agreement. The Special Chamber in the Ghana/Côte d'Ivoire case considered what Article 83(3)'s obligations mean in practice. First, it found that entering into a provisional agreement is not obligatory, and second, that any unilateral actions should do as little as possible to jeopardize reaching a final delimitation agreement.

The nature of activities in the zone of overlapping entitlements influences the analysis on the violation of obligations under Article 83 (3): while harvesting sedentary species might not amount to a violation of these obligations, the construction of permanent installations would be

more harmful to the spirit of cooperation and thus more likely to be considered as a breach of the obligations (Antsygina, 2021). Under Article 300 of UNCLOS, States should exercise the rights, jurisdiction, and freedoms recognized in UNCLOS in good faith in a manner which would not constitute an abuse of rights.

## *Problems and Prescriptions*

The problems arising from the nature of the continental shelf's extent and the coastal state's jurisdiction pending delineation and delimitation are two-fold. First, some problems are pre-delineation problems, arising from inconsistent application of or adherence to coastal state rights and jurisdiction in entitlements beyond 200 M before the CLCS issues its recommendations. The other class of problems are pre-delimitation problems between the states with overlapping entitlements. Until the CLCS issues its findings, these coexist with pre-delineation problems; after the CLCS moves, these will remain sore points until overlapping entitlements are delimited.

### *Pre-Delineation Problems*

The most pernicious pre-delineation problem is one of ignorance about a coastal state's entitlement. If foreign parties do not know whether a coastal state believes it is entitled to an ECS, they will struggle to know whether some activities, such as marine scientific research, require authorization by a coastal state in a certain location outside the EEZ. It is possible to ascertain on charts that there is a natural prolongation of a state's landmass beyond 200 M, but its extent may not coincide with the outer limits of the ECS identified following Article 76. Recall that several states already assert rights and jurisdictions over their entire shelf, including areas not yet defined but nonetheless appertaining to the landmass, and thus researchers and other users of the shelf could be violating coastal state rights and opening themselves to legal jeopardy. This problem is acute where states have not made a CLCS submission or otherwise marked the edge of what they believe their entitlement to be.

Another pre-delineation problem is inconsistent application. Take for instance the Xue Long 2's 2021 research activities (Arctic Today, 2021). This Chinese icebreaker collected samples on the Gakkel Ridge including rocks and magma. Whether the Xue Long 2 was engaged simply in marine

scientific research or natural resource assessments, Russia has domestic law asserting sole jurisdiction to authorize scientific activities on its ECS. Since all but a sliver of the Gakkel Ridge was within Russia's continental shelf submission as of 31 March 2021, and thus presumptive entitlement, the PRC vessel may have violated Russian law. However, in the absence of clear communication about the vessel's location, precise activities, and its communication with Russian authorities, it is difficult to judge whether the Xue Long 2 violated Russian law. Indeed, some states have a clear history of enforcing their law on the ECS, while others might not be active in enforcing their jurisdiction. This will at the very least put a drag on research activities; at worst it could lead to misunderstandings and diplomatic incidents that further worsen international relations in the Arctic.

*Pre-Delimitation Problems*

Since Russia, Canada, and Denmark assert undelimited, bi- and tri-lateral continental shelf entitlement overlaps in the Arctic Ocean, Article 83(3) applies to them. Pipelines and cables play important roles in various plans for economic development in the Arctic. Already, at least one cable-laying project has been proposed to connect Asia, North America, and Europe with a map showing possible routing through overlapping shelf entitlements of Canada and Denmark, and Canada and the United States (The Barents Observer, 2021). In theory, all the entitled states should be able to take reasonable measures to regulate laying of submarine pipelines (while Article 79 (3) of UNCLOS provides that coastal states have the right to delineate the course for the laying of pipelines and does not mention cables, many states still require delineation of the course of submarine cables as well, for example, Russia). It remains an open question whether approval from a single rights-holder would be sufficient to proceed with such a project.

For the protection of the interests of all the states and companies that own a pipeline/cable, it is necessary to create a mechanism of authorization and sharing information. Coastal states with overlapping entitlements need to cooperate on the authorization of activities of third parties, especially on the issue of laying pipelines/cables since they will stay permanently on the seabed. Cooperation between coastal states with overlapping ECS entitlements is thus the most effective way to avoid violations of Article 83 (3) provisions.

A similar problem arises with respect to marine scientific research. Strictly speaking, a vessel with permission from one rights-holder is violating the sovereign rights of any other rights-holder that did not authorize these activities. However, the research activities are not illegal per se since a researcher has authorization from another rights-holder. Jurisprudence to date has not identified any obligation to involve other concerned states, inform them about the authorized activities, or share data. Depending on the circumstances, such isolationism might account for jeopardizing or hampering the reaching of the final agreement, but, most likely, it will not be a violation of obligations under Article 83 (3). The lack of certainty can be avoided through the creation of a mechanism on the common authorization of marine scientific research in the areas of overlapping ECS entitlements. Since research activities are generally temporary, unilaterally approved MSR is less likely to jeopardize a final agreement on shelf delimitation contra Article 83 (3). But still, such actions could sap trust among the Arctic coastal states.

The ambiguities and potential clashes triggered by these pre-delimitation problems on contested shelf areas can be best addressed by a multilateral mechanism for information sharing and joint approval—a shelf approval deconfliction mechanism. Not only would this comport with Article 83(3)'s call for states to enter into provisional arrangements, but it would also minimize the risk that unilateral approvals for activities on overlapping Arctic shelves heighten tensions. In normal times, the Arctic coastal states with overlapping entitlements could possibly agree to a supplemental treaty that establishes a legal obligation to consult all concerned states pending delimitation, affirming that the process would not prejudice any final delimitation. However, pan-Arctic cooperation is currently paused due to Russia's invasion of Ukraine. Instead, Canada, Denmark, United States, and Norway could already begin to design and implement a shelf approval deconfliction mechanism for use among themselves. When cooperation with Russia resumes in the Arctic, the mechanism could be broadened to include Russia.

## Conclusion and Recommendations

The exercise of the sovereign rights over ECS pending delineation leads to problems with the uncertainty of the outer limits and the unilateral exercise of coastal state rights. The doctrine of inherent rights better suits the continental shelves within 200 M but creates legal uncertainty for

the users of the seas in the areas that could qualify either as ECS or the Area. These problems might intensify with the increasing uses of the oceans and seas beyond 200 M. In the Arctic, this means that activities on the vast majority of the seabed, including research, already come under coastal state jurisdiction. The United States, Russia, and Canada clearly claim jurisdiction in line with the doctrine of inherent rights. In Canada, courts have long upheld the Crown's right to administer laws and punish violations and Canada had been issuing drilling permits on the continental shelf both within and beyond 200 M in the Atlantic since the late 60's (before UNCLOS was adopted), based on the 1958 Convention on the Continental Shelf and customary law. Since both Russia and Canada have made clear their believed entitlements, any activities on the shelf within those outer limits should occur in conformity with Russian or Canadian law. The US position and law clearly embraces the doctrine of inherent rights, and in late 2023, the United States identified the outer limits of its shelf in the Arctic and thus the areas where users must comply with relevant US law. Although coastal state jurisdiction already exists, a CLCS recommendation will firm up the division between the Area and coastal state jurisdictions (with exception of the US which has not made a submission).

The Arctic seabed could be a source of tension not because of a lack of governance of the Arctic seabed, as some hold, but a surplus of it. Overlapping submissions over the vast majority of the Arctic seabed mean that multiple states simultaneously assert exclusive rights to manage the continental shelf and its resources. But in the rush to exploit opportunities (if any) emerging as ice recedes, some investors and states may embark on unilateral investment or research projects in areas of overlapping shelf entitlements before delimitation can take place. While this would not lead directly to conflict, it could sharpen suspicions and feelings that some states act in bad faith.

Transparency and communication are key to allow much needed research and investment to proceed on the Arctic seabed pending a final delimitation of overlapping entitlements without further souring Arctic relations. A shelf-approval deconfliction mechanism, initially among the United States, Canada, Denmark, and Norway, with possible future extension to Russia, would be the best means to institutionalize this coordination. This mechanism could be as simple as a memorandum or similar legal arrangement that establishes expectations that states will notify concerned states of any proposed activities on the shelf under their

shared jurisdiction and withhold unilateral approval until all affected states have assented to the activity.

The United States and Canada are particularly well-placed to establish a model for this mechanism given that over extensive US-Canada overlaps are in more economically and environmentally accessible locations, where potential use is more immediate. Such a mechanism would certainly require input from each state's legal and environmental officials in the relevant ministries. Although each Arctic state has overlaps in other regions, the Arctic is likely the most complex region for each of them, given the scope of bi- and tri-lateral overlaps. Thus, Senior Arctic Officials might be best placed to serve as primary external touch points under this mechanism.

In absence of such a formal initiative, states in the Arctic should use bi- and tri-lateral channels to ensure that any research, drilling, or pipelaying in areas with overlapping entitlements are considered and approved by all relevant rights-holders. States should only approve uses of the shelf unilaterally where it is the only state with an entitlement, and it should communicate clearly the activity's location or route to reassure other Arctic coastal states that no overlap exists with their jurisdiction.

Canada, Russia, Norway, Denmark, and the United States already govern the vast majority of Arctic seabed. The problem is that each state has overlapping and equally valid competing claims to jurisdiction until the delimitation process is complete. Unilateral approvals of certain shelf activities regulated by UNCLOS in areas of joint jurisdiction could stoke mistrust in the Arctic. Paralysis, however, could hamper important research activities. By effectively recognizing the problem of shelf overgovernance and designing semi-formal institutions or state practices to mitigate the risks, the five states with ECS in the Arctic can promote study and use of the shelf in a way that minimizes the chance of tensions or disputes.

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# Global Governance of the Arctic

# A Mediator's Perspective: Reflecting on the Obstacles and Opportunities for Renewing Dialogue on the Arctic

*Paul Dziatkowiec*

## Introduction

For so long an inspiring model for international cooperation, the Arctic has fallen victim to the geopolitical ruptures that followed Russia's brutal attack on Ukraine in February 2022. Even before that, recent years had been marked by greater militarisation in the region, and the full-scale war in Ukraine has only exacerbated tensions and increased the risk of provocation, or even confrontation, in the High North. Many Arctic-watchers now see no way back to the 'golden era' of collaboration.

This chapter will examine the factors that have led to the general breakdown of West-Russia cooperation on Arctic affairs, including security, science, and the environment. By drawing on historical examples where collaboration across ideological divides proved possible even during times of geopolitical tension, and examining possible entry points from a mediator's perspective, some ideas will be proposed to gradually rebuild trust and resume cooperation, at least on an exceptional basis and with regard to the most urgent threats to the Arctic.

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Regarding the structure of this contribution, following an examination of the areas where cooperation has faltered since Russia's full-scale invasion of Ukraine, some observations will be shared as to how the resulting geopolitical fractures have impacted the perception of the Arctic as an 'exceptional' region that has traditionally been relatively less affected by geopolitical shocks.

Later, the author will apply a mediator's approach to addressing the recent lack of constructive dialogue on Arctic issues, in particular by outlining the logic and potential applicability of discreet, inclusive Track II dialogue as a method for identifying entry points, developing creative policy ideas and channeling them informally to decision-makers on all sides.[1]

These methods will be presented as part of a framework for addressing some of the urgent threats facing the Arctic, most notably through de-escalation (of rhetoric and behaviour) and improved communication flows, the gradual rebuilding of confidence that aims to prevent a potential military confrontation, and avoidance of an environmental disaster through science diplomacy and improved data sharing. Past examples will illustrate that such cooperation—even if only for exceptional cases—has previously succeeded in comparable situations.

## Background

On the face of it, the seemingly tranquil environment of the Arctic ought to be an ideal setting for promoting international cooperation on globally relevant problems, but geopolitical tensions are rising in the Arctic just as they are elsewhere in the world. This has resulted in the severing of most channels of constructive communication between Russia and the West.

Russia and some NATO states have always had a direct stake in the Arctic; nowadays there is an expanding group of others, including from faraway continents, that are becoming invested—among them China, Japan, South Korea, Singapore and India. These states are also, in one way or another, implicated in the overarching geopolitical game—in some cases they have chosen (implicitly or explicitly) one side over the

[1] According to Montville, Track II diplomacy can be defined as 'unofficial, informal interaction between members of adversary groups or nations that aim to develop strategies, to influence public opinion, organize human and material resources in ways that might help resolve their conflict' (Montville, 1991, p. 162).

other, and in others they still try to hold to a middle ground. The balancing act is a difficult if not impossible one, and the Arctic has felt the repercussions.

As a consequence of recent developments in Eastern Europe, the work of the formal structures that once facilitated cooperation on Arctic issues has been drastically curtailed, with no sign of a return to 'business as usual' anytime soon. Thus there is no obvious institutional architecture for the Arctic at the Track I (official) level that can effectively mitigate the fallout from the Ukraine war. In its absence, creative new approaches need to be found to sustain a reasonable thread of communication, that in turn can enable the most urgent problems to be addressed.

One such approach is through Track II dialogue, sometimes termed 'private diplomacy', which makes use of the methodology and skills of unofficial mediation and peacemaking.[2] Standard practice for any mediator or dialogue facilitator is to first gain an understanding of the background context, and then to unearth and pursue opportunities for mutually acceptable compromises. In other words, the first task is to conduct an actor- and conflict-mapping, and on that basis to search out and stress-test potential entry points for dialogue and convergence between the key protagonists. The current chapter will broadly follow that sequence.

## *The End of 'Arctic Exceptionalism'? How Geopolitics Affect Arctic Governance*

The deepening geopolitical fissure between the West and Russia has directly impacted Arctic governance, with perhaps irreversible consequences. Constructive dialogue across the geopolitical divide has dissipated at the official level, and even scientists have been caught in the headwinds and pressured to disengage. From a practical perspective, the lack of proper engagement presents considerable problems, given that Russia has sovereign control over more than 24,000 km of Arctic coastline and represents around half the population within the Arctic Circle. For good or for bad, it remains a major stakeholder that cannot be ignored.

As long as Arctic governance continues to be framed in terms of big power rivalry, the prospects for collaboration will remain bleak. In

[2] For a useful explanation of the merits and methods of Track I and Track II dialogue, and how they interact with one another, see Mapandere (2000).

this situation the Arctic, and how it is governed, will be a hostage to three relationships: United States-Russia, United States-China, and China-Russia. Rebalancing the relationships in this geopolitical triangle would affect the Arctic, potentially positively. But that appears an unlikely prospect for the foreseeable future. As such, an alternative way forward may be to identify other 'non-traditional' actors—whether states or institutions—to champion specific Arctic issues.

History points to the difficulties that may lie ahead in resuming international collaboration. While there was significant collaboration in the Arctic even during the Cold War, it abruptly ceased after major collisions, such as the Soviet invasions of Czechoslovakia and Afghanistan. Each time, it took years to re-establish cooperation, and this only followed a return to 'normal' patterns of behaviour (as perceived by the United States).

Still, the Arctic was long considered a region relatively detached from other global problems—an 'exceptional' place where cooperation between Russia and the West on various issues was considered normal, despite their problems on other fronts. Nowadays, that image has largely evaporated, and the Arctic is in that sense not unlike other regions—subject to big power alignments and machinations, even when it comes to seemingly apolitical topics. Many experts on the Arctic now openly doubt whether Arctic issues could again be treated in isolation from other international developments and trends.[3]

The inescapable reality is that its shocking attack on Ukraine shattered international trust in Russia, and that even if it were to eventually recommit to international norms, there would be little faith in such a promise. Having trampled the most fundamental tenets of international law, many Western policymakers question what rules—whether already existing, or potentially revised in the future—Russia could be trusted to abide by.

Additionally, the Arctic is becoming an arena of competition for resources, and climate change will only accelerate that trend. As such, it can reasonably be expected that national ambitions will increasingly override the more altruistic search for win-win solutions. Moreover, for many states the drivers of Arctic policy are external rather than linked to the region per se. The scramble for new energy resources, for instance, is

[3] See for example Melchiorre (2022), Smith (2022), Saxena (2020) and others.

fueled partly by the Ukraine war and the state of the global energy market. In this realm in particular, the Arctic is increasingly becoming another integral part of global systems, rather than 'a region apart'. For all these reasons, there is some logic to the argument that 'Arctic exceptionalism' has become a redundant and even naïve ideal.

Mediators, on the other hand, are typically the last to lose hope. They will find reassurance in the Arctic's history as an incubator and host of international cooperative projects, and in the basic truth that Arctic problems are increasingly becoming global problems that require common, cooperative solutions. On both counts, there is still a persuasive case to be made for compartmentalisation; or in other words, for the need to treat the Arctic as a separate, specific case, rather than a by-product of other (geo)political issues.

However, compartmentalisation could only become viable if the most powerful actors—chiefly the US and Russia—were to consciously choose this approach. Currently and for the foreseeable future, 'horizontal escalation' is the order of the day—the other Arctic states (all of them NATO members) have resolved that Russia must be pressured and punished for its behaviour in Ukraine through isolation on other fronts, including in the Arctic.

### *No Quick Fixes: The Need for Creativity*

Needless to say, the urgent problems facing the Arctic will not wait until the war is over, geopolitical relationships are healed, or other institutional solutions are found. Climate change in the Arctic will continue at a pace several times faster than in the rest of the world; accelerating militarisation of the region will increase the risks of misunderstandings and miscalculations; and without effective governance and coordination, the race for energy and other resources will invariably cause harm to the environment and local populations.

On both sides of the Ukraine war, the main protagonists have hardened their positions, with the West having decided that Russia should pay for its imperialistic adventures through sanctions and marginalisation from normal multilateral activity. While Moscow keeps up its aggressive approach to foreign policy, there is little prospect of this Western strategy being reversed.

That means that the Arctic Council—the main intergovernmental forum for addressing questions of governance in the Arctic—may struggle

to deliver holistic outcomes, at least when it comes to the collective 'Arctic 8' getting things done for the good of the region. The West's response to Russian aggression has been largely uniform and coherent, and in the near term we are unlikely to see a sufficient split in that alliance to allow a return to 'business as usual' either in the Arctic Council or other multilateral bodies concerned with the Arctic.

As such, there is a need for creative alternatives that can keep the most important channels open, and maintain some exchanges at least on the most pressing issues. In other circumstances where conflict precludes communication at the official level, Track II dialogue or 'private diplomacy' has helped fill the void. It enables the continuation of discreet exchanges between conflict parties by offering them confidentiality and deniability, and the chance to rebuild understanding. In many contexts, such unofficial dialogues have been vital in preparing the ground for peace agreements, diplomatic deals, and the prevention of dangerous escalations.

Track II dialogue is commonly understood to be a process that involves non-officials, most typically experts, thinktanks, or others with the requisite subject-matter knowledge to engage in meaningful discussions. At its most basic, Track II dialogue should serve as a channel through which to communicate information and improve understanding between two (or more) sides to a dispute or conflict. To achieve real traction, though, Track II actors should ideally have access to decision-makers or -shapers, so that the ideas that emerge from such dialogues can be transmitted to relevant authorities and, hopefully, considered and applied in practice. (Where some of the actors are more directly implicated in policymaking—for example, proxies of officials, or even officials attending 'incognito' or in their private capacity—the process is sometimes referred to as 'Track 1.5'.)

There are a number of specialised organisations active in the business of Track II dialogue or 'private diplomacy'. The better known in this field include the Geneva-based Centre for Humanitarian Dialogue, the Crisis Management Initiative in Helsinki, Conciliation Resources, and an increasingly expanding collection of others. They are often staffed by experienced former diplomats, ex-UN or -ICRC officials, but also other profiles drawn from civil society, the media, or even the private sector. While the professional background matters greatly, sometimes equally important are other attributes such as subject-matter or geographic expertise, and relevant networks.

The Geneva Centre for Security Policy (GCSP) is another, albeit smaller, actor, whose Mediation and Peace Support arm has developed a relatively new methodology and growing influence in the profession. As one of its flagship projects, in 2022 the author initiated a Track II process on the Arctic, which has come to be known as the High North Talks.[4] This emerged from an early assessment of the knock-on effects of Russia's illegitimate attack on Ukraine, which was expected to reverberate in other regions—the Arctic being one. Indeed, shortly thereafter normal diplomatic contacts became untenable, and cooperation across the West-Russia divide was largely severed.

This major shock to the international system introduced great dangers, as this volume testifies. But in the world of 'private diplomacy', it also presented opportunities for Track II actors to act as a confidential, temporary 'bridge' while other mechanisms ceased to function. The GCSP took up the challenge and convened a dialogue involving experts from all sides of the geopolitical divide, which has since become a sustained process. Participants are from the United States, Russia, Northern and Western Europe, Canada, China, Japan and India. The Talks aim to informally explore common interests, build trust, and co-create workable solutions, that can then be transmitted to decision-makers as policy options.

## Assessing the Space for Dialogue

In an attempt to recover some semblance of communication or even cooperation, it is important to first assess what architecture is already in place, and how it might be complemented, restored, or restructured. Intergovernmental dialogue on Arctic issues centres around the Arctic Council, a body established in 1996 that comprises the eight Arctic states (Canada, Denmark, Finland, Iceland, Norway, Sweden, Russia, and United States). It is not a treaty-based organisation but an international

[4] The High North Talks are an unofficial dialogue platform hosted by the Geneva Centre for Security Policy (GCSP) and founded by the author that aspires to promote peace and international collaboration in the Arctic. The Talks are held in Geneva, Switzerland, which enables the hosts to reach into relevant UN and diplomatic networks to further this cause. In the spirit of International Geneva, GCSP convenes the process as an inclusive and multi-regional dialogue that addresses a range of urgent and interconnected issues in the Arctic setting, including security, science and the environment.

forum that operates on consensus basis.[5] Primarily the Council focuses on science, the environment and sustainable development, and it notably avoids boundary or resource disputes, as well as military security.

Shortly after Russia's full-scale invasion of Ukraine, on 3 March 2022 the other seven member states (A-7) of the Arctic Council condemned Russia's attack and, while underlining the importance of circumpolar cooperation, announced a halt in cooperation with Russia in the Arctic Council[6]—even as Russia chaired the Council at the time. In other words, the decision heralded a 'pause' in cooperation rather than a ban of Russia from the Council. Russia called the move 'regrettable', and emphasised its own position that cooperation in the Arctic Council should be isolated from tensions that may prevail elsewhere (Koivurova, 2022).

With multilateral cooperation stalled for the foreseeable future, there may be better prospects for creative bilateral partnerships as a temporary substitute, at least on those issues that demand urgent action. With the 'Arctic 8' now becoming a 'NATO 7 plus Russia', some of the burden may increasingly rest with other states—for example those among the observers of the Arctic Council—to play an important intermediary role.

India, for example, has serious global clout and enjoys good relations with all sides. During its recent chairing of the G20, it championed the theme 'One Earth, One Family, One Future'—a slogan that neatly encapsulates the importance of the Arctic to the planet. Indeed, a leading Indian analyst has argued that Delhi is well positioned to push for concrete deliverables, such as a resumption of the most urgent scientific exchanges (Bisen, 2023). There are other credible candidates with mediation credentials, including of course Switzerland, but naturally each must make its own calculation as to whether such a responsibility aligns with its foreign policy priorities.

As in any region, policy priorities among the Arctic countries vary, though each is concerned about sovereignty, defence, natural resources, shipping routes, and the environment. Among these issues, there is ample

[5] Interstate interaction in the two polar regions is governed by vastly different governance arrangements, which also helps illustrate how vulnerable multilateral cooperation is to geopolitical shocks. One key distinction is that international engagement in the Antarctic is predominantly governed by a set of treaties (with a wide diversity of signatories), whereas Arctic governance is largely exercised through informal and voluntary arrangements such as the Arctic Council.

[6] See the joint statement: https://www.canada.ca/en/global-affairs/news/2022/03/joint-statement-on-arctic-council-cooperation-following-russias-invasion-of-ukraine.html.

space for greater cooperation, but also increasing risk of fierce competition, particularly in an increasingly fractured international system where the climate is seemingly more favourable to building barriers than bridges.

The other gap in the 'dialogue landscape' has been the lack of a platform that would bring together the whole gamut of urgent issues facing the Arctic, which are palpably interconnected. These include hard security/militarisation, climate change/the environment, natural resources/economic opportunities, and the impact on local and particularly Indigenous communities—that is, those groups that will be most affected by all the aforementioned issues. Given the sensitivities, unofficial dialogue may offer the best opportunity to weave these threads together.

### *The Utility of Track II Dialogue*

With a number of complex and interlinked strategic challenges ahead, the sharpening of geopolitical divisions leaves few real opportunities for their effective and holistic management. In the absence of constructive official diplomacy, there is a clear need for informal dialogue through a neutral platform that sustains some threads of communication, and develops solutions to the most pressing problems.

Aside from the High North Talks, there have been other initiatives that promote dialogue on Arctic issues (including the Atlantic Council's annual conference on Security in the Arctic, the Arctic Circle hosted by Iceland, and the economic-focused High North Dialogue), though they largely exclude Russia, and usually China—which, while not directly a regional actor, will certainly become increasingly relevant to the region in the years ahead. From a realist viewpoint, there is a sound logic in engaging not only with likeminded, but with anyone who can and will have an impact on the ground.

Discreet dialogue should address both areas of cooperation and of potential confrontation, so as to find their possible interplay; and aim to define viable confidence- and security-building measures. Ultimately, informal talks should contribute to unearthing opportunities for renewed cooperation, and to developing mechanisms for averting confrontation.

At the same time, any unofficial dialogue initiative must have realistic ambitions. It is highly unlikely that it could affect or reconfigure the 'geopolitical triangle' (US-Russia, US-China, Russia-China) on which so much depends, and thus to influence those Arctic issues that are contingent on an improvement in big power relations. Still, Track II

dialogue could contribute in another way—by developing creative ideas for mitigating the practical consequences of the lack of Track I dialogue. These consequences are many; in the prevailing atmosphere of zero-sum geopolitics, the Arctic governance system is on a lose-lose trajectory, with mutually harmful consequences. The lack of constructive dialogue only accelerates that trend.

As a facilitator of dialogue between parties in disagreement with one another, the mediator should come to the table not only with concrete propositions, but also a set of incentives—in other words, a compelling rationale as to why the protagonists should want to move away from confrontation. In the case of the Arctic, the sheer weight and consequence of the issues that intersect there (for example climate change, economic development, and the risk of conflict spillover) serve as a reminder of this region's significance for the whole world, and the irreversibility of certain problems if they are left unaddressed. Without a doubt, states have far more interests in common than reasons for confrontation.

When differences on fundamental matters of international relations prevent any convergence through official diplomacy, unofficial or 'private' diplomacy can serve as a discreet tool—a deniable channel—for discussing pressing issues that demand joint attention. It can protect the participants from public or media scrutiny and help them generate creative ideas that, in turn, translate into viable policy options.

### *Where to Start: Recalling Better Times*

A good place to start in considering where unofficial dialogue might help to resume cooperation, is to recall the areas where such cooperation was strongest before the current geopolitical impasse. This may offer a clue as to where the recovery of minimal cooperation is most likely.

Research in the Arctic has long been a collaborative international effort. The International Arctic Science Committee, the Barents Euro-Arctic Council, and the 2017 signing of the Agreement on Enhancing International Arctic Scientific Cooperation, showcased the cooperative spirit that prevailed even when there were tensions over other matters between Arctic states.

Separately, with regard to shipping there is some international regulation through the International Code for Ships Operating in Polar Waters, adopted by the International Maritime Organization in 2017 (Mathiesen, 2014). At the same time, there is much work still to be done

to develop common understanding (and reach concrete agreements) on trade, shipping, tourism, and resource development.

Perhaps most urgently, climate change constitutes a key security threat in the Arctic. Temperatures in the region continue to rise at four times the global annual average (Rantanen et al., 2022). These trends directly affect the entire globe and therefore require urgent and global responses. As such, climate science has been and remains an issue of immense potential for cooperation.

Among other knock-on effects, there are concerns that Arctic ice shrinkage could soon contribute to a substantial rise in sea levels worldwide (Pörtner et al., 2019). Prior to Russia's invasion of Ukraine, scientists from Russia and Western countries worked together to track the pace and effects of climate change, and could therefore help inform policy responses to this global threat. Now, much of this cooperation has ceased, which could have profound impacts on the rest of the world.

Paradoxically, most countries see climate change as an opportunity as well as a threat. The melting of sea ice will expose more arable lands, accessible natural resources, and open Arctic transportation routes via the Northwest Passage among others. This could become the shortest shipping route between Europe and Northeast Asia, and eventually a prime trade route once cost efficiencies have been achieved. However, these opportunities will require careful and cooperative management—another topic that requires constructive dialogue.

### *Some Rays of Optimism*

It may be years before the current geopolitical turbulence winds down and gives way to any sort of 'normalisation'. In the meantime, for the sake of global stability it is of critical importance to find a manageable balance between deterrence and reassurance. In this regard, it is worth remembering that in previous periods of significant tension between big powers, there were opportunities for meaningful cooperation where both sides considered it mutually beneficial.

Inspiration may, for instance, be drawn from certain agreements struck during the Cold War between the main protagonists, the United States and the Soviet Union. These included the U.S.-Soviet Agreement on Prevention of Incidents on and over the High Seas (1972) and their Agreement on Prevention of Dangerous Military Activities (1989). These agreements improved mutual understanding of military activities,

reduced the likelihood of inadvertent conflict through misperception or miscalculation, and therefore increased stability in a turbulent time.[7]

The 1972 Agreement represented an effort by the two foes to prevent accidents from escalating into crises, and to build some predictability into an otherwise antagonistic relationship, so as to avoid dangerous flare-ups that might incite a hot war that neither side wanted. The agreement achieved this by setting out 'rules of the road'; among others, providing for steps to prevent collisions at sea, avoiding maneuvers in heavy sea traffic, requiring a safe distance between surveillance ships and their object of investigation, using accepted international signals when ships passed near one another, and informing vessels when submarines were exercising near them.

The later (1989) agreement on preventing dangerous military activities listed a number of actions that would not be allowed on either side, including the crossing by armed forces personnel or equipment into the national territory of the other party, whether intentionally or as a result of unintentional actions; or interfering with command and control networks so that harm would be caused to the personnel or equipment of the other party's armed forces.

There were a number of other agreements struck during the Cold War with a similar purpose in mind. They included the following U.S.-Soviet agreements: the Memorandum of Understanding Regarding the Establishment of a Direct Communications Link (1963), and agreements on Measures to Reduce the Risk of Outbreak of Nuclear War (Accidents Measures) (1971); Prevention of Nuclear War (1973); Establishment of Nuclear Risk Reduction Centers (1987); Notifications of Launches of Intercontinental Ballistic Missiles and Submarine-Launched Ballistic Missiles (1988); and Reciprocal Advance Notification of Major Strategic Exercises (1989).

These examples constitute a robust body of law and practice, and reflected a considerable convergence around mutual interests (or shared fears) in a time when U.S.-Soviet relations were often poor and tensions high. Even in such a context, clear-eyed policymakers were able to compartmentalise the need for predictability and stability, as distinct

[7] It is worth noting that some, but not all, other NATO members have finalised agreements with Russia on preventing incidents on the high seas that are similar to the 1972 agreement, while far fewer NATO members have agreements on preventing dangerous military activities.

from the political and ideological barriers that continued to divide not just the two main adversaries, but much of the rest of the world. One consideration that may be put to policymakers in the current climate is the possibility that some of these old bilateral agreements could be 'multilateralised' and aligned with the needs of today.

That Cold War history should serve as inspiration for any mediator seeking to carve out space for renewed cooperation between the West and Russia on the most basic security concerns. Moreover, it offers a rich catalogue of still-relevant concerns, as well as pertinent terminology for crafting new confidence-building measures tailored to modern needs. As such, it can serve as a helpful point of departure for unofficial, discreet Track II discussions.

Of course, international treaty law is replete with many other models that may be worth studying—agreements that have reflected comparable fears and interests in decades past, as well as sound ideas and innovative mechanisms. With creative thinking, some of these historical innovations may be adapted and scaled to the needs of the Arctic in what is, by some estimates, turning into a Cold War 2.0.

In that regard, some of the texts worth considering as reference material could include the Conventional Armed Forces in Europe (CFE) Treaty of 1992 (adapted in 1999); the Open Skies Treaty (1992); and the Vienna Document on Confidence- and Security-Building Measures (OSCE, 2011). As these materials attest, while the international system has previously suffered from other geopolitical fissures, there are ample lessons and best practices to be learned from that past experience.

There are also important economic arguments worth exploiting in any dialogue. The Arctic economy has much to offer the world, including fish stocks, energy, and raw materials for the green transformation. While these considerations are unlikely to trump politics in the near term (and of course, one must acknowledge that the 'great race' for resources will trigger its own new tensions), it is worth keeping in mind that in many conflicts, the financial incentive is an important factor. In this specific case, the Arctic with its great economic potential may be one of the first places to 'open for business' after a geopolitical de-escalation—and as such, this may represent another mutually interesting outcome of renewing cooperation.

## Managing Potential Confrontation

The states that border the Arctic Ocean—Canada, Denmark, Iceland, Norway, Russia, and the United States—are limited to a 200 nautical mile exclusive economic zone off their coasts. Since their ratification of the UN Convention on the Law of the Sea, Norway, Russia, Canada and Denmark have lodged claims for certain sectors of the Arctic seabed. With the melting of the sea ice, such claims may intensify, resulting in a race for control of the Arctic's vast hydrocarbon resources.

Given the stakes, even without the Ukraine war the Arctic may have become a theatre for great power confrontation. This possibility has dramatically increased since Russia's invasion, which has dealt a serious blow to already difficult Russia-West relations. It will undoubtedly have long-term impacts on regional security and cooperation; and among others, the role of NATO will likely increase in the Arctic.

While many experts and analysts long considered the Arctic a relatively stable security environment, the recent bolstering of Russia's and the West's military posture there has triggered renewed concern about the militarisation of the region. A significant part of Russia's military (and nuclear) capability is based in the High North, including the Northern Fleet, which operates adjacent to the Norwegian (and therefore NATO) border. Russia is now able to conduct air operations over vast areas in the Arctic, and it has carried out exercises in the Barents Sea with submarines fitted out for intercontinental nuclear weapons (Wall & Wegge, 2023).

At the same time, China's interest in the Arctic is expanding. China defines itself as a 'near-Arctic state' and is expected to become increasingly active there. Its first Arctic strategy (published in 2018) declared that 'as a permanent member of the UN Security Council, China shoulders the important mission of jointly promoting peace and security in the Arctic.' And in another important extract,

> China is also closely involved in the trans-regional and global issues in the Arctic, especially in such areas as climate change, environment, scientific research, utilisation of shipping routes, resource exploration and exploitation, security, and global governance. These issues are vital to the existence and development of all countries and humanity, and directly affect the interests of non-Arctic States including China. (State Council Information Office, 2018)

Should geopolitical tensions continue to rise (in any of the bilateral relationships in the US-China-Russia triangle), the stage could be set for fierce big power rivalry in the Arctic. Much depends on the outcome of the war in Ukraine, and the trajectory of US-China relations in the years ahead. As such, geopolitics will increasingly have an impact on the fate of the Arctic, and while the big powers struggle to interact constructively, the outlook is rather bleak.

To avoid stumbling towards Thucydides' Trap, further thinking must be done to identify 'guardrails' that can guide state-to-state interactions and big power competition. For those states that are geographically in the Arctic itself, this will mean accepting that each of them will continue to defend its sovereign territory—thus implying a strong military presence. In the current circumstances, this calls for urgent work behind the scenes to prevent escalatory trends translating into miscommunication and confrontation.

Defining these guardrails through informal dialogue could help to improve predictability, avert escalation, and inject creative ideas into a policy landscape that is currently dominated by increasingly toxic official discourse. Now that normal diplomatic engagement has dissipated, discreet back-channel dialogue may be a useful contingency for mitigating the associated dangers.

### *Enhancing Mutual Confidence on Security*

Despite the turbulent geopolitical landscape that underpins international relations today, it is noteworthy that there is a still-existing basis for collaboration in the Arctic. In that regard, it is possible to build on those pockets of cooperation that have not completely dissolved, which include emergency response in the Bering Strait, search and rescue operations, and collaboration on fisheries.

On security matters, it is another story, given the rapid militarisation of the region, and the degrading of trust and official communications channels since the war in Ukraine. As such it is imperative to carefully assess what methods may contribute to decreasing military tensions in the High North, possibly including the elaboration of joint principles or 'rules of the road' between adversaries. This may take the form of a military code of conduct, a set of policy options for all sides, or another format. Through an impartial and skilled intermediary, tools can be developed to promote reassurance rather than just deterrence, and channels

may be established to manage tensions, as well as decrease the risk of miscalculations and dangerous incidents.

The High North Talks, the Track II dialogue process facilitated by the Geneva Centre for Security Policy, aims to explore such options. While they appear overly ambitious for the times, it may be that in the pursuit of such outcomes, other ideas emerge along the way that can be equally helpful in conflict-avoidance. To define the scope of any such initiative, it is necessary to conduct a stocktaking exercise that would (1) determine what directives/guidance/operational law already exist in this domain; (2) study other practices/protocols that could be applied to the Arctic, wholly or partially; (3) identify gaps that still need to be addressed; (4) consider other good examples (including from different fields) that could be applied to the Artic; (5) identify the distinctive problems specific to the region that would require a new approach.

In years past, the Arctic Security Forces Roundtable (ASFR) was one venue for such dialogue and ideas development. Since Russia has not participated in the ASFR since its illegal annexation of Crimea in 2014, in its current incarnation the Roundtable is less a conflict prevention tool than a coordination mechanism between the (Western) Arctic allies. This has left an important gap in meaningful dialogue on security matters between non-likeminded, which may be filled at least partially through unofficial 'private diplomacy'—ideally only temporarily, until official mechanisms for communication are once again properly functioning.

## Averting an Environmental Catastrophe

Separately but just as urgently, Track II dialogue ought to investigate the possibilities of resuming cooperation on environmental protection. The Arctic is in many ways something of a microcosm of the global environment, in that it directly connects to and influences the most fundamental dynamics of the earth system (climate, ocean currents, and others).

Given the global reach of the environmental crisis, it is imperative that science be freed from political and ideological frameworks. The global character of the threat should drive an international consciousness, and eventual convergence, around obvious mutual threats and therefore interests. If and when that happens, science could produce the most compelling incentives to restart trust-building and collaboration. Accordingly, the environmental theme could become an 'anchor' for Track

II dialogue that aims to restore some measure of mutually-beneficial engagement.

Indeed 'science diplomacy' has historically proven to be an indispensable tool for promoting renewed international cooperation, notably by persuading policymakers to make informed decisions based on hard evidence. During the Cold War, science diplomacy helped maintain communication across ideological divides, and it provided the rationale and methodology for continuing dialogue (see for example Davis & Patman (eds), 2015).

There are a number of channels through which science diplomacy on Arctic matters is conducted, at multilateral and national levels. Apart from the already-mentioned Arctic Council, they include the United Nations (and within it the UN Environment Programme; the World Meteorological Organization; and the United Nations Educational, Scientific and Cultural Organization, to name a few), the Association of Polar Early Career Scientists, the University of the Arctic, International Science Council, International Arctic Science Committee, and GlobalArctic.

In the current geopolitical deadlock, science diplomacy may help impress upon decision-makers the notion that environmental crisis will not wait for political tensions to be resolved; and accordingly that collaboration between scientists should not be equated with or dependent on trust between their governments. Relatedly, the principle of 'open science' can play a vital role in the Arctic; in acknowledging that the problems of our planet do not respect sovereign borders, it encourages knowledge sharing, collaboration, and transparency among researchers, indigenous communities, policymakers, and other stakeholders (UNESCO, 2021).

Re-establishing mutual acknowledgment of the universal importance of open science would allow for monitoring to again occur in real time, which in turn would facilitate early warning, climate modelling, and adaptation strategies (Dziatkowiec, 2023). Critically, many of these important functions have been discontinued over the Ukraine war, which harms not only the Arctic but also other parts of the world affected by the knock-on effects of climatic conditions in the Arctic.

Given the global impacts of this emergency, a failure to collectively address climate change will be potentially catastrophic for all states. It is worth recalling, also, that environmental problems in the Arctic span well beyond the climate crisis; they include a range of other pressing

issues including threats to biodiversity, ocean acidification, the introduction of new invasive species, and the permafrost thaw-carbon emission cycle, among others.

Other themes worth examining in a Track II format include the environment-economic development nexus, and the role of the Arctic in contributing to global food security. In addition, solutions are needed to manage the dangers associated with the emergence of possibly dangerous pathogens (including viruses) from the melting permafrost (Cohen, 2023), and the spread of radioactive waste (Miner et al., 2021). These are just two examples of risks that will persist and potentially undermine global safety and health, whether the war in Ukraine is resolved or not.

Taking the latter issue further, there are thousands of radioactive objects—including spent fuel and corroding nuclear reactors inside sunken vessels—that were left abandoned at the bottom of the Arctic seas during the Cold War. Today, political tensions and international sanctions hinder any retrieval and clean-up efforts as Russia lacks the equipment and technical expertise to extract these vessels without international assistance (Digges, 2022).

One possible method for restarting a culture of cooperation, and for testing whether compartmentalisation may work in the Arctic context, would be to agree a small pilot project that has relatively limited political consequence, but offers a clear mutual benefit to all involved states. A carefully selected joint undertaking may imply small political cost—certainly it would not influence the course of the war in Ukraine, nor the balance of power in the region—but may bring serious benefits to the local and surrounding environment.

An example of such a project could be the extraction of hazardous waste from sunken vessels in the Arctic Sea, which could be 'ring-fenced' as a mutually-important exception to the current freeze in West-Russia cooperation.[8] The severe impact that radioactive contamination can have on the environment is undeniable. It can harm plant and animal life, disrupt ecosystems, and potentially impact human health through the consumption of contaminated food and water. As such, the idea of

[8] Indeed such joint project ideas were being actively discussed prior to Russia's full-scale invasion of Ukraine, and the resultant pause in the full functioning of the Arctic Council. See for example: https://thebulletin.org/2022/11/war-puts-cleanup-of-russias-radioactive-wrecks-on-ice/.

resuming a discussion on extracting the sunken vessels and their radioactive waste is one tangible and universally valuable project that could prove the worth of decoupling certain issues—even if only on an exceptional basis—from the situation of the war in Ukraine.

There are a number of comparable ideas that may be worth testing with policymakers, to assess the political appetite on all sides. But while the needs are obvious, one major stumbling block is that for as long as Arctic issues are viewed predominantly through a geopolitical prism, there is unlikely to be meaningful progress. Given these realities, it is useful for the mediator to imagine different constructs (for example, new lead actors, or atypical groupings of states) that are issue-focused rather than geopolitically driven. For example, a new role could be crafted for certain middle powers as champions for Arctic governance, or even for other actors—organisations and coalitions—to do more to shield the Arctic from the collateral harm of the geopolitical contest.

Ultimately Track II dialogue must aim, through robust exchanges and creative thinking, to produce actionable policy options. Of course, whether it has any subsequent impact will depend on the political will of relevant states to buy into any new initiative. A crucial aspect of the transmission of ideas to the decision-making level is to also present clear incentives for adopting any course of action. The most convincing of these incentives would surely be the realisation that a new policy direction may help minimise existential risks and avoid a dangerous escalation—an outcome that benefits all states and their peoples.

## The Importance of Inclusivity in Dialogue

In a number of forums and discussions about the Arctic—whether on security, the environment, climate change, or economics—one constituency whose voice is, regrettably, often marginalised is that of Indigenous Peoples who are native to the Arctic and directly affected by regional or global political shocks.[9] A more holistic and inclusive approach to such discussions—one that takes into account the views and vast knowledge of local and Indigenous communities—would more likely produce positive and sustainable results.

[9] Moreover, Indigenous Peoples make up a sizeable 10% (approximately) of the total population of the Arctic (Coggins et al., 2021).

Along with its profound impact on other aspects of Arctic life, the war in Ukraine has also eroded the role and contribution of Indigenous Peoples to relevant international formats. The Arctic Council is a striking example; through this forum, Indigenous communities from Western states and from Russia had a fair opportunity to have their concerns heard by all the eight Arctic states. Regrettably for them, and indeed for the whole Council, that platform no longer functions in the same way as a dialogue between all Arctic states and their diverse Indigenous communities.

The sharpening of geopolitical polarisation since February 2022 has accelerated some of the most acute problems that were already threatening the way of life of Indigenous Peoples, such as food insecurity, climate change, pollution, and a deterioration of public health services. Moreover, Indigenous Peoples live at the epicenter of the tension between preserving the surrounding environment and exploiting its untapped economic potential. While new access to natural resources, the opening of shipping routes and additional touristic areas, offer exciting new opportunities for economic development, local communities ought to be involved in determining how these openings are explored (United Nations, 2008).

Among many of the Indigenous Peoples of the Arctic, post-February 2022 there is a sense that they lack an adequate platform to convey the views of their communities.[10] To ensure that their concerns and interests, but importantly also their unparalleled knowledge, wisdom and insight are properly taken into account in international Arctic policy, it is important that unofficial dialogue efforts fill this gap, and channel the perspectives and ideas of Indigenous Peoples' representatives to the policymaking level. Again, Track II diplomacy can be a useful vehicle.

From the perspective of Arctic States, and private actors too, it is imperative that robust modalities be found for working with the peoples of the Arctic, especially on environmental and climate change issues that affect their lives and lands, and by extension their countries. Apart from the obvious scientific and moral arguments, there is also a clear economic rationale; some rare earth minerals, hydrocarbons and even uranium are to be found on Indigenous lands and, from the socioeconomic perspective, only an equitable partnership between states and local communities can ensure a sustainable and stable future for these areas.

[10] A regular observation heard in the High North Talks facilitated by the Geneva Centre for Security Policy.

Though it is beyond the scope of this chapter, a few words should be added here regarding a related problem—the overall governance arrangements for the Arctic. In every crisis there is opportunity, and this may be a suitable moment—with normal business on hold—to consider this fundamental question, and assess whether the governance arrangements that were in place prior to the Ukraine war can be improved. In this regard, there is room for a discussion on whether governance is sufficiently inclusive, whether non-state actors should have a more influential role, whether a subset of Arctic states could implement joint actions more efficiently (even when others among them cannot or will not collaborate), and whether other multilateral bodies should be more involved in Arctic governance questions.

Serious reform is perhaps not most likely to be explored by the Arctic Council members themselves; as such, Track II dialogue can be an appropriate setting for informally discussing the merits of new variants for Arctic governance, and then testing them with key actors. If new ideas can emerge for improving the existing architecture, then this will not have been a wasted period of hiatus without meaningful progress.

## Potential Lessons from the Antarctic Experience

As explained earlier, international engagement is governed in a vastly differently manner in the Antarctic compared to the Arctic, not least because the former is essentially a treaty-based system that involves a far greater number and range of states. Nevertheless, in the quest for solutions it is worth reflecting on whether there are transferable lessons that might at least provide part-answers to some of the governance problems of the Arctic.

While many of the issues facing the two regions are distinct, there are important similarities, including the fact that both poles are climate regulators for the planet, and face a range of related concerns including melting ice sheets, marine pollution, and loss of biodiversity. Both are subject to renewed interest from major global players, particularly for their natural resources. In this regard, Antarctica benefits from certain treaty-based protections against commercial exploration activities.

In various ways, the South Pole experienced a surprising level of international cooperation during the Cold War and beyond. The Antarctic Treaty was drafted in the context of high tensions in the 1950s, which persisted for decades more. States were able to transcend many of these

tensions by recognising that many challenges were shared, and that joint solutions would therefore be of mutual interest. In this regard, the Antarctic governance model was relatively successful in promoting international cooperation and maintaining stability in the region.

Another valuable lesson was the key role played by a shared international project, the International Geophysical Year (July 1957 to December 1958), in galvanising interest in joint scientific research and cooperation in Antarctica (Korsmo, 2007). It triggered a surge in scientific activity and expeditions, as many countries established research stations there. The Fourth International Polar Year (2007–2008) was also instrumental as an instigator of cooperation in both polar regions (National Research Council, 2012). In the future, similar multinational events, such as the Fifth International Polar Year planned for 2032–2033, may present new opportunities to stimulate international cooperation, and to set the Arctic on a better course.

## Conclusion

Although the prevailing geopolitical conditions do not augur well for the near- to medium-term wellbeing of the Arctic, there are some openings and sources of hope that ought to be exploited through quiet, private diplomacy. These are to be found in the realms of security, the environment, economics and, perhaps most immediately, scientific cooperation.

This chapter has pointed to historical experience, and still-existing pockets of cooperation, that together can serve as a model for efforts to resume cooperation on the most pressing questions in the Arctic. Unofficial Track II dialogue can help identify ways to build on these educative examples, which include emergency response in the Bering Strait, search and rescue operations, and collaboration on fisheries management.

As the above has shown, the Arctic is directly affected in multifarious ways by the geopolitical schism over the war in Ukraine. Apart from introducing new and increasingly urgent threats to security and the environment, it has also caused something of a paralysis in governance, with no obvious replacement architecture for managing West-Russia engagement on Arctic matters. Moreover the current tendency to cut all ties between the West and Russia is dangerous for the Arctic, and by extension for the global environment.

Beyond the current crisis, there is a longer-term challenge to find ways to reshape Arctic governance so that it is not purely a framework reflecting big power rivalry, and that progress is not contingent on the quality of relations between those powers. Perhaps a greater role could be envisioned for other states, and certainly more thinking should be done on how to compartmentalise issues, so that urgent threats in the Arctic are not sidelined while geopolitical shocks elsewhere are addressed (or not).

All of this points to a need and a niche for 'private diplomacy' to identify openings for constructive engagement, and to prepare ideas and incentives that will help states to eventually reactivate urgent collaboration. Though constructive collaboration is unlikely to resume in the near future, this chapter has illustrated that Track II diplomacy has a role in keeping the most urgent threads of communication alive, and bringing creative options to the table.

Specifically, Track II formats can help elaborate confidence-building measures in the security sphere, and reconnect important channels for scientific exchanges. In such times of deep distrust, geopolitical collision, severed communications and tit-for-tat diplomatic confrontation, often this type of unofficial dialogue is the most effective tool for maintaining some semblance of constructive dialogue and cooperation, and for creating a platform for the eventual resumption of official-level diplomacy.

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# Science Diplomacy as a Form of Arctic Global Governance in the Age of Geopolitical Turbulence

*Valery Konyshev, Maria Lagutina, and Alexander Sergunin*

## Introduction

Arctic science diplomacy (ASD) is both a relatively new theme and a vexed question in the world academic and policy-making communities. There is neither a clear-cut definition of the concept nor a consensus on science

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diplomacy's nature, problematique, stakeholders, instruments and activities. Various IR schools differ by their theoretical approaches to the ASD phenomenon and its role in the Arctic affairs.

As for the ASD definition, in this study we interpret this phenomenon as a kind of public diplomacy used by both individual countries and multilateral institutions to enhance international scientific and technical cooperation and solve the most important problems in the High North. At the same time, it should be emphasized that both state and non-state structures are involved in it (the latter include academic communities, civil society institutions, professional scientific organizations and associations) (Gutenev & Sergunin, 2022).

In a broader sense, ASD means the interaction of diplomacy and science in international relations in order to both promote Arctic studies and influence decision-makers. ASD is a sort of a response to the demand on knowledge-based decision-making and policies in the High North. ASD is based on international scientific and technical cooperation for all countries' mutual benefit. It helps to develop common rules and balance stakeholders' interests. For this reason, it is safe to assume that ASD has a spill-over effect to other areas of Arctic cooperation and it is conducive to shaping the region's governance regime.

It should be noted that many Arctic and non-Arctic states acknowledge the importance of ASD for the success of their policies in the High North. ASD is especially important for relatively small Arctic powers such as, for example, Nordic countries which have limited material resources to influence regional economy, politics and military balance. It is also crucial for non-Arctic states such as Germany, United Kingdom, China, Japan and South Korea which use ASD to shape their positive image of responsible Arctic actors and increase their influence in the region.

This study aspires to address the question whether ASD could be helpful in establishing global governance in the High North? The chapter is structured in a way to explore the main theoretical approaches to ASD, such as technical/instrumentalist, soft/smart power, public diplomacy, coercive diplomacy and globalist ones, as well as explain its nature, strategic motivations, forms and platforms.

## Theoretical Approaches to the ASD Phenomenon

Almost every IR school suggests a theoretical explanation of ASD of its own. The most popular theoretical approaches to the ASD phenomenon include:

*Technical/instrumentalist approach* to ASD has become quite popular in the international academic and political communities. For this approach, ASD is the use of scientific-technological and academic collaborations among countries, regions and societies to address common issues and build strong international partnerships on the non-ideological basis (see Fig. 1). Furthermore, these activities and resulting networks offer excellent opportunities to share resources, organizational capacity and expertise, open countries up to better funding opportunities from international sources.

The technical/instrumentalist approach defines science diplomacy as a set of interlinked but definable cognitive practices, such as enquiry, providing empirical evidence, compiling databases, reporting, and consulting. These practices arise and are maintained at the level of

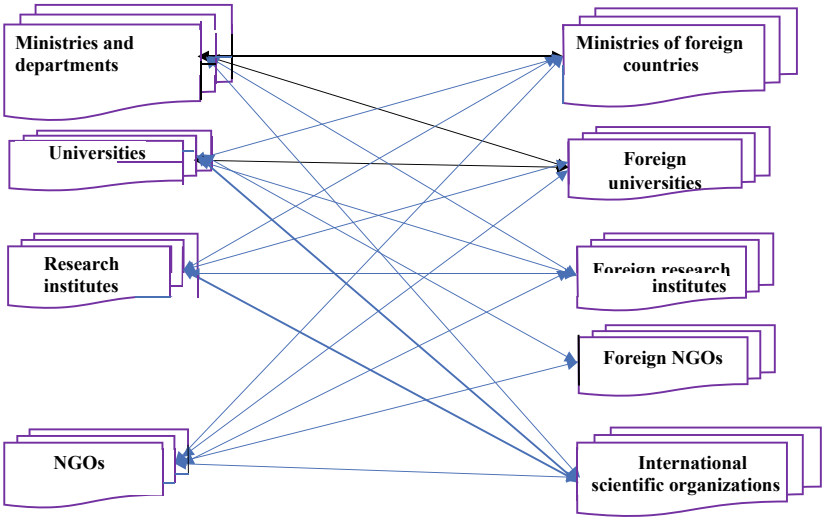


**Fig. 1** International scientific cooperation in the Arctic

everyday and routine activities through research institutions, laboratories, universities, conferences, seminars, workshops and other academic forums. ASD takes on a network character, caused by the need for coordination of efforts and timely communication for implementation of various research projects.

The ASD has already demonstrated its global importance, which is confirmed by the above-mentioned Agreement on Enhancing International Arctic Scientific Cooperation (hereinafter referred to as the 2017 Agreement) signed by the Foreign Ministers of the eight Arctic countries on 11 May 2017 at the Arctic Council Ministerial Meeting in Fairbanks.

*ASD as soft/smart power.* Proponents of this approach draw attention to the fact that various countries—both Arctic and non-Arctic—use ASD to strengthen their innovative status and improve their image in the region. The scientific attractiveness of the state is one of the essential features of the ASD soft power (see Fig. 2). The countries that occupy leading positions in the soft power ratings are very active in science diplomacy in the Arctic region. Such states include the United Kingdom, Germany, France, Switzerland, Japan, and South Korea, i.e. countries that are not Arctic states and have only an observer status in the Arctic Council. Due to their scientific activity, they have gained great authority in the field of Arctic research, and the "official" Arctic countries have to reckon with them in matters of regional policy. Of course, ASD itself is not an indicator of the soft power attraction, but it serves as a channel for the spread of this power, and the effectiveness of scientific and diplomatic networks is another element of soft power (Gavrilović, 2019).

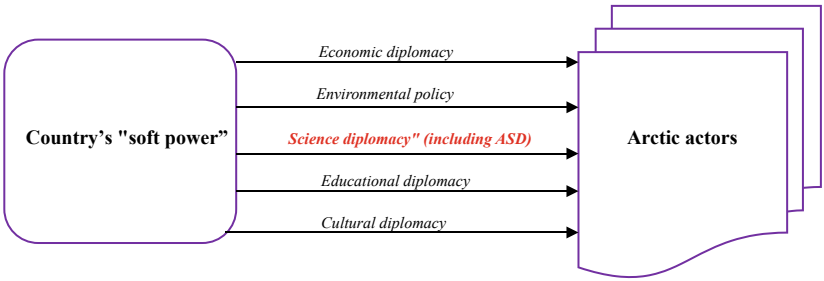


**Fig. 2** Arctic science diplomacy in the "soft power" strategy

The critics of the soft power interpretation of ASD, however, point out that many soft power ASD initiatives often pursue overtly pragmatic, interest-based goals of regional players rather than aim to take into account international partners' interests and, for this reason, are met by other Arctic actors with suspicion or even hostility (Sergunin & Karabeshkin, 2015). For example, Russian and Chinese ASDs are often perceived by their regional counterparts as a continuation of Moscow's and Beijing's "expansionist" policies in the Arctic but by different (non-military, non-propagandist) methods.

*ASD as a tool of public diplomacy.* For this school, the aim of ASD is not only to enhance international scientific cooperation in the Arctic (technical/instrumentalist approach) and/or improve a country's international image and make it an attractive partner (as the soft power approach suggests) but also to engage in a long-term cooperation with a foreign country's academic community with the purpose to solve most important theoretical and practical problems related to Arctic research (see Fig. 3). Furthermore, building upon successful research cooperation and generating a spill-over effect, ASD aspires to improve the overall state-to-state and society-to-society relations (Berkman, 2014; Faselt, 2017).

In fact, this approach does not deny the two previous ones; rather, it tries to incorporate them and subordinate them to a more general strategic goal—use ASD for establishing good/cooperative relations with all the Arctic players. To compare this theoretical approach with its competitors, it looks more reasonable, comprehensive and preferable for

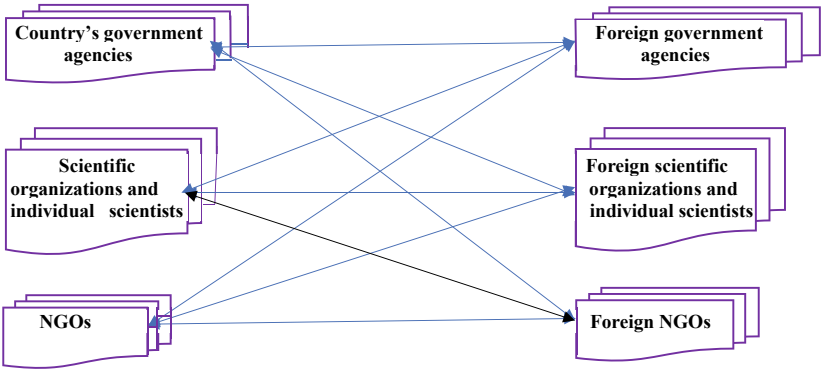


**Fig. 3** The place of the ASD in public diplomacy

explaining the nature of the ASD phenomenon and building science strategies in the region.

*ASD as an instrument of coercive diplomacy.* The start of the large-scale war in Ukraine revealed the fact that science can also be a tool in the hard-power arsenal—instead of stimulating scientific connectivity, science can be targeted by sanctions that make collaborations difficult or impossible (see Fig. 4). Sanctions could entail cutting funds for international scientific collaborations and isolating scientists in the targeted country from the rest of the world. Sanctions of this nature can, paradoxically, thus be regarded as an alternative form of science diplomacy (Van Langenhove et al., 2022).

As a result of the Western sanctions against Russia, the process of implementing the 2017 Agreement was stopped. The European Union and its individual member-states cut all collaborative programs with Russia, including the Arctic-related scientific projects.

In early March 2022, the seven member states of the Arctic Council other than Russia—Canada, Finland, Iceland, the Kingdom of Denmark, Norway, Sweden, and the United States—announced that they were

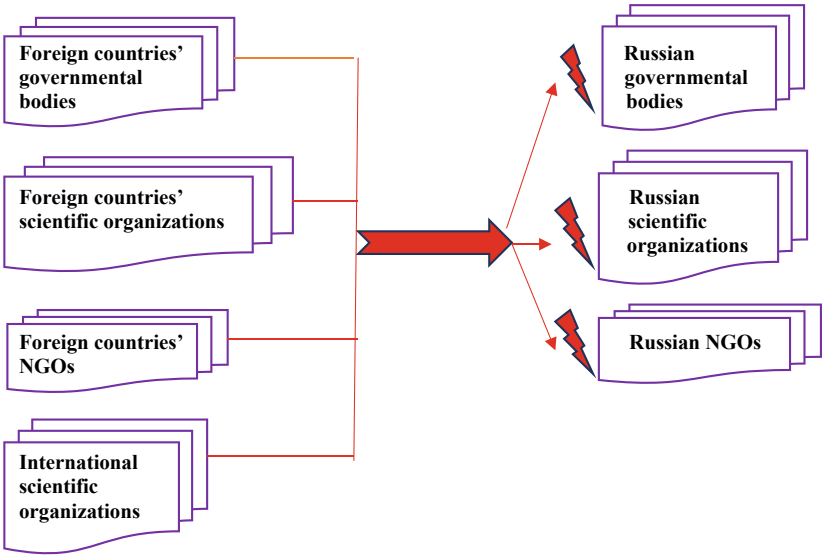


**Fig. 4** Coercive science diplomacy in the Arctic

pausing their participation in the Council's work, including that of its subsidiary bodies until further notice. Those states subsequently agreed among themselves to recommence cooperation on activities not involving Russia. In 2024, under the Norwegian chairmanship, some Council's working groups started online consultations with Russian experts in a limited format, but this is far away from the resumption of a full-fledged ASD.

Along with the Arctic Council, in early March 2022 the Barents Euro-Arctic Council (BEAC) and the University of the Arctic either froze their activities or suspended Russia's membership in these institutions. In the protest of these actions, Moscow withdrew from the BEAC in September 2023. This move led to the BEAC's general crisis because Finland also decided to leave the Council after 2025 because of its ineffectiveness in the current geopolitical situation.

It should be noted that professional associations such as International Arctic Science Committee (IASC), International Arctic Social Science Association (IASSA) and Association of Polar Early Career Scientists (APECS) also condemned Russia's special military operation (SMO) but did not exclude or isolate Russian scientists. On the contrary, they encouraged them to continue their work and cooperative projects within these NGOs.

In practice the sanctions imposed on scientific cooperation with Russia have negative implications not only for the Russian researchers but also for the global academic community, especially in areas related to climate change. As non-Russian scientists confess, without Russian data they cannot build a reliable climate change model or predict further melting of permafrost and Arctic ice dynamics (Pamuk et al., 2023). The indigenous peoples of the North are also discontent with cancelation of dozens of research and practical projects in the Arctic Council's context because this negatively affects them.

Reacting to these concerns, some Western experts suggest a "selective approach" to scientific cooperation with Russia. According to this view, while sharing critical or dual-use technologies with Russian scholars should be stopped, cooperation with Russian experts on climate, meteorology, oceanology, glaciology, biology, indigenous peoples, and cultural studies should be resumed (Van Langenhove et al., 2022).

However, Moscow does not agree with such a "selective approach" and advocates the resumption of full-scale scientific cooperation in the Arctic.

*The globalist approach*. The Arctic has long been considered a model region for peaceful and constructive cooperation with scientific collaboration playing a central role. The success story of the Arctic Council was, to a large extent, built on scientific cooperation—recognizing that policy-making must be based on scientific knowledge. The scientific assessments conducted by the Council's working groups were very successful instruments for formulating policy recommendations for its member states. These assessments provided the basis for a multitude of measures to protect the Arctic environment, ensure safe shipping, support the well-being of Arctic inhabitants (including the indigenous peoples), and, more generally, facilitate the sustainable development of the entire region. Although "hard" (military) security is outside the mandate of the Arctic Council, it served as an important network for bilateral and multilateral discussions on key regional issues related to the "soft" security sphere. Such long-lasting, productive collaboration, which took place through the Arctic Council and other entities—UN and regional—encouraged some politicians and scholars to see ASD as an instrument of an emerging global governance system in the High North (Berkman, 2018, 2019; Caymaz, 2021) (see Fig. 5).

The war in Ukraine that began in 2022 led to a crisis of regional institutions in the Arctic and called into question the ASD effectiveness as a tool of global governance. However, there are both practitioners and scholars who believe that ASD is still able, on the one hand, to

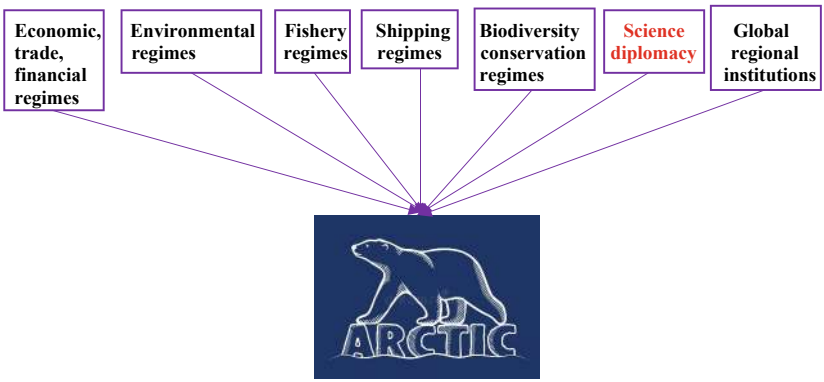


**Fig. 5** ASD as part of the Arctic governance system

prevent sliding academic communities to the Cold War-type confrontation, and, on the other, to preserve and further develop international scientific cooperation on most vital Arctic problems such as climate change, ice and permafrost dynamics, biodiversity conservation, environmental monitoring, maritime safety, resilient local communities (including the indigenous peoples) and so on.

A comparative analysis of the characteristics of these five approaches is given in Table 1.

Let's examine which institutions, platforms and venues are still available for ASD promotion on the global, regional and national levels.

## Arctic Science Diplomacy in the Era of Global Geopolitical Tensions: Institutional Dimensions

ASD encompasses numerous inter-governmental and non-governmental organizations forums, and associations interacting at the global, regional, and national levels.

**At the global level** the United Nations (UN) is a universal platform for science diplomacy, including the Arctic one. It promotes sustainable development projects through global agreements/conventions as products of science diplomacy: the Montreal (1987) and Kyoto (1997) Protocols, the UN Framework Convention on Climate Change (1992), UN Convention on Biological Diversity (1992), etc. The 1982 UN Convention on the Law of the Sea (UNCLOS), which is of crucial importance for maintaining the Arctic Ocean's legal regime, was grounded on a solid scientific basis as well. The UNCLOS-driven institutions such as the Commission on the Limits of the Continental Shelf and the International Seabed Authority are also oriented to knowledge-based decisions. The CLCS consists of 21 members who are experts in the field of geology, geophysics or hydrography.

Other important structures supporting ASD include the UN Environment Program (UNEP); the UN Development Program (UNDP); the UN Educational, Scientific and Cultural Organization (UNESCO), including its Intergovernmental Oceanographic Commission (IOC); and the World Meteorological Organization (WMO).

The UN Convention on Biological Diversity was initiated by UNEP and negotiated under its aegis. In 1988, the UNEP and WMO established the Intergovernmental Panel on Climate Change (IPCC). It provides decision-makers with expert knowledge that they can use to discuss the

**Table 1** Comparative analysis of theoretical approaches to ASD

| *ASD specifications* | *ASD strategic goal* | *ASD agents* | *ASD results* | *ASD research agenda* |
|---|---|---|---|---|
| Technical/ instrumentist approach | Expansion of international scientific cooperation in the Arctic | State and nonstate actors with a predominance of state players | Sustainable long-term academic partnerships, joint research projects | Orientation to natural science Issues |
| Soft power approach | Improving a country's image, turning it into a more attractive International partner in the Arctic | State actors | A more attractive international image of a country in the region | Focus on serving the foreign policy goals of regional actors |
| Public policy approach | Includes the previous two goals, plus improving relations with other Arctic actors (state and non-state) | Equal participation of state and nonstate actors | Two previous outcomes, plus more friendly relations between the Arctic state and nonstate actors; the Arctic is a region of peace and stability | Equal representation of natural science and social science problematique |
| Coercive approach | Putting pressure on a hostile country | State and nonstate actors | Scientific cooperation is destroyed | Non applicable |
| Globalist approach | To be instrument of global governance | State and nonstate actors; focus on international inter-governmental and non-state institutions | Arctic research serves global rather than national/ parochial interests | All spectrum of natural and social sciences issues |

*Source* Prepared by the authors

problems of climate change, related risks, and options for adapting to the negative impacts of climate change, including the polar regions. The IPCC has 195 member states who govern the Panel. The member states elect a bureau of scientists to serve through an assessment cycle. A cycle is usually six to seven years. The bureau selects experts in their fields to prepare IPCC reports. During the period of the Sixth Assessment Report,

the IPCC released the Special Report on the Ocean and Cryosphere in a Changing Climate (2019) where both polar regions were given close attention (IPPC, 2019, pp. 203–320). The seventh assessment cycle of the IPCC began in 2023.

In the UNDP *Human Development Report* (1994), the human security concept was introduced and defined as "safety from such chronic threats as hunger, disease and repression" and "protection from sudden and hurtful disruptions in the patterns of daily life – whether in homes, in jobs or in communities" (UNDP, 1994). Besides that, the main components of "human security" were identified in the text of the Report, including economic security, food security, health security, environmental security, personal security, community security, and political security. The Arctic states' human security strategy in the region is being built around these seven priorities (Sergunin et al., 2022).

The International Maritime Organization (IMO) is a UN specialized agency established in 1948 and responsible for regulating maritime transport. Headquartered in London, the IMO, in 2025, had 176 member states and three associate members. The IMO's primary purpose is to develop and maintain a comprehensive regulatory framework for shipping in areas such as maritime safety, environmental concerns, legal matters, technical cooperation, and the efficiency of shipping. The work of IMO is conducted through five committees and these are supported by technical subcommittees. At least three IMO committees (on maritime safety, marine environment and legal issues) build their work on the basis of scientific knowledge and are involved in science diplomacy. The IMO's most important contribution to Arctic shipping regulations was the International Code for Ships Operating in Polar Waters (Polar Code, 2014–2015), which was developed in close cooperation with the Arctic countries' academic community.

It is important to note that all the UN bodies did not stop cooperation with Russian scholars and experts after the start of the large-scale military conflict in Ukraine in 2022.

Among the NGOs operating at the global level, the International Arctic Science Committee is the most important professional organization uniting Arctic specialists from 24 countries (8 Arctic and 16 non-Arctic). Five IASC working groups conduct research in atmospheric, cryosphere, marine, terrestrial and social sciences. Emphasizing an interdisciplinary approach, these groups advise the IASC Council when it formulates research agendas for Arctic studies.

The IASC runs the International Conference on Arctic Research Planning (ICARP), which is an international Arctic science planning process and conference convened periodically by IASC in cooperation with its partners. More recently, the ICARP IV process was organized, which was initiated in 2022 and culminated at the ICARP conference in Boulder, Colorado, USA in March 2025. ICARP IV aimed to establish Arctic research priorities by achieving consensus and building collaborations among the leading scientific, academic, environmental, indigenous and political organizations currently concerned with Arctic issues. Following the ICARP IV Summit, the ICARP IV International Steering Committee during 2025–2026 will oversee the development of the final outcomes of the ICARP IV process to start implementation of research priorities and develop Arctic research themes for the International Polar Year 2032–33.

In 1993, the IASC established the International Science Initiative in the Russian Arctic (ISIRA), which is a Russian and international cooperative initiative to assist Arctic science and sustainable development in the Russian Arctic. Its objectives included (1) initiating planning of multinational research programs that address specific key scientific problems in the Russian Arctic; (2) providing a forum for linking on-going or planned bilateral projects; (3) facilitating improved scientific access to the Russian Arctic; (4) advising on funding and implementation of projects. This program was successfully functioning until the COVID-19 pandemic and the start of the Ukrainian war in 2022. Currently, ISIRA remains in a dormant phase.

The International Arctic Social Sciences Association, which was established in 1990, promotes international cooperation in the social and health sciences, humanities, and fine arts. It facilitates research and educational partnerships with indigenous peoples and other inhabitants of the Arctic and encourages the establishment of informal international working groups such as Justice in the Arctic, Gender in the Arctic, and Extractive Industries in the Arctic.

The University of the Arctic (UArctic), which was launched in 2001, is an international non-profit network organization engaged in scientific and educational activities. By 2022, its membership included more than 200 organizations in the countries involved in formulating Arctic-related policies. However, with the start of the 2022 Ukrainian war the UArctic paused the membership of 55 Russian universities and organizations. The

UArctic focuses on mobility, exchange, and cooperation among scientists from different countries, and the development of joint educational programs. The UArctic research cooperation is organized in the form of thematic networks which include experts from different countries in accordance with their research interests.

The IASC, IASSA and UArctic are observers to the Arctic Council.

Association of Polar Early Career Scientists (est. 2007) is a worldwide association of early career scientists (undergraduate and graduate students, postdocs, and early career faculty) interested in the polar regions and the cryosphere generally. APECS mission is to raise the profile of polar scientists by stimulating collaborative projects. Its member-states (Australia, Brazil, Bulgaria, Canada, Chile, Denmark, France, Germany, India, Italy, Norway, Poland, Portugal, Russia, South Africa, Sweden, the United Kingdom and the United States) have their own APECS chapters that focus on the needs and ideas of scholars country-wise.

Among other global-level NGOs involved in ASD, the International Council for Science, International Union for Conservation of Nature and Natural Resources, Advisory Committee on Protection of the Sea, World Wide Fund for Nature, and Circumpolar Conservation Union should be mentioned as well.

**At the regional level,** the Arctic Council serves as the central body for ASD. It is a high-level intergovernmental forum that addresses issues facing the Arctic states and indigenous peoples living in the High North. The structure of the Council includes six working groups that provide science-based recommendations to decision-makers. Decisions of the AC are the exclusive right and responsibility of the eight Arctic states acting in cooperation with state observers, as well as with intergovernmental and interparliamentary organizations and NGOs. Unfortunately, after the outbreak of the war in Ukraine, the activities of the Arctic Council's working groups were virtually paralyzed, and most of them were unable to implement current projects and publish their results.

Another process to strengthen ASD was initiated by the United States in 2016, when it invited the science ministers from all countries engaged in Arctic research as well as representatives from indigenous peoples' organizations to the initial White House Arctic Science Ministerial Meeting (ASM). Following this first ASM, the European Union, Germany, and Finland organized the second meeting in Berlin in 2018. Iceland and Japan hosted the third meeting in Tokyo in 2021. The fourth ASM was

organized by the Russian Federation in St. Petersburg in April 2023. Unfortunately, this meeting was not attended by foreign science ministers because of the Ukrainian war. The next meeting should be organized by Norway. The meetings have discussed measures to expand international scientific cooperation in the region, develop a global observation system, organize the exchange of observation data, integrate traditional knowledge into academic science and discuss the sustainable development of the Arctic.

The Northern Forum (the international organization of the northern regions) was established in Anchorage in 1991. Initially, it included northern regions from the Arctic states and even some regions from China, Japan and South Korea involved in cooperation with Arctic countries. According to its statute, the forum is a platform for dialogue between northern regions. Using the status of an international organization, representatives of the political elite, transnational companies, scientists, and heads of educational institutions got direct access to this international platform and the opportunity to share the results of scientific research, to launch initiatives to improve the socioeconomic development of the Arctic, and to call for solving specific problems.

After some break in the early 2000s, the Northern Forum resumed its activities in 2013, with the support of the regional government of the Republic of Sakha-Yakutia (Russia). The current leadership of the Northern Forum acknowledges an important role of ASD in maintaining international stability and cooperation in the region and, for this purpose, organizes an event on an annual basis—the Northern Forum for Sustainable Development (since 2019).

Interestingly, a rather intense ASD is conducted under a number of bilateral and regional fisheries regimes and institutions such as the Joint Norwegian–Russian Fisheries Commission (Barents Sea), North-East Atlantic Fisheries Commission, Northwest Atlantic Fisheries Organization, Convention on the Conservation and Management of Pollock Resources in the Central Bering Sea, North Pacific Anadromous Fish Commission and so on. These entities use research data to establish/identify total annual catch quotas, vulnerable marine ecosystems and marine protected areas (Sergunin, 2019).

Along with national scientific institutions, such research is provided by the International Council for the Exploration of the Sea. ICES is a leading multidisciplinary scientific forum for the exchange of information and ideas on all aspects of marine sciences pertaining to the North

Atlantic, Arctic and North Pacific. It was established in 1902 in Copenhagen, Denmark by eight founding nations: Denmark, Finland, Germany, the Netherlands, Norway, Sweden, Russia and the United Kingdom. It received a legal foundation and full international status in 1964. ICES today has 20 member states including the eight original members plus 12 additional nations: Belgium, Canada, Estonia, France, Iceland, Ireland, Latvia, Lithuania, Poland, Portugal, Spain, and the United States. Currently, ICES runs a network of nearly 6000 scientists from over 700 marine institutes in member countries and beyond. Over 2500 scientists participate in the ICES activities annually (ICES, 2025).

**At the national level,** the following ASD instruments are used by both Arctic and non-Arctic states—specialized research institutes/centers, universities, research infrastructure, and regular conferences/fora on the Arctic problematique.

As for research institutes specializing in Arctic studies, for example, in Norway, the Fram Center (Tromsø) is a leading scientific center in this field. Being an umbrella-type entity, it consists of 21 institutions involved in interdisciplinary research and outreach in the fields of natural science, technology, and social sciences.

In Russia, the Arctic and Antarctic Research Institute operating under the auspices of the Federal Service for Hydrometeorology and Environmental Monitoring (Roshydromet) is a largest research center on polar studies. The AARI conducts fieldwork, data processing, mapping, modelling, and forecasting on the climate, atmospheric processes, near space, and the marine and ice environments. AARI scientists work at Severnaya Zemlya (Cape Baranov Ice Base), Tiksi Bay, and the Spitsbergen Archipelago. The institute has a fleet of research vessels capable of operating in icy waters.

In the non-Arctic states, the following research centers are renowned for its expertise in Arctic studies: Scott Polar Research Institute (UK), Alfred Wegener Institute for Polar and Marine Research (Germany), Polar Research Institute of China, National Institute of Polar Research (Japan), Korea Polar Research Institute.

As far as the universities are concerned, for example, in Finland, the University of Lapland (with its Arctic Center) is famous for its expertise in northern studies and being an active ASD actor. The Arctic University of Norway in Tromsø is a leading higher education institution in this country's Arctic studies. In the United States, the University of Alaska is an absolute leader in this field. In Russia, several university-level institutions

are involved in both Arctic research and ASD: Northern (Arctic) Federal University (NARFU) (Arkhangelsk), Murmansk Arctic State University, North-Eastern Federal University (Yakutsk), St. Petersburg State University, etc.

The research infrastructure (laboratories, polar stations, research vessels, icebreakers, satellites, etc.) is a powerful tool of national ASD as well.

For example, in Russia, the largest research stations in the Arctic are the Cape Baranov ice base on Bolshevik Island, the hydrometeorological base in Tiksi, the North-Eastern Scientific Station of the Russian Academy of Sciences in the village of Chersky, and the observatory of the Polar Geophysical Institute in Barentsburg (Spitsbergen/Svalbard).

The INTERACT (International Terrestrial Research and Monitoring Network) allows scientists from all over the world to carry out fieldwork and research in the fields of ecology, meteorology, biology, and cryolithology. For example, the key Russian components of the INTERACT include the following facilities: Aktru Research Station, Bely Island Research Station, Chokurdakh International Tundra Research Station, Elgeeyi Research Station, Igarsk Geocryological Laboratory, Kaibasovo Research Station, and the Khanymei Research Station. Unfortunately, because of, first, COVID-2019 and, second, the Ukrainian war, foreign scholars cancelled their trips to the Russian Arctic research stations. However, more recently, polar scientists from friendly nations such as China and India expressed their interest in visiting these stations.

Russia also plans to build an all-year-round Arctic station of the new generation "Snowflake" in the Polar Ural (Yamal-Nenets Autonomous District). It should use renewable sources of energy, including solar, wind and hydrogen ones. It will be specially designed to host foreign scholars and implement international research projects.

Moscow also suggested building a BRICS international research station in Pyramid, a ghost Soviet-time mining town on Spitsbergen/Svalbard, which can be available for polar scientists from any country.

As for research vessels and icebreakers, they can also be effective ASD instruments because they play an important role in organizing scientific research in the Arctic. They provide scientists with access to the Arctic Ocean, help to resupply other research vessels drifting in the ice and also to deliver materials and equipment to research stations located on the polar islands remote from the continent. For example, the one-year-long MOSAiC (Multidisciplinary drifting Observatory for the Study of Arctic

Climate) expedition into the Central Arctic Ocean (September 2019–October 2020) made on the German ice-class research vessel *Polarstern* was a real ASD success story. MOSAiC's main goals were to investigate the complex and still only poorly understood climate processes at work in the Central Arctic, to improve the representation of these processes in global climate models, and to contribute to more reliable climate projections. In total, during the various phases of the expedition, more than 600 people from more than 80 institutions from 20 countries were working in the Central Arctic. The *Polarstern* was supported and resupplied by the icebreakers and research vessels *Kapitan Dranitsyn*, *Akademik Fedorov*, *Akademik Tryoshnikov* (Russia), *Sonne* and *Maria S. Merian* (Germany).

Russia has a particularly great potential in this area. In addition to a dozen ice-class research vessels, it has about 40 icebreakers, of which seven are nuclear-powered. Several more nuclear-powered icebreakers are on sea trials or under construction. This potential allows Russia to annually conduct about 50 marine research expeditions to the Arctic.

Some of these expeditions are unique in terms of combining research and education programs. For example, since 2012, with the support of the Russian Geographical Society, NARFU, and Roshydromet, an innovative educational project, the Arctic Floating University (AFU), has been implemented. Every year the expedition takes place on the ice-class research vessel *Professor Molchanov*. Expeditions were made to the Novaya Zemlya, Franz Joseph Land a Spitsbergen/Svalbard archipelago, as well as to the Taimyr Peninsula. Members of the expedition have included politicians, representatives of business, students, graduate students, and researchers of Russian and foreign scientific and educational institutions. During the marine expedition, scientific and educational programs dedicated to Arctic science are organized for students. The development of international scientific and educational cooperation, including with the Arctic and non-Arctic countries, as part of expeditionary activities in the Arctic, is one of the AFU priorities of AFU (NARFU, 2025).

In 2022, the AARI got the *North Pole* ice-resistant self-propelled platform, a research and expedition vessel designed for long-term drifting in the Arctic ice (up to two years). The platform is a home to 15 research laboratories and state-of-the-art equipment for geological, geophysical, acoustic, oceanographic and other research. It is able to host 14 crew members and 34 scientific personnel. After the first trip in 2022–24, the *North Pole* went for the second two-year voyage to the Central Arctic Ocean in August 2024. The platform is designed to accommodate foreign

scientists, but for various reasons (due to tense relations with the West and COVID restrictions), the composition of both expeditions is purely Russian, which, however, does not exclude the formation of international teams in the future.

The Arctic nations actively use regular international forums on Arctic issues as an ASD tool. These include the Arctic Circle (Reykjavik, Iceland), Arctic Frontiers (Tromsø, Norway), Arctic Encounter (Anchorage, USA), Arctic Science Summit Week (organized by the IASC in different countries on the rotating basis), "The Arctic – a Territory of Dialogue" (sponsored by the Russian Government), etc. These forums serve as a good platform not only for sharing research results and establishing cooperative contacts, but also for initiating new ideas and projects that define the horizons of Arctic research and science diplomacy.

As the number of ASD actors is constantly growing, the need to coordinate their activities at the national level is objectively increasing. For example, in Russia, there are more than 500 organizations located in 50 regions that carry out research on the Arctic. There are several coordination mechanisms in this country. There is a special Research Council on the Arctic in the Russian Academy of Sciences to coordinate Arctic studies in the numerous RAS natural and social sciences institutes. The State Commission on the Arctic Development, Russia's main coordination body on Arctic policies, has recently formed an Advisory Board where the leading research organizations dealing with the Arctic are represented.

In Canada, the Polar Knowledge Canada (POLAR), which operates under the auspices of the Crown-Indigenous Relations and Northern Affairs Canada, assumes coordination functions. In the United States, the Arctic Research Consortium of the United States plays a role of informal coordinator of the ASD activities of American academic community. At the governmental level, the United States Arctic Research Commission is the main coordination body which works in a close contact with the National Science and Technology Council and Interagency Arctic Research Policy Committee.

Nordic countries also have ASD coordination mechanisms: the Danish Polar Center, Icelandic Arctic Cooperation Network, Norwegian Research Council, Finnish National Committee of Arctic and Antarctic Research, and Swedish Polar Research Secretariat.

Non-Arctic states' coordination bodies include the Arctic Office of the Natural Environmental Research Council (UK), Swiss Polar Institute,

Chinese Arctic and Antarctic Administration (subordinated to the State Oceanic Administration), Japan's Ocean Policy Research Foundation, etc.

## Conclusions

Several conclusions emerge from the above analysis:

First, although there is still no common understanding of the ASD concept in the international academic community, it has firmly entered the worldwide political and scientific lexicon and is actively used by scholars and practitioners responsible for the development and implementation of a scientific strategy for the Arctic.

Second, currently, the international academic and political discourse is dominated by the understanding of ASD as a mechanism for building strong international partnerships on a non-ideological basis, establishing scientific relations with foreign colleagues to solve common problems, and gaining access to the research infrastructure of foreign partners as well as additional sources of funding.

Third, part of the international academic community and political elite perceives ASD as an effective tool of national soft power in the Arctic. Considering the fact that many Arctic and non-Arctic countries seek to avoid aggravating relations with other Arctic players and turn the High North into a region of peace and cooperation, it can be assumed that the role of ASD in Arctic actors' soft power strategy will only increase (especially after the end of the Ukrainian war).

Fourth, in the world political and academic discourses, the interpretation of ASD as a form of public diplomacy is gradually gaining momentum. This interpretation does not have a pronounced state-oriented character, but at the same time, it does not refuse to coordinate its activities with official diplomacy. Proponents of this approach to ASD believe that amid the current tension between the West and Russia, less formal non-state diplomacy can achieve more progress than official science diplomacy. This approach to the study of ASD, to some extent, tries to incorporate the two previous approaches (improving countries' image in the international arena along with the stimulation of international scientific cooperation) into a single strategy that uses ASD to improve relations between the Arctic players.

Fifth, along with the above cooperative approaches to ASD, a new vision of science diplomacy as an instrument of coercive policy or punishment of Russia for Moscow's SMO in Ukraine has emerged in some

Western countries. This approach can hardly be considered as a positive one because it undermines Arctic cooperation rather than supports it.

Six, fortunately, there is still another approach which perceives science diplomacy as an instrument of Arctic global governance which, on the one hand, prevents sliding academic communities to the Cold War-type confrontation, and, on the other, preserves and further develops international scientific cooperation on most vital Arctic problems such as climate change, ice and permafrost dynamics, biodiversity conservation, environmental monitoring, maritime safety, indigenous peoples, education, culture and so on.

Over three decades of intensive and fruitful scientific cooperation in the Arctic, an extensive ASD institutional system has been created, including mechanisms, platforms and tools at the global, regional and national levels. Despite the fact that this system has been severely stressed due to the war in Ukraine and Western sanctions against Russia, it has generally proven its viability. The regional level (in particular, the Arctic Council) has been particularly affected, but it can also recover if the global confrontation between the West and Russia ends. Nowadays, ASD is characterized by strong polarization, when Western countries prefer to cooperate with each other, and Russia prefers to cooperate with friendly Eastern countries. In this form, ASD cannot yet effectively perform its functions as an instrument of global governance in the Arctic. However, there is every reason to believe that after the end of the Ukrainian conflict, ASD will be able to recover in a short time, because it has accumulated a lot of positive cooperative experience and has preserved (albeit in a half-frozen form) the necessary institutional mechanism for this. The key priority for the world academic community is to protect the existing ASD institutional system from further destruction and keep channels for communication between Arctic scholars open.

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# Enhancing Science Diplomacy for a Better Arctic Governance

*Monika Szkarłat, Michał Łuszczuk, and Piotr Rakowski*

## Introduction

The chapter discusses the importance and challenges of science diplomacy in the Arctic, emphasizing its role amid political and environmental complexities. It critiques the vague definitions and practical applications of science diplomacy, suggesting the adoption of a polycentric governance

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approach to improve resilience and stability in the face of international crises. This approach highlights the system's interdependence, multiple decision-making levels, and the necessity for cooperative-competitive relationships among diverse stakeholders, including the integration of traditional knowledge. The authors propose mechanisms to enhance the governance system in the Arctic, stressing the need for inclusive research to address global challenges in the Anthropocene era. The paper calls for further research into science diplomacy's role in regional governance, suggesting that its adaptive potential could lead to more effective cooperation and conflict resolution in the Arctic's dynamic geopolitical environment.

In the past two decades, science diplomacy has gained recognition both as a political practice and as a subject of analysis within the evolving landscape of modern diplomacy. The discursive influence of science diplomacy has been steadily growing; however, for many observers, it might appear to be yet another buzzword characterized by a lack of definitional consistency and insufficient practical or analytical foundations. This challenge is exacerbated when one attempts to employ the traditional framework of diplomacy as a reference point for analyzing science diplomacy, as the latter encompasses a significantly more diverse range of stakeholders, objectives, and methodologies for achieving its goals.

The heterogeneity and multidimensionality inherent in science diplomacy present a formidable challenge when attempting to delineate the boundaries of this phenomenon and its associated concept. This complexity can be attributed, in part, to the frequent overlap between researchers studying science diplomacy and individuals with prior experience in diplomacy or foreign policy. While such expertise can elucidate certain facets of diplomatic practice, it also carries the risk of compromising objectivity. Conversely, a strict adherence to academic discourse and research outcomes may offer limited utility in practical diplomatic endeavors. In both scenarios, these factors frequently undermine the quality of research, impede constructive scientific dialogues, weaken collaborations between the scientific and diplomatic communities, and contribute to an information deluge that confuses public opinion. Moreover, actors in science diplomacy cannot function in isolation; they must navigate their respective national directives and engage with national diplomatic and governmental structures to align with national policies. Consequently, realizing the full potential of science diplomacy, both on

a global scale and within the particularly significant context of the Arctic region, remains a challenging endeavor.

In light of these complexities, it is imperative to adopt a more critical and rigorous perspective on science diplomacy, especially in light of the conceptual and practical shortcomings that became evident during the political crisis in the Arctic following Russia's aggression against Ukraine in 2022. This chapter draws upon the concept of polycentric governance as proposed by K. Carlisle and R. L. Gruby (2019) to explore fresh opportunities for advancing science diplomacy in the Arctic. This conceptual framework enhances our ability to comprehend the structure and operational dynamics of this open system, characterized by interdependence, multiple decision-making levels, and overlapping centers of authority that simultaneously cooperate and compete. This framework is instrumental in fostering innovation and facilitating conflict resolution.

On the basis of this analysis, we underscore the urgent necessity to fortify the resilience of science diplomacy and propose mechanisms that can stabilize the functioning of Arctic science diplomacy during future international crises or shocks. Such enhancements will not only spur further development of the regional governance system in the Arctic but will also ensure the broadest possible spectrum of research—an imperative for our civilization in the Anthropocene era.

## Polycentric Governance—Conceptual Framework

The concept of polycentric governance was developed by Vincent and Elinor Ostrom (Ostrom, 1961, 1990) and was further developed by researchers whose areas of interest include common-pool resource management systems, such as polycentric governance and management of common pool natural resources (Folke et al., 2005; Ostrom, 1990, 2009; Pahl-Wostl, 2009; Poteete et al., 2010; Sabatier & Weible, 2015).

The system of polycentric governance is a multidimensional, heterogeneous, and heterarchic system characterized by the dispersion of decision-making competencies and authority among multiple centers located at different levels of governance and representing diverse sectors. These decision-making centers operate alongside each other, acknowledge their existence, mutually recognize each other, and act within defined realms of autonomy (Ostrom et al., 1961). The challenge lies in delineating clear demarcation lines between individual decision-making centers since they form a complex network with numerous nodes and overlapping

units representing various levels of jurisdiction and specialized centers that intersect multiple jurisdictions (McGinnis, 2011; Ostrom, 2005; Ostrom et al., 1994).

An essential determinant that must exist for the concept of polycentric governance to apply is the mutual recognition of individual centers or units within the system, which are formally independent of each other but functionally linked by a certain type of interdependence. This interdependence includes, among other things, the consideration of the existence of other units in the system and engaging in cooperative-competitive relationships with them when choosing courses of action (Ostrom, 1961, 1990).

Four main attributes distinguish the polycentric governance system. Firstly, it involves the presence of multiple overlapping decision-making centers, each possessing a certain degree of autonomy. Although individual centers act independently, it is essential to recognize that their activities can influence other centers within the system. The boundaries between these centers are blurred and overlapping, and they remain interdependent on each other. It's important to emphasize that diverse entities contribute to the system, with only some of them holding formal legitimacy for political decision-making or law creation. However, others, such as private entities, non-governmental organizations, and various others, are not to be disregarded, as they actively participate in shaping the polycentric governance system, impacting official decision-making processes (McGinnis, 2011). A distinguishing category for decision-making centers is their "considerable independence to make norms and rules within a specific domain" (Ostrom, 1999). On the other hand, entities that influence decision-making processes and the behavior of decision-making centers are referred to as "critical supporting role actors." This category includes entities such as expert knowledge-providing bodies involved in the decision-making process. This diversity, both in terms of decision-making centers and supporting actors, renders the institutional dimension of the polycentric governance system dynamic rather than static, subject to continuous change and reconfiguration (Ostrom, 1999).

Secondly, polycentric governance systems are characterized by high adaptive potential. This means they have the ability to quickly adjust and respond to changing realities. This adaptability allows self-regulation, without the need for top-down planning and decision-making. Instead, the adaptation process occurs spontaneously (Ostrom, 1999). The adaptability of the system is also enhanced through the inclusion of new actors.

This is particularly important when existing participants in the system lose the ability to restore homeostasis (Folke et al., 2005).

Thirdly, polycentric governance operates at multiple levels, ranging from local and regional to national and global. This multi-level approach enables the system to respond to changes at different levels. Furthermore, it does not exclude the possibility that decision-making centers at one level, for example, the regional level, may be the most effective in addressing a specific challenge, often resulting in the bypassing of other levels of governance (McGinnis, 2011).

Fourthly, decision-making centers within the polycentric governance system engage in cooperative-competitive relationships with each other. This characteristic promotes the development of innovative management tools and the resilience of the entire system. Collaboration among centers and supporting actors builds the capacity for effective collective actions and the delegation of competencies to other entities (Ostrom, 1961, 1990).

## Science Diplomacy—From Political Practice to Analytical Phenomenon

Science diplomacy is a set of practices taking place at the intersection of foreign and/or international policy and scientific policy or science. The catalog of activities matching the definition of this term includes support for the internationalization of science, providing scientific/expert knowledge to foreign policy and decision-making processes at the international level, and using scientific contacts as a transmission belt to maintain, renew, or improve international relations between parties (Leijten, 2017; Turekian et al., 2015; Van Langenhove, 2017). The objectives of science diplomacy and the instruments applied highlight its cooperative and competitive character. However, in practice, stakeholders of science diplomacy combine these two approaches, regarding progress in science, scientific cooperation, and scientific/expert knowledge both as a goal in itself and as an instrument for pursuing other policies (Szkarłat et al., 2020). The primary subjects of science diplomacy are states, even though actions falling within the scope of science diplomacy are also undertaken by non-state actors. We should mention here such stakeholders as intergovernmental and non-governmental organizations, scientific and higher education institutions, private entities, and individual scientists (Campbell, 2015).

### *Science Diplomacy in the Arctic—Multiple and Overlapping Decision-Making Centers*

In the category of decision-making centers within a polycentric governance system, not only do formal government bodies belong, but not every entity expressing interest in a specific area of international policy becomes another decision-making center. This status is granted to entities capable of independently establishing norms and rules applicable to a specific area. These entities can include both state institutions and non-state actors such as intergovernmental organizations and transgovernmental networks.

Within the category of state entities, there is a significant diversity, resulting in a multitude of state decision-making centers. Furthermore, when analyzing science diplomacy in the Far North region, several distinctive factors should be highlighted. First and foremost, there is no single science diplomacy approach in the region, owing to the involvement of numerous stakeholders, particularly states. This group encompasses the Arctic Eight (A8) countries, observer states in the Arctic Council (AC), and all those who consider this area important in the context of international scientific initiatives, economics, or ecology (Canova, 2023). In this context, national interests and specific political objectives are crucial. While the A8 states and their partners from outside the region have expressed their intent to cooperate internationally and protect the Arctic from potential disputes and conflicts, this prospect has become increasingly unrealistic. For instance, due to the strategic significance of the Arctic in the global climate change regime, the region is not a closed system. This is evident in aspects such as data collection and access to scientific information required to assess global trends in climate change.

As a consequence, states differ in their approach to science diplomacy.[1] Furthermore, non-state actors are also significant stakeholders in

[1] Some states have separate strategic documents dedicated to science diplomacy and/or the actions taken in this regard in the Arctic, as seen in the case of France (Ministère de L'Europe et des Affair Étrangères, Équilibrer les Extremes., 2022; Ministry of Foreign Affairs of France, 2013). On the other hand, some states may not explicitly use the term "science diplomacy," but they have extensive programs focused on scientific activities and the application of scientific/expert knowledge in the political decision-making process related to the region. This is evident in the Scandinavian countries, such as Sweden (Government Office of Sweden, 2020). Denmark has developed and implemented a strategy known as 'TechPlomacy' that combines economic growth with knowledge-based development (Ministry of Foreign Affairs of Denmark, 2023). Similarly, in the new U.S.

Arctic science diplomacy. The primary structure for intergovernmental cooperation in this context is the AC. It serves as both a platform for international dialogue on regional matters and an influential entity that shapes the direction of international law and acts as an epistemic forum for generating and disseminating expertise crucial for informed decision-making (Rottem, 2020, p. 27). However, the functioning of the AC is not without its challenges and limitations. It is susceptible to operational difficulties in situations where "hard politics" takes precedence and when there are crises in relations among the A8 states. This vulnerability arises from the Council's application of the consensus principle in decision-making, the restriction on new project proposals to A8 states and permanent participants, and the exclusive right of A8 states to hold the rotational chairmanship (Rottem, 2020, p. 21).

The heterarchical network of science diplomacy stakeholders in the Arctic also includes international non-governmental organizations. One notable actor in this category is the International Arctic Science Committee (IASC), which brings together organizations representing the scientific community from 24 states. The IASC functions as an interdisciplinary body, uniting scientists engaged in Arctic research. It serves as a platform for dialogue, knowledge sharing and development, and the coordination of international scientific cooperation. The IASC is active through its multidisciplinary working groups, projects, the organization of annual Arctic Science Summit Weeks, and its role in stimulating and shaping the direction of scientific research within the framework of the International Conferences on Arctic Research Planning (ICARP). Furthermore, the IASC holds observer status in the AC, which is closely related to one of the Committee's key roles—providing scientific/expert knowledge to the decision-making process. This knowledge transfer occurs, for example, through a group dedicated to conveying Arctic-related information to decision-makers (Communicating Arctic Science to Policy-Makers, CASP) (Łuszczuk & Szkarłat, 2022).

Actions that align with the definition of science diplomacy and are focused on the Arctic region are also carried out by various organizations,

National Strategy for the Arctic Region, there is no direct mention of science diplomacy, but the priorities outlined encompass science-based decision-making, participation in international scientific partnerships, collaborative knowledge creation with indigenous communities, and active engagement in regional organizations, notably the AC (The White House, 2022).

including the Barents Euro-Arctic Council, the Council of the Baltic Sea States, the Nordic Council, the Nordic Council of Ministers, as well as organizations within the United Nations system and the European Union, among others. These efforts also extend to cooperative networks between universities, such as UArctic or Arctic5 (Everett & Halašková, 2022).

To comprehensively understand the subject structure of the polycentric governance system in the Arctic, it's essential to consider a diverse array of non-state stakeholders. This includes private entities, advocacy groups, epistemic networks, and various other categories of entities. These stakeholders should also be taken into account in the analysis of the subject structure of science diplomacy in the Arctic, as each of these categories, formally or informally, plays a role in generating and disseminating knowledge. Consequently, they influence the formation of transnational knowledge networks that are active or emerging in the Far North region, often with a global reach. A defining characteristic of this governance system is its fluidity and the blurring of boundaries not only between individual decision-making centers (e.g., A8, AC) but also between decision-making centers and pivotal supporting actors (e.g., observers in the AC, the EU, knowledge hubs like recognized research centers, international scientific conferences, etc.) (Carlisle & Gruby, 2019).

One of the key characteristics of polycentric governance systems is the overlapping, intertwining of areas of competence and levels of governance. This is also an inherent feature of science diplomacy, especially one of its types, which involves the creation and transfer of scientific knowledge to transnational decision-making processes. The challenge lies in capturing and identifying the boundaries of the knowledge flow channel because it cannot be limited solely to decision-making centers such as ministries and other state institutions, diplomatic services, or the bodies of international organizations. It also includes epistemic networks, think tanks, and many other entities participating in the knowledge governance process in the Arctic. To describe this phenomenon adequately, the formulations proposed by J. Agnew (2007) are appropriate, where he writes about the geographical identification of the origin of knowledge present in the regional knowledge governance system, or M. Kuus, who uses the metaphor of "in-betweeness" to support the thesis of blurred boundaries and the diversity of entities co-creating the system (Kuus, 2023).

For entities such as states/observer organizations in the Arctic Council, the knowledge they contribute/provide often serves as a significant and

informal channel for their involvement in the activities and discussions taking place within the Council. Through this means, they indirectly participate in decision-making processes for which they do not possess official legitimacy. A similar mechanism operates for other stakeholders, such as major Arctic conferences like the Arctic Circle or Arctic Frontiers, which serve as nodes of knowledge and are characterized as 'bazaar governance' by C. Geertz (Depledge & Dodds, 2017; Kuus, 2023).

### *Science Diplomacy in the Arctic—The Adaptability of the System*

Science diplomacy in the Arctic exhibits a diverse range of instruments and approaches. Strictly diplomatic tools are typically reserved for states or intergovernmental organizations. These tools encompass international agreements, exemplified by the legally binding Agreement on Enhancing International Arctic Scientific Cooperation (Arctic Council, 2017), as well as formalized and recurrent international scientific programs, such as the International Geophysical Year (1957–1958) and the International Polar Year (1882–3, 1932–3, 2007–9, 2032–3). From a scientific research perspective, international scientific projects hold significant value. An illustrative example is the MOSAiC expedition—a year-long international endeavor in the Arctic Ocean (MOSAiC, 2023). Another crucial aspect of science diplomacy is the organization, hosting, and participation in internationally recognized conferences, which find recognition within scientific, political, and business circles. Notable events include the Arctic Science Summit Week, Arctic Frontiers, and the Arctic Circle (Steinveg, 2021, 2023). Furthermore, science diplomacy employs various instruments, particularly international scientific cooperation, which includes access to infrastructure such as research stations, such as those located in the Svalbard archipelago. Scientific cooperation extends to various forms of logistical support and the exchange of measurement data.

The crisis in the Arctic cooperation, caused by Russia's full-scale aggression against Ukraine in 2022, may become a test showing to what extent the conscious use of science and cooperation can contribute to the restoration of trust in the scientific community and between political partners. As a result of the aggression, a broad range of actions and influences showing the specific character of science diplomacy can already be noticed in the Arctic region. Unlike the so-called Ukrainian crisis from 2014, which did not cause serious consequences for scientific cooperation between the Russian Federation and partners from the

West, the Russian invasion from early 2022 constituted an important game changer which had its repercussions also in the area of scientific relations (Byers, 2017; Käpylä & Mikkola, 2019). In response to the Russian aggression, seven states of the A8 announced suspension of their participation in the work of the AC (Joint Statement, 2022b). Then they agreed to return to the cooperation in this format, but it pertained to the activities without Russia's participation (Joint Statement, 2022c; Kornhuber et al., 2023). Russia's operations in Ukraine were condemned both by institutions representing the scientific community (Allianz der Wissenschaftsorganisationen, 2022; ASSW 2022 Local Organizing Committee, 2022; IASC, 2023; Joint Statement, 2022a) and governments of states (Norway Government, 2022; UK Government, 2022). In most cases, institutional cooperation with Russian partners was suspended, although it has been possible to maintain contacts and cooperation with Russian scientists without indicating their affiliation with scientific institutions of the Russian Federation.

Nevertheless, there has been parallel argumentation about the adverse impact of the geopolitical crisis on scientific research in the Arctic which shall have its implications for the processes of identification, analysis and monitoring of negative environmental changes in the region and globally. Despite the ongoing conflict, non-institutional and informal contacts between scientists from the West and from Russia are maintained, as exemplified by the Arctic Science Summit Week conference organized by IASC and the Austrian Polar Research Institute (APRI) in Vienna, February 2023. Among the conference participants there were researchers from Russia who did not provide their scientific affiliation, and took part solely under their own names (ASSW, 2023). In addition, works related to the collection of data, e.g. meteorological, in the Russian part of the Arctic are continued, because—in this respect—the international agreements to which the Russian Federation is a party are still in force. These data are transferred to the World Meteorological Organization (Enomoto, 2022). There are also more pessimistic opinions pointing out serious obstacles resulting from the closure of the Russian part of the Arctic to Western researchers. It was emphasized by L. Kullerud, President of the University of the Arctic (Uarctic), at the Arctic Frontiers conference in 2023. Among members of the UArctic network of universities there were 55 Russian institutions which, in reaction to Russia's aggression in Ukraine, were excluded from the community. All joint educational

programmes and research projects were suspended. The future of cooperation in the Arctic and the role of science in the restoration of trust between its participants were also discussed during the Arctic Circle Japan conference (4–6 March 2023). The panelists emphasized the significance of science diplomacy. L. Heininen, the chairman of the GlobalArctic Mission Council, said: "Knowledge is more powerful than physical or military force, we need to trust it and rely on it" and "(…) My message to the eight Arctic states is very clear: let us do our work (author's note) […] we need to do our work. Do not put obstacles for us on our way to do it" (Heininen, 2023).

The response of a polycentric governance system, whether to a crisis or the emergence of new areas requiring regulation, demonstrates the adaptive capacity of such a system. This is related to the dispersed models of governance and decision-making. Furthermore, polycentric governance systems are open to new actors and the creation of alternative decision-making forums (centers). For a long time, not only in relation to the Far North region but also in other contexts, actors associated with the world of science and the creation of expert knowledge have played such a role, with scientific cooperation serving as the transmission belt. During the current crisis, science continues to display the greatest adaptive capabilities and serves as a platform (a level of governance) not only in the literal exchange of scientific knowledge but also as an alternative forum for sustaining dialogue and contacts between political actors. Expert structures such as working groups in the AC, the IASC, or participants in meetings such as the Warsaw Format, through informal social and professional networks, create opportunities for functioning as platforms for interaction and dialogue, known as "cross-scale linkages" (Carlisle & Gruby, 2019).

The persistent inability to return to normal operations, as seen in the AC, and efforts to develop new solutions are examples of what is referred to as "institutional fit." This phenomenon involves attempting to adapt to changing circumstances. In this specific case, it involves the decision in the beginning of September 2023 to reactivate working groups and expert groups to engage in activities (Edvardsen, 2023).

### *Science Diplomacy in the Arctic—Multiple Levels of Operation*

In the Arctic a transnational epistemic community has been formed, heterarchical in the subject-related dimension (public and private entities,

NGOs), with science and knowledge as its keystones. We can talk here about a unique model of international governance—a heterarchical epistemic regime which combines several regimes of knowledge—traditional, conventional (western), bureaucratic (knowledge of decision-makers and officials) and stakeholders' knowledge (practical, non-scientific, professional knowledge based on life experience) (Godowska, 2022).

The recognition of the significance and value of traditional knowledge of the Arctic indigenous inhabitants is another distinguishing feature of science diplomacy in the region. This attitude is confirmed by official state documents, e.g. the Norwegian, Swedish or US Arctic strategies which are based on the inclusive approach to traditional knowledge, involvement of representatives of indigenous communities in the decision-making process at the national level, and consultation of political opinions presented on the forum of e.g. international climate negotiations. The same trend is visible in the strategies of regional intergovernmental and non-governmental organizations, such as the AC or the IASC (Arctic Council, 2023; IASC, 2018).

The polycentric system of science diplomacy in the Arctic consists not only of vertical levels of governance, such as local, regional, national, transnational, and global dimensions but also horizontal levels. In this context, it is important to mention the sectors in which the transfer of expert knowledge occurs (natural environment, energy, health, migration policy, tourism). From a subject perspective, we observe the dispersion and spread of practices related to the creation and transfer of knowledge beyond state institutions, research institutes, universities, or international organizations (Carlisle & Gruby, 2019; Kuus, 2023).

Furthermore, the levels of management can also be viewed from the perspective of various types of science diplomacy, as there are differences observed in both the vertical and horizontal dimensions of the governance system in the cases of diplomacy for science, science for diplomacy, and science in diplomacy. An example of this can be seen in international scientific cooperation in the Arctic, which relies on personal contacts between research teams from different countries. The relationships between scientists are often stronger and better compared to diplomatic relations between their respective countries. The blurring of governance levels and the emergence of new ones are evident in the creation and transfer of knowledge. Expert knowledge increasingly originates from locations outside the Arctic or beyond Arctic states. The same applies to research funding and research infrastructure in the

region, where non-Arctic actors, such as the EU and Asian countries, have become active players. This is evidence of the global direction of changes in the character of the polycentric governance system in the Arctic (Carlisle & Gruby, 2019; Kuus, 2023).

A common phenomenon is the existence of decision-making centers at different levels of governance or spanning across them (bridging multiple levels) and crossing several political jurisdictions. An example of this phenomenon can be seen in international Arctic conferences like the Arctic Circle, which functions not only as a platform for presenting scientific and expert knowledge within various knowledge regimes but also as a venue for dialogue, networking, and decision-making involving representatives from state institutions, international organizations, businesses, and social organizations in attendance (Carlisle & Gruby, 2019; Kuus, 2023).

### *Science Diplomacy in the Arctic—Decision-Making Centers in Cooperative-Competitive Relation*

The awareness of the need for international cooperation is another feature of science diplomacy in general and in the Arctic. It is directly connected with the natural conditions prevailing in the region, which make scientific research a challenge in terms of logistics, finance and access to particular experts or knowledge. As a result, a tradition of sharing research infrastructure, data and knowledge (including traditional knowledge of indigenous peoples) has evolved (Bertelsen, 2019).

An equally important factor integrating the scientific community is the primary goal of research works that is combating global environmental threats, especially climate change. This is another reason why the Arctic is a place where international research initiatives are implemented with the participation of scientists from all over the world. The scientific/expert knowledge and the process of its generation make the Arctic "a laboratory for the scientific world". Data from surveys and observations carried out in the region are an indispensable element of the global governance and decision-making within the United Nations system (Finger & Heininen, 2019). Science diplomacy can be a significant and effective form of the activity of states and non-state actors, which enables achievement of goals strictly related to science and technology policies, optimization and justification of decision-making processes by making them grounded in expert knowledge, but also these goals for which science diplomacy is a means to accomplish objectives of other policies and to safeguard national interests.

One deals here with issues of the so-called low politics which—unfortunately—is extremely sensitive to changes taking place in the international reality, especially those triggered by competition and crisis in relations between states. On the other hand, science diplomacy is frequently the only way to rebuild trust and relations after they have been broken or suspended (Monkiewicz et al., 1989). Nevertheless, there has been an ongoing discussion for a long time both among theoreticians and practitioners of science diplomacy concerning the effectiveness of these actions (Penca, 2018).

In accordance with the functional approach logic, it can be assumed that after the end of the conflict, states will search for the areas of potential cooperation with low polarization factor. One of these areas, successfully exploited in the Arctic for a long time, is scientific cooperation. An important instrument of international law can be the Agreement on Enhancing International Arctic Scientific Cooperation. It may prove to be an effective tool of scientific cooperation between countries of the region and beyond the Arctic, because it provides solutions that lift restrictions on scientific exchange (formal and legal ones connected with research logistics and data sharing) (Arctic Council, 2017). Similar opinions were expressed by the participants of a seminar: "The Arctic Council in the Shadow of the War in Ukraine" organized on 15 February 2023 by the Danish Institute for International Studies. It was pointed out that non-institutional scientific cooperation was still possible. Lack of data concerning the Russian part of the Arctic would make the decision-making process at the international level based on incomplete knowledge and prone to risk of error (DIIS, 2023).

For the Inuit Circumpolar Council, the current situation should be considered in terms of a break in cooperation and not its absolute end. The participation in scientific projects and the inclusion of traditional knowledge into the scientific discourse have always been priorities for indigenous people, and these should be resumed. The role of the AC as a forum for dialogue and cooperation in the region has been emphasized numerous times. In the opinion of the Danish Senior Arctic Official, the AC is open to cooperation with observer states and other states from outside the region, and the scientific cooperation has not been entirely suspended. One of the ways to resume the work of the Arctic Council is to focus on the activity of the working groups and not on the ministerial level (DIIS, 2023).

## SD and Governance in the Arctic—Concluding Remarks

Managing a region is usually a challenge for those involved in this process. In the case of such a unique region as the Arctic, this challenge becomes even more difficult. Although in the face of the crisis caused in 2022 after Russia's aggression against Ukraine, there were voices questioning "Arctic exceptionalism", the resistance of the regional system to conflicts and disputes outside the Arctic, perhaps such a position was premature. The specificity of the relationship between the West and Russia, as well as Russia and the non-Western world in 2022 and 2023, clearly shows that globalization and the complexity of connections, interests and political narratives have a powerful impact. They make the approach of many players appear to be a certain relativism or awareness that radicalism is not a solution in the long run, especially since the world is not only struggling with the crisis caused by the aggression against Ukraine. How can one perceive science diplomacy in this context? Is cooperation for joint research, e.g. climate change in the Arctic, a real need or perhaps an excuse for a "thaw", or maybe it is only to satisfy the interests of part of the scientific community that significantly influences political decisions? There are many indications that the lack of clear answers to such questions should not necessarily be treated as an objection against scientific diplomacy but rather as its dual nature—the potential for cooperation in the face of political differences.

Moreover, in this context, there is an argument for more thorough research on science diplomacy in the Arctic and in-depth reflection on its importance for regional governance. Is there any need for institutionalization or more robust embedding of such activity within the framework of international law? As we have pointed out, presenting science diplomacy in the Arctic based on the concept of polycentric governance, there are arguments in favor of stating that this phenomenon or process is challenging to control or design. There is too much complexity, dynamics and ambiguity here. At the same time, the adaptive potential of such a system allows us to hope that its functioning, in the long run, will allow for a relatively stable pursuit toward achieving common goals.

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# On the BRICS of War: What Future for the Governance of the GlobalArctic?

*Matthias Finger*

## Preamble

Before its colonization since the eighteenth century, the Arctic was exclusively inhabited by indigenous peoples, which were made up of two main language families, namely Eskimo-Aleut (inhabiting what is today Alaska, Northern Canada, and Greenland) and Uralic-Altaic (inhabiting Arctic Russia and Northern Scandinavia). There were no indigenous peoples in Iceland. Colonialism, industrialization, and most recently the changing climate in the Arctic have decimated and displaced the indigenous peoples and brought an influx of non-indigenous populations. Today, indigenous peoples make up approx. 10% of the 4 Mio. inhabitants of the Arctic. They are however still a majority in Greenland, Northern Quebec, Nunavut, and the Northwest Territories of Canada. With the end of the Cold War (1989), Arctic indigenous peoples were able to assert some of their rights and organize in the Inuit Circumpolar Council, the Saami Council, and others, and have obtained observer status in the Arctic Council that emerged during the same inter-Cold-War-period. Their rights, their status, and their livelihoods have always remained fragile and

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are today again at risk, probably more than ever before … as is the Arctic region as a whole.

## Introduction

To recall, in 1987 Gorbachev held his so-called "Murmansk speech" declaring the Arctic to become a zone of peace (Heininen, 2022). This meant, in essence, that the Arctic, could now be seen as a region of its own—i.e., no longer merely as a Cold War theater with the United States and the Soviet Union occupying the center stage—and should enter a new phase of sustainable development. This—i.e., the 1990s—was the end of the Cold War and the beginning of a new era of "sustainable development", made possible thanks to by now global capital flows and the broad sustainable development discourse. In short, the Arctic became a new "frontier" for development, actively supported by a new regional governance structure—the Arctic Council created in 1996—as well as parallel conferences and fora where all these "sustainable-development-of-the-Arctic-stakeholders" would meet and discuss the road to peace thanks to development.[1]

Admittedly, there were not only opportunities in the Arctic after the end of the Cold War, but also some challenges, especially environmental challenges. Indeed, the Arctic Council was the continuation and to a certain extent the institutional embodiment of the Arctic Environmental Protection Strategy tabled by Finland right after the end of the Cold War (1989), which had already identified a series of environmental challenges, albeit mainly pollution and biodiversity (and not climate-related) challenges, on which the Arctic Council then worked.[2] In 2013, in his

[1] *Arctic Frontiers* started out in 2006 assembling the first global scientific conference on economic, societal and environmentally sustainable growth in the north. The *Arctic Circle Conference* was created in 2013 by then President of Iceland Olafur Ragnar Grimsson stating that "*the Arctic has suffered from a lack of global awareness and, as a result, a lack of effective governance. In the past, the region did not matter to the world's decision-makers and was largely forgotten. Now, with sea-ice levels at their lowest point in recorded history, the world is waking up to the challenges and opportunities the Arctic presents for its citizens as well as those who live in lower latitudes.*"

[2] The Arctic Environmental Protection Strategy (AEPS) (sometimes referred to as the Finnish Initiative) is a multilateral, non-binding agreement among Arctic states on environmental protection in the Arctic. Discussions began in 1989, with the AEPS adopted in June 1991 by Canada, Denmark, Finland, Iceland, Norway, Sweden, the Soviet Union, and the United States.

inaugural speech to the Arctic Circle, the then president of Iceland, Olafur Ragnar Grimsson, identified global warming as being a new challenge for the Arctic and its governance. But even though climate science became ever more alarming since, especially for the Arctic region, melting sea ice was (and continues to be) seen essentially as an opportunity for Arctic (hopefully sustainable) developers, mostly active in the areas of natural resources extraction and infrastructure development (for both energy extraction and the new global transport routes).

It is in this context that we—Rasmus Bertelsen, Lassi Heininen, and myself—have created in 2014 the GlobalArctic project. This was very much a spontaneous idea, as we were convinced that, with global warming and the accompanying "development opportunities", the Arctic was not going to remain a regional affair.[3] In our two preceding books on the GlobalArctic we were, in particular, asking ourselves what the governance of such an increasingly GlobalArctic could or should look like. However, we did not really have an answer to this question, except for the conviction that the Arctic Council as a regional governance body would inevitably have to evolve. Also, we did note that the rhetoric about the sustainable development of the Arctic ignored the fact that demilitarization had not really happened, and that the Arctic continued to remain one of the most militarized regions of the world.

And then Ukraine happened, and the Arctic is now definitely no longer a regional but a global affair. In other words, we now have the real GlobalArctic, but not exactly the way we had imagined. Also, we should apply some self-criticism, as the first signs of this new type of GlobalArctic go back to Russia's annexation of Crimea with some scholars already back then trying to understand its consequences on the Arctic (e.g., Byers, 2017). In retrospect, we were naïve, but our naiveté was very much caused by our (naïve) belief that the negative effects of global warming would rapidly overshadow the opportunities (resources, transport, infrastructure development, sustainable development), thus triggering states to collaborate in the Arctic (and elsewhere), rather than fight over what is left. As a matter of fact, I wrote a chapter in 2022, in which I argued

[3] See the landing page of our website: *"The Arctic Region is now experiencing some of the most rapid environmental, social, economic and geopolitical changes, resulting from combined long-range pollution, climate change and globalization. Consequently, the Arctic region has now become part and parcel of systemic global economic, technological, cultural and environmental change."* (www.globalarctic.org).

that sustainable development in and of the Arctic was an illusion, if not a scam (Finger, 2022). I still believe this, but this belief no longer matters, because the global Arctic is no longer about development. It is now about prospecting, fighting for and extracting natural resources … by military means, if necessary.

In this chapter I therefore want to come back to the original question of our GlobalArctic project, namely the question about governance, but this time the governance of the New, the post-Ukraine, GlobalArctic. Today, this question is much more radical, as we are not talking anymore about how the Arctic Council will evolve, but rather about whether there will be a governance proper of the Arctic region at all. To be able to address this question, I propose to systematically examine what I think are the five ingredients of this New GlobalArctic, or rather the dynamic forces affecting it. Most of them are old and already well known, such as (1) global warming, (2) resources extraction, (3) infrastructure development including transport infrastructures, (4) digitalization, (5) militarization, and (6) the recent geopolitical situation. The analysis part (Sect. 7) will then discuss how all these dynamic forces, taken together, are a recipe for disaster, i.e., are shaping the future governance of the New GlobalArctic, if there will be a future governance of the Arctic proper at all. Such a systematic assessment has never been done before.

## Ingredient No.1: Global Warming

Global warming is an essential, if not the most decisive driver toward an ever more GlobalArctic. We know about the global warming effects of carbon dioxide since the end of the nineteenth century and have been alerted to global warming at the latest since the establishment of the Intergovernmental Panel on Climate Change in 1988. Ever since, humanity has also been alerted by climate scientists that climate change—or rather global warming—disproportionately affects the Arctic (Post et al., 2009). Not only does the Arctic region warm much faster than the global average, but such warming further amplifies the process mainly because of the declining albedo effect (whereby melting ice exposes darker surfaces, leading to more heat absorption) and of thawing permafrost (thus releasing greenhouse gases such as carbon dioxide and methane), so-called Arctic amplification.

The underlying science in this matter is called Earth System Dynamics (Lenton, 2016). Accordingly, the Earth System is basically driven by

five different forces, namely energy flows stemming from solar radiation, climate (temperature, temperature differentials, and precipitations), ocean circulation (ocean currents), geological processes (plate tectonics, erosion, volcanic activities), and biological forces (carbon recycling, biodiversity). All of these forces together determine weather patterns as well as the health of ecosystems. As of the Holocene approximately 12′000 years ago, weather patterns had become more stable, allowing for agriculture and the emergence and development of civilization(s) up to today.

The two poles (North and South) and in our case the Arctic region play a crucial role in the dynamics of the Earth system as well as in its stability, and this for four different reasons: first, the cold climate and the ice cover affect global temperature and weather patterns all over the globe; second, the quantity of the ice contained mostly in Greenland, and especially its melting, will affect sea levels as well as climate change and weather patterns, again all over the globe; thirdly, the changing temperature and salt content of the Arctic waters due to ice melting will affect the circulation of ocean currents and therefore again weather patterns globally; and finally, the warming of and the changing weather patterns in the Arctic will affect Arctic ecosystems, biodiversity, notably fisheries as well as vegetation and forest cover (e.g., Arctic forest fires), again with global consequences. The most important of these global consequences resulting from all four above reasons, pertain to temperature, water availability, agricultural production and biodiversity.

But the above changes are not linear. Earth system dynamics specialists insist on the fact that the dynamics of the earth system is non-linear, and characterized, among others, by so-called "tipping points". In system science, tipping points are thresholds which, if crossed, lead to disruptive and often irreversible changes in the state of the system. Such tipping points typically stem from changes in one or more of the above five forces, namely changes in solar radiation, changes in the Earth's temperature, changes in ocean circulation, from geological factors, as well as because of major changes in some of the ecosystems, such as for example the Amazon rainforest. When tipping points are crossed, the relative stability of the Earth system, of the past 12′000 years that is, will be jeopardized, with potentially dramatic consequences for the survival of ecosystems and of humanity. Among the main seven tipping points that could be triggered within the next 10 years, four are directly related to the Arctic, namely the melting of the Greenland ice shield, the disruption of the Atlantic

Meridional Overturning Circulation (AMOC), the loss of Arctic Sea ice, and the thawing of permafrost in the Arctic.[4]

In other words, global warming, via its disproportionate effects on the Arctic region already has and increasingly will affect weather and precipitation patterns all over the world. Such changing precipitation patterns have already been identified in Scandinavia, Greenland, Alaska, Northern Canada, Siberia, and Northern Asia, including Mongolia, Kazakhstan and Northern China, even though direct links to Arctic warming are difficult to establish; similarly, the snow cover in the Himalayas is also changing (e.g., Hassol et al., 2004). This disproportionate effects of global warming on the Arctic and their consequences—in particular via the four above mentioned tipping points—on the Erath System and its dynamics constitute the most compelling argument for a much more inclusive governance of the Arctic region and should include at least the currently most affected countries by a warming Arctic, notably China and India.

## Ingredient No. 2: Resources Exploration and Extraction

Global warming of the Arctic leads us directly to natural resources—both hydrocarbons and minerals, along with fisheries—becoming accessible for extraction. Of course, resources, especially some basic minerals, but also coal have been extracted in the Arctic since the late nineteenth century in Alaska, Canada, Sweden, Spitsbergen, and the Russian Empire, but mainly for national development purposes, as industrial development started to kick in in the Northern hemisphere. However, massive extraction of these natural resources was limited because of the geographical distance, the available technologies, and the weather conditions. During the Cold War period, first the Soviet Union (Prirazlomnoye oil field, 1960s and 1970s), and later also the United States (e.g. Prudhoe Bay, Alaska, late 1960s), as well as Norway in the Barents Sea (late 1970s) started to drill for oil and gas in the Arctic. In 1988, the very important Shtokman gas field was discovered, even though gas is still not extracted there. With the end of the Cold War, environmental, or rather sustainable development concerns somewhat framed oil and gas extraction in the Arctic,

[4] See: www.global.tipping.points.org.

without, however, significantly reducing it. In this context, also the Exxon Valdez oil spill of 1989 must be mentioned as it contributed to environmental concerns about oil extraction in the Arctic. Furthermore, the United Nations Convention on the Law of the Sea (UNCLOS, as of 1994) and the Arctic Council (as of 1996) have created some, albeit very limited institutional boundaries to natural resources extractive practices in the Arctic. Concerns about natural resources extraction were furthermore voiced by environmental groups and indigenous peoples, without, however, being able to stop or even significantly slow down the pace of natural resources exploration in the Arctic.

As of the beginning of the twenty-first century, global warming has accelerated in the Arctic and led, as said above (see above ingredient No. 1), to reductions in sea ice cover and permafrost thawing. This has facilitated access to previously inaccessible natural resources in the Arctic, favored also by substantial technological developments in offshore drilling, not to mention the planet's continuously growing demand for fossil fuels. This growth in demand mainly stems from emerging countries such as China, India, and Türkiye, all countries which do not have fossil fuels of their own. Among the main oil and gas fields that have been significantly expanded or newly developed in the Arctic, one must mention the Prudhoe Bay oil fields, notably by BP, ExxonMobil, and ConocoPhillips. Similarly, in Russia, Liquefied Natural Gas (LNG) production started in 2017 in the Yamal Peninsula by Novatek a private mainly Russian-owned equity firm, with a 16% shareholding by French company Total. Also, in the Norwegian Barents Sea new oil and gas fields have been discovered and are gradually being exploited by mainly (67%) Norwegian State-owned company Equinor. More recently, oil exploration has been undertaken by Cairn Energy and Exxon offshore Greenland, but no extraction is yet taking place. Coal mining which had been the main mining activity before the 1970s in the Arctic, has lost its prominence, but still goes on in Siberia, Spitsbergen and Canada (see: Krivorotov, 2022).

As said above, minerals have been extracted in the Arctic since over 100 years, namely iron ore in Sweden and Canada, nickel and copper in the Soviet Union and today in Russia (Kola Peninsula and Siberia), diamonds mostly in the Canadian Northwestern Territories, gold in Alaska as well as northern Canada and Siberia, and more recently uranium in northern Canada. As the world's hunger for minerals is growing, not the least because of the so-called "Energy Transition", these traditional mines are enlarged and new mines are discovered and sometimes already

exploited, also because of easier accessibility due to global warming and better extraction technologies. In this context, we can mention new diamond mining activities in Canada by Diavik Diamond Mines Inc., a subsidiary of Rio Tinto (as of 2003) and the expansion of nickel mining by Norilsk Nickel in the Russian Arctic (Norilsk-1, Norilsk-2, and Talnakh mines), whereas new iron ore mining is projected in Greenland, new gold mining in Alaska, and new rare earth mining (including uranium) again in Greenland but also in Sweden (Lithium) (see: Talvanen, et al., 2019).

When discussing growing resources extraction in a warming Arctic, one also has to mention fisheries. Indeed, a warming Arctic is before all a more accessible Arctic for commercial fishing also from outside the Arctic. To recall, the biggest fishing fleets today in the world are Chinese, Japanese and Korean; they will no doubt enter Arctic waters, not only because of their increased accessibility, but also because all other oceans have been fished empty (see Rossi, 2022). In short, fishing pressure and competition will only increase with global warming in and of the Arctic. But the fish will not stay idle and wait to be fished, as it has to adapt by migrating North (as long as it can). In addition, fish populations are changing, becoming less productive, or simply disappearing.

In short, be it fish, minerals, oil or gas—and with global warming, exponential growth in global demand (for all of them), as well as ever more powerful extraction technologies—they all will fall prey to global economic and geopolitical forces that are after them. It is therefore in my opinion only logical that the powers—both countries and companies, as in most cases companies are state-owned enterprises anyway (see. Krivorotov & Finger, 2019)—should have a say in the governance of Arctic resources extraction and more generally in the governance of the Arctic region. In addition to the Arctic powers, this would also include at least China, Japan, and South Korea, as well as some private oil, gas, and mining companies.

## Ingredient No. 3: Transport and Infrastructure Developments

Because of the melting of the Arctic Sea ice, transport across the Arctic—also called "Arctic shipping"—is about to become a commercially viable activity. This is of course a totally new and unprecedented development, made possible because of global warming, substantial technological developments in shipping, icebreaking, and navigation systems, along with still

growing commerce between Asia, Europe and the United States. In the past, there have been sporadic transport activities, but they were mainly of scientific exploratory and military nature. In the early twentieth century, Roald Amundsen explored and navigated for the first time across the so-called North-West Passage (NWP, 1909). Since the 1950s, the Soviet Union had developed the so-called Northern Sea Route (NSR) along its North shore, mainly for military, but also for domestic commercial supply purposes. Similarly, at around the same time, Western powers started to think about a more commercial use of the NWP and even about a so-called Trans-Polar Route (TPR) straight across the Arctic Ocean, but these plans have not materialized so far.

Arctic Shipping significantly increased only since the past 10–15 years as a result of reduced Arctic ice cover as well as because of the growing natural resources exploration and exploitation activities, which, in turn, have led to infrastructure development requiring, again, transport by sea (see: Theocharis et al., 2018). As for commercial shipping, some freight (cargo) activities take place on both the NSR and the NWP, because both routes significantly reduce shipping time and therefore costs. Maersk, COSCO (China Ocean Shipping Company), and some others have all made trials of shipping goods from Asia to Europe via the NSR, but none of them has yet established a regular Arctic cargo shipping activity. The transport of oil, gas and minerals from the Arctic via the NSR to the global markets is more advanced by companies such as Sovcomflot (Russia) and Teekay LNG Partners (Russia), activities which are doubtlessly bound to increase in the coming years. One also has to mention Arctic tourism with tour operating companies operating in the European and North American Arctic. Finally, there is also significant scientific and military shipping activity in the Arctic. Overall, it is obvious that Arctic shipping, for whatever purposes, is only going to increase in the years to come, requiring more search and rescue activities, more navigation services, and more infrastructures to support them. All this increases the risks of pollution and more generally the negative impact on the fragile Arctic ecosystem and wildlife.

Arctic shipping activities, no matter which kind, along with resources extraction require supporting infrastructures, and this is in all Arctic rim countries (Russia, US, Canada, Norway, Iceland, and Greenland) (see: Pelyasov, 2022). The most important of these infrastructures pertain to energy and include LNG terminals, drilling platforms, and pipelines, mainly built by oil and gas companies (Exxon, Shell, Gazprom, Equinor,

etc.). Equally important and equally massive infrastructure developments pertain to ports and harbors, access roads, and airports. Russia is also exploring the construction of a Northern Latitudinal railway line North of the Arctic circle. Many if not most of the investment in transport and energy infrastructures in the Russian Arctic are actually made by the Chinese government as part of its Belt and Road Initiative, whereas in the United States and Canada, the major investors and construction companies are private (e.g., Fluor and Bechtel). One should also not forget the recent construction of tourism infrastructures (hotels, lodges, and airports in Canada, Norway and Greenland; see: Huijbens, 2022), along with the expansion of military bases (Thule Air base in Greenland, three US Air Force Bases in Alaska, many Russian naval bases along the Northern Coast, notably in Murmansk, Arkhangelsk, Severomorsk, and Polyarny, Norwegian bases in Bodo, Tromsö, Spitsbergen, as well as Canadian bases in Nunavut), whereas the scientific research stations were mainly built during the last century.

In terms of governance, most of the infrastructure developments have been financed by governments and are typically operated by state-owned enterprises, at least in the European and Russian Arctic (see: Krivorotov & Finger, 2019). Shipping is more commercial in nature, but also always close to governments, especially when it comes to natural resources. It would be therefore only logical that at least the Chinese government, because of its massive investments in the Arctic Belt and Road initiative, but also some private shipping companies be associated to the governance of the Arctic.

## Ingredient No. 4: Digitalization

Digitalization is a driver of, an opportunity for, and a necessity in a GlobalArctic; it is also a challenge in light of the recent geopolitical developments (see ingredient 6). Before applying digitalization to the context of the Arctic, there is a need for some factual and conceptual clarification: to begin with, digitalization is a profound technological change which in its massiveness as well as in its transformational potential is somewhat comparable to the Industrial Revolution. Yet, it is no alternative to the fossil fuel-based industrial economy and society, even though it was often promoted as such. Rather, it is some kind of "hyper-industrialization" (Crawford, 2021). To be clear, digitalization will not replace the need for hydrocarbons of the Arctic, yet it will, on top of that, trigger a

global hunger for minerals, especially rare Earth minerals, including in the Arctic. As such, digitalization will act as an additional driver for ever more aggressive Arctic resources exploration and exploitation.

Digitalization is best conceptualized as a set of layers (Montero & Finger, 2021): the first layer pertains to quite traditional telecommunications infrastructures, such as copper cables, broadband, and fiber optic lines, as well as mobile telecom infrastructures. For the sparsely populated and geographically challenging Arctic, rolling out telecommunications infrastructures to create what is called "connectivity", i.e., internet access, has a substantial cost, especially if one has to rely upon satellite telecommunications. Therefore, for most of the Arctic communities, especially the indigenous communities, internet access remains a challenge up to today, which translates into lack of economic opportunities for them. However, connectivity as well as high quality and cheap internet access in all of the Arctic would be an invaluable opportunity for Arctic populations, especially indigenous peoples and communities, so as for them to be able to benefit from the global economy. This could certainly contribute to slowing down migration to urban centers. In this context, the distance education activities of the University of the Arctic must be mentioned as being an appropriate means to maintain the local population. Indeed, distance education could and should be accompanied by corresponding remote working opportunities.

The third (and not the second, nota bene) layer of digitalization pertains to (Arctic) data analysis, in all its dimensions. As such it has already become and will ever more become a necessity for managing and governing a globalizing Arctic. Such analysis implies the availability of and access to data (second layer, see below), as well as powerful algorithms to analyze such data for specific purposes, and of course companies capable of doing so. In the Arctic, there are three such areas, where powerful data analysis is needed. There is first the area of navigation and transportation more generally, which, both thanks to infrastructure (e.g., advanced navigation systems, including GPS and radar) and analysis, will be able to operate more efficiently and more safely, ideally in a seamless manner across the entire Arctic region. There is, secondly, the area of environmental monitoring, where digitalization (thanks to remote sensing technologies, geographic information systems (GIS) and powerful analysis) is needed to monitor and protect vulnerable areas, wildlife habitats, biodiversity hotspots, as well as ever more spreading wildfires, hopefully again covering the entire Arctic region. The third and most important

area where digitalization (remote sensing technologies, including drones and the analysis of generated data) will be ever more needed is for monitoring of, research about, as well as the assessment of Arctic warming, methane releases, vegetation and ice cover, etc., so as to support policymakers and the global policy community about how to govern the changing Arctic (for example thanks to advanced modeling and simulation based on huge datasets). Again, it is desirable that this covers the entire Arctic region.

However, the availability of and access to all these data in order to make informed decisions at all relevant levels—from local to regional to national to global (see ingredient No. 1)—is a huge challenge. In this sense an Arctic data layer (layer No. 2), ideally with open access to it would be essential. Indeed, while digitalization could and should, at least in theory, enable the collection, analysis, and management of vast amounts of data in the Arctic region, this is rarely happening because of a lack of standardization and collaboration across institutional (horizontal and vertical) boundaries, in the Arctic and elsewhere. But it is even less happening because of the recent geopolitical tensions (see below ingredient No.6), that make access to and sharing of data a geo-political issue, i.e., almost impossible today (see: Bradford, 2023). This would however be essential in order to be able to appropriately deal—at all levels—with the consequences of a rapidly and profoundly changing Arctic.

In other words, the governance of the Arctic must necessarily include digitalization and involve the major global digital companies (such as Google, for example). At the least, we will need a comprehensive governance of the Arctic data layer, and of the policy-relevant analyses of the data about the changing Arctic.

## Ingredient No.5: Militarization

Had the Arctic region not been militarized—and heavily been militarized for that matter—, the question of its governance could certainly be approached very differently today. But this is regrettably not the case, and therefore its militarization (ingredient No. 5, this section) and its bi-/multi-polarity (see ingredient No. 6 in the next section) are likely to override the above considerations (ingredients 1 to 4) in favor of comprehensive governance, as I will argue in the conclusion of this chapter.

The militarization of the Arctic began during the Second World War with the so-called Winter War between Finland and the Soviet Union. Also, the Arctic Ocean became a transit route between the Allies and the Soviet Union with some military bases along the route, established by the British Royal Navy in Spitsbergen, Arkhangelsk (USSR), and Novaya Zemlya (USSR) to support allied supplies to the Soviet Union. But most importantly, the United States established the Thule Air Base in Greenland already back in 1941, a base which came to play a key role during the Cold War. But it is with the Cold War that the militarization of the Arctic literally exploded (see: Kikkert & Lackenbauer, 2020). However, at the end of the Cold War, there was a short intermezzo of a slowdown in the Arctic's militarizarion, following Gorbachev's Murmansk speech about the Arctic as a zone of peace. But this period did not last very long and did not really lead to substantial disarmament either. And as of 2005/2010 there was a remilitarization of the Arctic, mostly by Russia, but this time along the Northern Sea Route, rather than along the longitudinal Cold War axis (Kjellén, 2022). Let us look at each of these stages since the 2nd WW in a little bit more detail.

The militarization of the Arctic during the Cold War era (1945 to 1991) was of course not because of the Arctic, but because of the global ideological rivalry between NATO (founded 1949) and the Warsaw Pact (founded 6 years later in reaction to NATO). The Arctic only served as a "Cold War Theater", yet a theater with strategic importance, due to the geographical proximity of the Soviet Union and NATO. This geographical proximity let military strategists to plan for intercontinental ballistic missiles (ICBMs) exchanges and deploy early warning and surveillance systems. Over 45 years NATO and the Soviet Union built many military installations, such as air bases, radar stations, early warning systems, and military ports all over the Arctic. Also, the Thule air base became entirely part of this Cold War military infrastructure, and the Soviet Union built similar air bases on its Arctic territory. Particularly noteworthy is the deployment of nuclear-capable bombers and submarines, which in turn led to missile defense systems and anti-aircraft bases. One must also mention the establishment of the American Aerospace Defense Command (NORAD) in 1957 to monitor and defend North American airspace, including in the Arctic. As a result of all this militarization, the Arctic became, during the Cold War, one of, if not the most militarized region on the planet and remains so until today.

At the end of the Cold War (1991) and during the period of the Yeltsin presidency (1991–2000) the tensions, and especially the military tensions, between the US/NATO and the now Russian Federation significantly declined. The Barents Euro-Arctic Council (with Russia as a member) was created in 1993 and the Arctic Council (again with Russia as a member) in 1996. At some point, Russia even inquired if it could become a member of NATO. Such cooperation focused mainly on environmental matters, but also search and rescue operations as well as scientific research, again mainly on pollution matters. But this did not automatically mean that the military capabilities that had been built up during the Cold War were dismantled. Rather, the military build-up in the Arctic during the previous Cold War era had left significant environmental consequences in the form of pollution and environmental degradation, also because the Arctic region is a particularly fragile ecosystem. Still military spending in the Arctic declined somewhat, especially on the Russian side, mainly for lack of financial means. Already before the end of the Cold War, the Intermediate Range Nuclear Forces Treaty (INF, 1987) contributed to the reduction of tensions between the United States and the Soviet Union. INF was followed by the Strategic Arms Reduction Treaties in 1991 (START I) and 1993 (START II), as well as the Comprehensive Nuclear Test Ban Treaty (CTBT) in 1996, but the CTBT was never ratified neither by the United States nor by Russia. Also, in 1990, again before the end of the Cold War, a Conventional Armed Forces in Europe (CFE) Treaty was signed by 22 countries, including NATO and Warsaw Pact members and led to significant reductions in tanks, armored vehicles, artillery pieces, combat aircraft, and attack helicopters, including in the Arctic. In addition, there were other demilitarization initiatives specifically in the Arctic, which led to some decommissioning or repurposing, and some closures of military bases and the conversion of others into research stations or civilian airports.

Unfortunately, this decline in military tensions and even some slowdown in the process of the Arctic's militarization did not last and has remained a short 15 to 20-year intermezzo. Ever since 2005/2010, the militarization of the Arctic restarted again, but this time also with some Chinese military presence (Huebert, 2019; Lozier, 2022). The triggers for this development are specific to the Arctic and result in particular from its warming and subsequent reduction in ice cover. This leads to the accessibility—or at least anticipated accessibility—of hydrocarbon and mineral resources in the Arctic (see ingredient No. 3), as well as to

the opening of Arctic shipping routes, along with ensuing infrastructure developments (see ingredient No. 4). Also, commercial fishing becomes ever more attractive in Arctic waters. And these (potential) riches have triggered stake claims as well as potential conflicts over resources and shipping routes, including by non-Arctic states such as China, Japan or Korea. The same riches have also bolstered the military presence and capabilities of some of the Arctic states, such as for example by way of constructing new military bases, deploying advanced weapons systems, and conducting military exercises (Russia, US, Norway). Quite logically, the Treaty on Conventional Armed Forces in Europe became challenged as of 2000. Especially Russia, but also other countries, criticized the enlargement of NATO and suspended its participation in the Treaty as of 2007. Subsequently, NATO countries also stopped respecting their obligations under the Treaty, which is now dead. That latest stage in this new accelerated militarization of the Arctic was further boosted by the deterioration of the relations between NATO and Russia following the war in Georgia (2008), the annexation of Crimea by Russia (2014), and most recently the war in Ukraine (2022), and has culminated, so far, in Finland and Sweden joining NATO. This NATO—Russia conflict indeed changes the governance of the Arctic and has already led to the suspension of the activities of the Arctic Council as well as the withdrawal of Russia from the Barents Euro-Arctic Council.

Whether this evolution marks the continuation of the old Cold War, the beginning of a new Cold War or still something different, the fact of the matter is that the Arctic region is being militarized since the end of the 2nd WW, with a short period of moderation between 1990 and approx. 2005. What is new as of most recently is the fact that now all Arctic states—i.e., also Finland and Sweden—are now involved in the Arctic's arms race, and that China is also making its military appearance in the Arctic. In other words, the remilitarization of the Arctic since the past almost 20 years is currently making a comprehensive governance of the Arctic impossible. But, if we want to understand what this could mean for the future of Arctic governance, we have to look at yet another ingredient (i.e., ingredient no. 6) which is in fact another underlying global trend affecting the Arctic and especially its future governance.

## Ingredient No. 6: From Uni- to Multi-polarity

If global warming is the most compelling argument for a GlobalArctic, multi-polarity is the most compelling argument for the governance of the GlobalArctic. All other ingredients (2 to 5) are supporting arguments that point in the same direction. The slow but inevitable evolution from uni-polarity to multi-polarity has to be placed within a historical context of evolving Civilization or rather civilizations, a context framed by Ferguson already back in 2011 as "The West and the Rest". I am therefore not using the words "uni-polarity" and "multi-polarity" in a purely geopolitical acceptation, even though, as I will show in the last section of this chapter, this evolution may well lead to a geo-political confrontation between "The West and the Rest". This confrontation, or rather the alleged superiority of the West over the Rest starts with the weapons technology development in the late Middle Age in Europe, continues with the scientific and Military Revolution during the Renaissance, to the Colonization of the planet by European military powers, the rise to (military) power of the (European) Nation-State, Industrialization in Europe and the United States and further military development of the West during the First and the Second World War. It is important to mention that the underlying force of this Civilization endeavor is one of Christianism, turned Enlightenment, paralleled by the Vatican, turned Modern Nation-State. While there were other Civilizations before and parallel to the Western Civilization, they were degraded and crushed in this Westernization/Civilizational process.

This evolution from a uni-polar, Western-centric civilizational process to some form of civilizational multi-polarity—which as we will see later on is more perceived than real—started with decolonization, which in most cases takes the form of a political and military fight against some Western powers (mostly the UK and France), often with an ideological undertone (e.g., Communism versus capitalism, notably in Russia and China). It is this ideological undertone that has led to sometimes seeing uni- and bi-polarity as a conflict between political systems, when it is fundamentally a decolonization exercise in a series of dimensions, namely economic, technological, and demographic. As of decolonization, but mostly, and paradoxically, with economic globalization after the end of the Cold War, many emerging countries have risen to global economic power, starting with Japan, Korea, China, India, Türkiye, or Brazil. As economic powers, they have challenged the traditional economic powers

like the United States and Western Europe. These emerging economies have displayed rapid economic growth and industrialization, somewhat redefining economic power on a global stage. Industrialization being fueled mainly by coal and oil, has also led some resources-rich countries, such as Russia (after the end of the Cold War) and before that Mexico, Saudi Arabia, the Emirates, Malaysia and Iran to turn into economic powers at a global stage.

This rise to global economic power has been paralleled and supported by technology transfers to these emerging countries, followed by indigenous technological development and innovation, mostly in manufacturing in Asia (Japan, Korea, China). But as of more recently, technological development and innovation is happening also in emerging countries in information technology, telecommunications, and digital connectivity, thus accelerating the process of these countries becoming global economic and technological powers. In many of these emerging countries, population growth, urbanization, and changing age distributions, are reshaping the global balance of power. Emerging economies with young and growing populations become ever more important actors in the global economy, while traditional Western powers with aging populations are challenged in their economic dynamism and ultimately power on the global stage.

Of course, the rise of these emerging economies (fueled by technology and population growth) is not really a civilizational alternative to the West. Actually, it is rather a copy of the West and often a supplier of the West. Both, the West and the Rest, are fueled by the same carbon-based industrial development, the same technologies, the same type of corporations, the same nation states and the same type of institutional frameworks. In this sense, the Rest looks more like a revenge vis-à-vis the West, rather than a civilizational alternative to it. This revenge aspect is furthermore exacerbated by climate change and environmental concerns, which basically limit the industrial development of the planet and create a competition for what is left in terms of resources and pollution rights.

There was a short moment in history—typically the 1990s and early 2000s—where there was hope that this finiteness of the planet in light of global economic and industrial development, might lead to cooperation, rather than competition and ultimately conflict and war. Yet, the revenge of the Rest vis-à-vis the West, along with the underlying military nature of industrial development (by the West and the Rest alike), is now leading to a multi- and perhaps simply to a bi-polar world, whereby the Rest will

fight with the West about what is left in terms of resources and pollution/climate change allowances, starting, perhaps, in the Arctic.

## Which Governance for the New GlobalArctic?

As a matter of fact, all the above six ingredients have profound geopolitical implications on the Arctic region. While they call for a new governance of the Arctic, they simultaneously lead to the Arctic being placed at the center of global geopolitics.

Everyone seems to agree that the Ukraine war has changed the governance of the Arctic, a change that is most clearly visible in Finland and Sweden joining NATO, the end of the Arctic Council, and the end of the Barents Regional Cooperation. But this is only the last stage of a militarization process that goes back to the Cold War. In the Arctic, the West, which can now be equated to NATO (US and EU combined), is today pitched against Russia. Russia cannot (yet) be equated to the "Rest", but it can, to a certain extent be equated to the BRICS or even a BRICS+. Some of the BRICS (e.g., Brazil and India) still try to keep a non-aligned position, and so do some other emerging countries; notably, Saudi Arabia, the Emirates, Japan, and Türkiye. But it is not clear how long their position can be maintained in light of NATO and Russia/BRICS+ polarization. Given the mounting pressure to extract the Arctic resources, the Arctic will become most likely the first theater of the military confrontation between the West (US and Europe) and BRICS+, with some emerging countries being, perhaps, able to stay out of it.

Today, the question of the governance of the Arctic is reduced to the question of whether and how this likely evolution and in the end military confrontation between the West and the Rest can be avoided, starting in the Arctic? Therefore, we are no longer talking about combatting or at least mitigating global warming in the Arctic (and elsewhere for that matter), but simply about how to avoid military confrontation. To be able to explore some alternatives, one has to back approximately 30 years, i.e., to the end of the Cold War, Gorbachev's declaration of the Arctic as a zone of peace, and more generally the idea of Arctic sustainable development. At that time, the Arctic became global because of the riches it contains, a situation that became even more obvious with the warming of the Arctic, the melting ice and the threat to earth system stability. But the Arctic 8, and even more so the Arctic 5, wanted the region and their riches for themselves; both Russia and the United States agreed that it

was preferable to cooperate more or less bilaterally, to achieve this goal. For the Arctic indigenous peoples, the Arctic Council was the greatest and probably only hope to at least obtain something, and so they went along with this Arctic Club idea, even though its scope was limited to pollution and search and rescue matters.

But there are now other stakeholders to the Arctic, notably China (transport, infra development, resources, digitalization), India (climate change), Japan (fisheries, shipping), and of course the EU (geographical proximity), who previously had been reduced to being "observers". Because of the limited scope of the Arctic Council, their concerns were not voiced and much less addressed. The Arctic Circle conference as of 2013 was an attempt to include them somewhat, but the Arctic Circle has evolved into a purely Western exercise over time. Yet, their concerns should have been taken seriously already back then, i.e., 10 years ago, and translated into a corresponding governance structure for the Arctic. This could still be done, but it is getting late now, and the likelihood of a NATO versus Russia/BRICS/BRICS+, if not West versus Rest military-type confrontation is increasing by the day … a confrontation which might start in the Arctic but ultimately will ignite the entire world.

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# Economy: A New Arctic, Two Sets of Rules

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## Introduction

There is a certain paradox about global Arctic economic development. Undoubtedly, economy matters as the way to provide livelihoods and ensure the survival for Indigenous Peoples, also nowadays when their former subsistence economies have often transformed into business-like entities. For large resource corporations, economic considerations are even more crucial as the overarching rationale to enter the polar regions at all. There is a body of research on these issues. Despite that, discussions on Arctic international relations tend to focus on issues like geopolitics, security, climate change or Indigenous interests, leaving economy largely overshadowed. In our opinion, there are at least two realistic reasons for that. One explanation is that economic activities, with their long project lifecycles, are very inertial, and changes may be less visible there. The other lies in the fact that global Arctic economy is highly multifaceted,

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which really complicates research and even more so mutual understanding and transboundary contacts.

This general remark is fully relevant for the present situation. The profound, politically motivated split of the global Arctic took place in 2022 in the aftermath of the Ukraine crisis, and there is a temptation to narrow the scope of economic analysis to the ongoing governmental interventions. However, we deem it worthwhile to put it in a broader historical and global context, to show that the root causes are of a substantially deeper and long-term nature, reaching far beyond the present Russia-West standoff. They were essentially a logical, although not inevitable by far, outcome of the intense debates on Arctic futures through the previous decade.

Similarly, the economic implications will also be lasting. Arctic economies may provide a solid substantiation to, and ensure continuity of international cooperation. At the same time, they are also dependent upon good governance. And, while a positive political climate does not necessarily result in a close economic cooperation, any international tensions are sure to complicate it, requiring a lengthy and painful adaptation.

## The Arctic Is Heterogeneous

An important thing to realize about the comprehensive pan-Arctic cooperation of the last three decades is that it represented a fairly unique historic experience. While the global Arctic may well be regarded as a single whole in geographic or climatic terms, it had never been one in political and economic respects until 1990s.

This enormous area of some 32.5 m sq.km has witnessed two principal waves of human 'domestication', the first one in the Stone Age (Csonka, 2022, p. 21). The similar, harsh natural conditions throughout the global North (low temperatures, short vegetation periods, dark seasons and midnight Sun, atmospheric and geomagnetic anomalies, etc.) have formed numerous technical and societal solutions, which are common among the contemporary Indigenous Peoples. On this ground, researchers have proposed a concept of a single Circumpolar Arctic civilization across ethnic and historical division lines (Shachin, 2019). But this small Indigenous population who lived scattered over vast distances and possessed no statehood, was for natural reasons unable to establish any wide-scope international ties.

When European nations launched the second wave about a millennium ago, each one already had its specific domestic market, governance, and legal systems. Projected to the Arctic and faced with its universal challenges like cold climate and long distances from the key markets, they brought about a wide variety of solutions. Each country has developed a distinct national Arctic model, i.e. a set of long-standing socio-economic relations facilitating human presence in the Arctic, plus the respective political and legal frameworks, formal and informal institutions, creating strong path dependency. In our opinion, at least two criteria are of paramount importance in this regard, serving as key watersheds.

### *European vs American Development Types*

The first one relates to the historic traditions of Arctic development, which fall into two distinct types.

The Europeans started acquiring 'their' Arctic, from Iceland in the west to the Polar Urals in the east, in the agrarian era of early Middle Ages. Norwegian, Swedish kings and Novgorod Princes delimited the entire northern Scandinavia and Kola Peninsula by mid-thirteenth century. Peasants and fishermen followed closely after Vikings and merchants to this remote region, attracted by its abundant fur, fish, and land resources. Their subsistence economies dominated by primary industries, plus the complicated communications made the newcomers settle firmly on their plots, adapting technologies and skills to the demanding Arctic conditions. That was how the unique Icelandic and Faroese nations, as well as the very distinct Russian Pomors, emerged over time in remote corners of the European Arctic.

For natural reasons, the settlers applied their written and customary law in the new territories, which were later on incorporated into their respective countries on equal footing. Although few Scandinavian or Russian monarchs would actually visit their Arctic domains, all of them regarded these as their 'normal' lands, and their inhabitants as regular subjects. The latter does not mean that the Arctic provinces were in the same economic situation as the rest of their countries, but the inequalities were due to objective reasons: the logistical challenges caused high transportation and transaction costs, which could only be overcome through export centralization. As the result, goods from the Arctic entered Central European markets centuries ago, but indirectly, via oligopolistic wholesalers like the

*birkarlars* in Northern Sweden or Hanseatic merchants in the Norwegian city of Bergen, who traded in sun-dried fish (the *tørrfisk*) from the Norwegian Arctic.

The industrialization processes, complemented in the twentieth century by the Social Democratic 'Scandinavian model', became important regional drivers and improved the living conditions in the North dramatically (Norden dagen derpå, 1986, ss. 86–154). As a result, the European Arctic areas, besides the Indigenous Sámi, have relatively large Scandinavian, Russian, and Finnish populations who have inhabited the Arctic for centuries. They live scattered over numerous communities enjoying year-round connections with their capital cities and between themselves. The local centers like Rovaniemi in Finland, Tromsø and Bodø in Norway, Murmansk and Arkhangelsk in Russia or Luleå and Umeå in Sweden, have universities, research institutions, theaters, and large shopping malls.

The North American Arctic followed a different path. Europeans made their initial visits to this enormous area in the new, groundbreaking epoch of early capitalism and making of colonial empires. It is noteworthy in this regard that Denmark, which acquired Greenland, was also a major colonial state with possessions in Africa, East-India and Caribbean.

The *modus operandi* was similar throughout the American Arctic: successful private expeditions in search of highly marginal goods—attracting the monarch's attention—setting up a trading monopoly and a formal acquisition of the territory (seventeenth-eighteenth centuries)—colonial exploitation—decolonization in the second half of the twentieth century. The Hudson Bay Company (established in 1660), Royal Greenlandic Trade Company (est. 1774) and the Russian American Company (1799–1867) were all typical examples of colonial chartered companies, which not merely enjoyed trade privileges, but were also entitled to implement certain government functions, therein to command their own armed troops (Bown, 2021; Nichols, 1923; Petrov, 2000).

The Arctic economic development followed a traditional colonial model featuring compact local administrations, public and corporate officers working on temporary missions, trading posts (complemented in the industrial era by isolated resource extraction sites), plus export routes with respective logistics bases. Europeans as a rule did not settle in the American Arctic for the lifetime.

As a result, the fates of these territories are in certain respects close to those of the developing countries. The key difference lies in their

subsequent integration into the metropoles, which nearly coincided with the decolonization of Asia and Africa. Greenland seized to be a Danish colony and turned into a legally equal part of the realm in 1953, Alaska became the 49th U.S. state in 1959 only. The three northern territories of Canada have until now not been equalized *de jure* with its southern provinces (although the de facto differences have been reduced). There are still many inhabitants in the North American Arctic who were born in the colonial times, (Kleist Pedersen, 2020, pp. 290–311) while many people in the south do not identify their countries with the Arctic. The geographic remoteness of Alaska and Greenland from the Lower 48 States and continental Denmark, respectively, enhance this divide additionally.

However, since the 1950s, the regions of the North American Arctic have obtained much broader authority than those in the European High North. They have now their own legislatures, governments, and separate budgets. Indigenous corporations and communities have control over large territories in Alaska and Northern Canada. Greenland has had a comprehensive self-government since 2009, including even its own foreign service and overseas rep offices. Both the federal nature of the U.S. and Canada, and the global trend toward Indigenous empowerment have played a role. Despite that, the central governments do continue rendering major financial support to all American Arctic regions.

The sole case of an American type Arctic development in Europe is the Norwegian archipelago of Spitsbergen (Svalbard). It was discovered a century later than America, has never had a permanent population, and still possesses a special legal status both internationally (as per the Spitsbergen Treaty of 1920) and inside Norway.

Russia, with its enormous Arctic domains, demonstrates a unique combination of both types, which in a way reflects its dualistic Eurasian nature. The Hansa-oriented Novgorod Republic established presence in the European Arctic in parallel with Scandinavians, following basically the same patterns, while the Asian Arctic east of the Urals, as well as Siberia and the Far East at large, was only acquired by Moscow Kingdom (later the Russian Empire) since mid-sixteenth century. Expanding the national export base was among the key drivers (Pokshishevsky, 1951, pp. 56–57), whereby Moscow furnished the traditional resource motivation with the administrative and military power of a big centralized monarchy. Trading in the most valuable furs like Siberian sable was a crown monopoly. As a result, Asian Arctic and Russian America (Alaska) largely adhered to the American development type, but with some specific distinctions. Firstly,

the government itself usually acted as the trading monopolist. Secondly, for this reason, the Asian Arctic and Siberia, well in line with the European model, enjoyed an equal legal status with the rest of the country. Thirdly, a permanent, multifaceted flow of grassroot settlers was moving to the new territories, accompanying the military and merchants. Peasants in search of personal freedom and of new arable lands, hunters, monks, adventure seekers, prisoners of war, political dissidents, etc., merged into new, frontier-minded and innovative communities, very dissimilar to Central Russia with its serfdom abolished in 1861 only.

The Soviet era enhanced both trends to the extreme. The state controlled the Arctic as the sole owner of industrial assets and the foreign trade monopolist, undertaking enormous investments in infrastructure, research, and human capital. Soviet economists created a unique theory of comprehensive Northern development, though the government would often pursue unbalanced resource-oriented approaches leaving a heavy environmental footprint. Nevertheless, an unparalleled, highly innovative growth took place, and many of those approaches are still in place (Kryukov & Nefedkin, 2022, p. 142). The state developed and introduced groundbreaking proprietary technologies, from construction on permafrost to Arctic oilfield development and nuclear icebreakers, it built large modern cities, spread education and culture among the Indigenous Peoples, and organized massive, predominantly voluntary migrations to the North. From 1920–1990, the population of the Soviet Arctic increased nearly eightfold, from 435,000 to the all-time high of 3,429,000 persons. Its share of the global Arctic population grew from 27 to 57% over the period.

In economic terms, both types of Arctic development aimed to overcome its extremely high costs, but provided different solutions and followed diverse learning curves. The European type relied on the settlers' self-sufficiency and relatively well developed infrastructure; much of the investments were of local origin. The American type relied on outside investors from capital cities, who applied the economy of scale through internalization of costs, eliminating competition, and minimizing the presence of European employees.

These, fundamentally different development types have brought about highly contrasting socio-economic results. Say, Murmansk District in Russia had about 724,500 inhabitants, or 5 per square kilometer, in 2022, compared to 14,000 (0.02 per sq. km) in Canadian Nunavik. The relative population densities measured against the national averages of the

respective countries varied from 0.3% in Svalbard and 0.5% in Nunavut (Canada) to 44.6% in the north Norwegian county of Nordland and 60% in Murmansk District.

The Gross Regional Product (GRP) figures measured in Purchasing Power Parity rates vary even stronger: in 2021, for which we have the latest comparable data, the GRP of Yamal-Nenets Autonomous Okrug in Russia was 776 times higher than that of Svalbard. The per capita GRP varied from US$55,100 in Finnish Lapland to $331,000 in Nenets Autonomous Okrug, Russia. Meanwhile, in relative figures, the per capita GRP in the Russian Arctic (thanks to its less populated Asian part) was 4.5 times the national average, Greenland was roughly on the national level, other American Arctic regions lay from 12–70% above it, while the European ones lagged some 10% behind.

These broad interregional ranges, when key economic characteristics vary in the order of magnitude of 1:200 or even 1:800, are not just numerical. They indicate qualitative differences in Northerners' lifestyles and quality of life, economic structures (which are usually more complex in the European Arctic, creating more local linkages and clustering effects), and relations between Indigenous and non-Indigenous population.

### *Arctic vs Great Power Identity*

The other watershed relates to the role the Arctic has played in the respective national identities.

Four Arctic countries out of eight obtained their present statehood and sovereignty relatively recently, in the twentieth century only. These are, in chronological order, Norway (1905), Finland (1918), Iceland (1944), and Russian Federation (1991). The first three of them were characteristic northern peripheries, which seceded from big European powers.

One half of the Arctic Council (AC) member states thus started their contemporary nation-building just decades ago. The idea of Northernness, later on of Arcticness, became an important part of their identity. The same is true for Greenland[1] with its ongoing powerful rise of Inuit self-consciousness and Canada, which 'patriated' its Constitution in 1982

[1] While Greenland is a part of the Danish realm, it enjoys a broad autonomy with a comprehensive self-government, and deserves a special mention in this context.

only (to replace the 1867 British North America Act) and has always regarded itself as a northern country (French et al., 2017, pp. 116–118).

Three nations represent another, 'great power approach' to the Arctic. These are the U.S. (originally an isolationist country, later on the leading global power), plus Sweden and Denmark, which used for centuries to play important roles in big politics in Continental Europe. For these countries, the High North would be of interest only as a part of broader geoeconomic projects. Say, Kings Frederik II and Christian IV who ruled Denmark in late sixteenth-early seventeenth centuries, saw possessing Norway, Iceland, and Faroe islands as a tool to control the entire trade in North Atlantic (the 'Danish Lake'). For William Seward, the U.S. Secretary of State who lobbied purchasing Alaska in 1867 (the deal commonly known as 'Seward's Folly'), its main value was facilitating a trade link with Asia.

Meanwhile, the Arctic had a low priority per se, as a domestic policy area. As Swedish researcher Niklas Eklund noted, 'The vast northern parts of Sweden, which in purely geographical terms belong to the Arctic, were long seen simply as a resource-rich, successfully exploited periphery' (Eklund, 2021, p. 152). As for the Americans in the Lower 48, they still do not regard themselves an Arctic nation. Barack Obama became the first-ever U.S. President in the office to visit Alaska in 2015.

This difference has a clear practical impact on policy-making. Nations with a strong northern identity treat the Arctic as a matter of major symbolic value. To the contrary, countries, which traditionally focus on big international politics, may well compromise the North for some overarching reasons. The above Alaskan trip by President Obama was dedicated mainly to combatting global warming, as an effort in his campaign to create a lasting climate heritage.

The case of Russia is also dualistic in the regard of identity. On the one hand, Northernness in a broad sense has been an integral element of its cultural code since the twelfth century. The harsh natural conditions with long cold winters and low yields, plus close interaction with the Scandinavian Vikings were among the factors which forged the Russian nation. The North, later also Siberia were frontier areas associated with human courage and dignity, sacred secrets, and freedom. On the other hand, they served for centuries for exploitation of nature and humans, and for deportation of criminals. Siberian authors noted bitterly that their homeland, while an integral part of the Empire, was an underestimated and overseen province (Yadrintsev, 1882). The rise of Russia as a major Eurasian player

(and, in the Soviet time, a global superpower) with an enormous territory enhanced this controversy further.

The approaches of contemporary Russia are also somewhat dualistic. It constituted the core piece of the former USSR, inherited the Soviet nuclear forces and seat in the UN Security Council, which framed the global scope of Russia's interests from the very outset. But from an ideological viewpoint it acted, especially in the 1990s, as a principal opponent to the Soviet Union. As a newly independent state, Russia had to develop its own identity in the post-bipolar world, and the Arctic played a role. Russia is 'on average' a colder and more northern country than the former USSR, possessing all of its Arctic and High North territories, while major areas in the south belong now to other FSU states.

Applying both of the above criteria clearly demonstrates how diverse the global Arctic community really is (Table 1).

Summing up, while inhabiting and developing the Arctic is a universal challenge for the humankind, the responses thereto have differentiated in socio-economic terms (development types) and in national mentality and doctrines (identities). In policymaking, the former defines the objective importance of the Arctic (how much the country has vested in it) and the latter the subjective one (how the decision-makers perceive this importance).

The Arctic is thus strongly heterogeneous not merely in the latitudinal direction, from the relatively comfortable continental rims to extreme ice deserts near the Pole, but also in the longitudinal one, from one country to another. These varieties impact transboundary cooperation in the area as each Arctic nation pursues its own distinct interests. They also complicate the dialog between experts in Arctic economy, who usually refer to their domestic, very incoherent national practices.

For centuries, however, these profound differences were of minor practical relevance because of the limited transboundary contacts. The main trade routes from the northern regions led to the key European markets in the south and not to their neighbors. The Pomor Trade between Norwegian peasants and Russian fishermen along the Barents and White Sea coasts was a remarkable exception, but it also suffered from politically motivated bans by both governments. Norway, Sweden and Finland gathered much valuable experience cooperating in their Arctic areas within the framework of the Nordkalott area. However, these were efforts of

**Table 1** Arctic nations grouped by development type and identity

| National identity | Development type | |
|---|---|---|
| | ***American*** | ***European*** |
| ***Country of the North*** | Canada<br>Greenland | Iceland<br>Norway<br>Finland<br>Russia |
| ***Great power*** | USA<br>Denmark (continental) | Sweden |

Subjective importance of the Arctic

Objective importance of the Arctic

*Source* The Author

mere local geographical scope. The Cold War, with its heavy militarization and secrecy in the Arctic, rendered genuinely pan-Arctic contacts nearly impossible.

## Globalization and the Making of a Holistic Arctic Macroregion

The contemporary cooperation in the Arctic is a recent phenomenon. It is a product of the globalization process, which started in late 1980s and gained a strong momentum after the demise and breakup of the Soviet Union in 1991.

The globalization made a controversial impact on the Arctic. On the one hand, it exposed the region to harsh external competition and investments inflow. Prices for Arctic raw materials remained low throughout the 1990s, numerous small businesses went bankrupt, and large outside investors (many of them from non-Arctic jurisdictions) grabbed the opportunities to purchase valuable Arctic assets cheaply. The socio-economic development of the North American Arctic, initially based on commercially feasible activities, turned more robust. The population of Alaska and of the Canadian Arctic territories grew between 6–24% in the 1990s. By comparison, nearly all European and Russian Arctic regions, which lost much of the previous governmental support, experienced a strong depopulation, up to nearly a half in Russian Chukotka.

On the other hand, the globalization set the scene for comprehensive interactions across the former iron curtain, involving central, local authorities and Indigenous Peoples. A network of regional organizations emerged within a few years, like the Barents/EuroArctic Council (BEAR), the Northern Forum, the Nordic Atlantic Cooperation (NORA), International Arctic Science Committee (IASC), International Arctic Social Science Association (IASSA), etc. The Arctic Council played a central role as a representative forum for central governments and Indigenous organizations from all the eight countries.

The pan-Arctic cooperation has gone through several periods. Prior to the AC establishment in 1996, the interaction consisted of several environmental programs and sub-regional forums like BEAR, with some loose coordination between them. From 1996–2008, the Arctic Council emerged as an ever important forum for discussion of a broad array of Arctic issues. The U.S. invasion to Iraq in 2003 launched a lengthy oil price rally, which drew global attention to the Arctic resources and

resulted in the implementation of several major investment projects in oil and gas, gold and diamond mining.

The publication of the first Norwegian High North Strategy in late 2006, the Russian North Pole expedition in 2007 and the breakup of the global recession in 2008 ushered a new period of hectic activities, which lasted until 2014. The political interest to the Arctic was growing, also on behalf of non-Arctic nations like EU members and East Asian states, as well as global institutions and NGOs. The positions of the Arctic Council, which allowed a group of Observers in 2013, remained unchallenged, with the first binding agreements under the AC auspices signed in this period. Meanwhile, the Arctic turned much less attractive for business, and many flagship projects in extractive industries were paused.

## 2014–2022: Global Arctic at the Crossroads

The last decade, which started with a new market turmoil, was turbulent and decisive in many respects.

The 2014 Crimean crisis led to the first economic sanctions against Russia, some of which also affected the Arctic (resulting among other in the dissolution of the very promising Rosneft-ExxonMobil petroleum alliance offshore Kara Sea). In general, however, the cooperation continued nearly untouched by the general tensions between Russia and the West, which gave rise to the concept of 'Arctic exceptionalism'. The Arctic Economic Council (AEC) was established in 2014 as an informal 'business wing' of the Arctic Council. The same year, both organizations opened their permanent secretariats in Tromsø (Norway). The AC members established the Arctic Coast Guard Forum and, jointly with some non-regional states, signed the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean. The main rationale for the continued Arctic cooperation was apparently a common understanding that it represented 'a positive sum game' for all parties involved.

The number of these parties was increasing constantly. All the eight Arctic nations (A8) and several outside states had adopted formal Arctic strategies by 2014. Six European and Asian countries obtained the status of AC Observers in 2013. Many non-governmental actors of various nature had also made their entry, including notably transnational corporations (TNCs), global financial institutions, and environmental NGOs,

each one with their specific agendas, financial and media resources (Finger, 2013).

Dissents, even contradictions were piling in parallel, while the world entered into an era of profound transformations, featuring a new 'long wave' of technological development, intensified global warming and the low-carbon transition, a massive buildup of US-China rivalry, etc.

In the theoretical and policy levels, these discrepancies resulted in ideologically laden, value-based discussions on Arctic futures. We have identified three overarching themes:

- the optimal human presence and role in the Arctic: if it should be minimized to protect the fragile nature, or a continued sustainable development is doable,
- Arctic governance: whether it should remain in the hands of the A8, even the 'Ilulissat Five' (A5), or non-Arctic actors should have a stronger formal say, be it countries, intergovernmental or non-governmental organizations,
- target image of the Arctic: shall it serve as a unique laboratory of multilateral cooperation or as another arena of geopolitical confrontation.

The first theme is about striking a fine balance between the interests of climate policies (SDG 13) and of socio-economic development (SDGs 7–9, 14). Countries with Northern identity, Republicans in the U.S., many corporations of extractive industries and northern municipalities support the idea of a continued, sustainable Arctic development, subject to applying cutting-edge technologies and stringent environmental regulations (Dmitrieva & Romasheva, 2020). To the contrary, Sweden, U.S. Democrats, numerous environmental NGOs, banks and financial companies tend to take a sufficiently more restrictive stand; the most fundamental positions presume that only traditional, preindustrial Indigenous communities and few net zero entities should remain.

The strong public focus on $CO_2$ emissions has among other created major obstacles for oil and gas development, regarded just 15–20 years ago as one of the key future Arctic industries. Nowadays, nearly all Arctic exploration and development has concentrated offshore Norway and onshore Russia. These two countries show a strong political will to continue operations, while they are also exposed to criticism including

the unsuccessful, but broadly publicized 'Climate Lawsuit' by Norwegian NGOs against licensing of new blocks in Barents Sea.

The second theme relates closely to the notion of the Arctic as 'Global Commons', or 'global public goods' as the Dutch Government calls it in its Polar Strategy (The Netherlands' Polar Strategy…, 2021, p. 8). This approach seeks to capitalize on the ongoing dilution of national sovereignty in issues like human rights, climate change, or COVID-19 treatment. Besides, the Arctic Council does not rest upon an international treaty, merely a declaration, and thus possesses no political authority to enforce its decisions (Ingimundarson, 2014). At the same time, the legal grounds for the 'Global Commons' slogan are vague, and littoral Arctic nations do care about their sovereign rights over the seabed around the North Pole, as well as maintaining control and authority over the Arctic sea routes (Canada and Russia), Svalbard (Norway) or Greenland (Denmark).

The third theme reflected the global markets disintegration and the growing security focus on the Arctic, exacerbated by the lack of a relevant discussion forum, as the AC deliberately did not address military and security issues.

Starting with Secretary of State Mike Pompeo's 2019 speech in Rovaniemi, the U.S. included the Arctic into its overall policies of containing Russia and China. However, the cooperation continued until 2022, although in a slower tempo.

The institutional framings of pan-Arctic cooperation in economic and political spheres developed in somewhat opposite directions. Under the unconstrained globalization (prior to 2008), the political contacts relied on new, region-specific institutions like the AC, BEAR, Northern Forum, etc. To the contrary, the economic development was primarily subject to mechanisms of global and continental scopes represented by the IMF, WTO, the Single Market of the enlarged EU plus the European Economic Area, NAFTA, etc. The late Russian Ambassador Vitaly Churkin, who was the Senior Arctic Official during the first Russian Chairmanship in the Arctic Council, told me in an interview in 2005 that it had taken Russia some effort to persuade other member states that the organization should not confine itself to environment and Indigenous Peoples only. Gradually, the parties agreed to broaden the scope to address socio-economic development like business, maritime transportation or extractive industries (Churkin, 2005, p. 17).

The 2008 recession (the first one since the globalization began) resulted in a renewed rise of protectionism around the world and the creation of the first alternative economic formats like the G20, later on of regional trade and investment partnerships. While the international politics was getting increasingly polarized, the global economic space experienced a growing fragmentation. The Arctic became an integral part of these trends.

In the political area, both Arctic and non-Arctic nations continued highlighting the central position of the Arctic Council. However, several outside countries, willing to participate in the governance process (e.g. Germany, the Netherlands, the EU, and China), also promoted a more active role of associations where they are full-fledged members, or bilateral accords. As Japanese researcher Aki Tonami put it, 'Asian states are realists' and prefer structures in which they are not subordinate (Tonami, 2019, p. 28). Arctic has witnessed an increased engagement of large international organizations with a broader geographic mandate like the UN and its agencies, the EU, NATO, etc. China included the Arctic into its flagship Belt and Road Initiative (BRI) under the 'Polar Silk Road' logo. The region got thereby involved into global politics and broader policy planning frameworks.

Meanwhile, the regulation of economic and research activities in the Arctic became increasingly reliant on region-specific solutions: binding agreements under the auspices of the Arctic Council, the IMO Polar Code, the WEF Arctic Investment Protocol, initiatives within the framework of the Arctic Economic Council, etc. Global trade liberalization was complemented and partly replaced by sub-regional or bilateral free trade zones and partnerships: Faroe Islands-Iceland, China-Iceland, China-Finland, China-Denmark, Iceland-Greenland, China-Russia, North Atlantic cooperation under the NORA auspices, etc.

This development reflected a growing international awareness of the specific conditions and challenges of the High North, which deserved tailor-made solutions.

On the negative side, the growing security concerns also brought about articulated doubts about Chinese investments in the Arctic and attempts to halt these, western sanctions on supply of Arctic oil exploration and drilling equipment to Russia, President D. Trump's initiative to purchase Greenland from Denmark, etc. Altogether, the global Arctic economic space was becoming increasingly heterogeneous. Still, a cross-regional

dialog went on, and the entire corps of Arctic organization maintained operations.

## 2022 on: What Next?

In early 2022, all of the Arctic 'crossroads' were substantially left behind. The region turned deeply divided in ideological, political and economic respects, which may devalue many results of the three decades of visionary and painstaking collaboration.

On March 3, 2022, the Western AC members 'paused' their activities in the organization, where they constitute seven of the eight Permanent Members and where Russia was the Chair at the moment. Just within a few days, they also froze cooperation with Russia within the Barents Council and several science forums like the IASC, IASSA, Sustaining Arctic Observing Networks, University of the Arctic,etc. On June 8, 2023, the seven Arctic nations declared a 'limited resumption of Arctic Council cooperation', to cover only the previously launched projects where Russia did not participate.

The politicized 'freeze' of contacts has also affected business, although with a certain lag due to the higher inertia in the real sector. The Arctic Economic Council decided on February 28, 2022 to move its hybrid annual general meeting from St.-Petersburg to an online meeting, although it did not stop the interaction with Russian entities. All western AC members, the EU and active observers like the UK, Switzerland, France, and Japan have imposed economic sanctions on Russia. As of March, 2024, they totaled nearly 19,300, therein over 16,500 introduced in the past two years (No. 2 in this rating, Iran, had less than 5,000 sanctions in force). Many western investors, among them notably majors from the Arctic countries, have left Russia or declared the intent to divest. These include former important players in the Russian Arctic oil and gas like ExxonMobil, Equinor, TotalEnergies, BP and Eni, the leading container ship operator Maersk from Denmark, etc. Exports of Siberian petroleum to the EU reduced dramatically; there are no direct air flights between Russia and western countries.

The discussion is ongoing in the West whether, regardless of the profound split over the Ukranian issue, it is practical and actually doable to exclude Russia, which stands for a half of the Circumpolar Arctic, from the global Arctic governance (Buchanan, 2023; Zellen, 2023, p. 157). Norway, which overtook Chairmanship in the Arctic Council from

Russia in May 2023, took major efforts to maintain the organization, AC Working Groups have resumed their meetings in online format. Some research cooperation is still intact within both natural (especially climate) and social sciences, this book being a good example. The overall trend, however, seems very clear and has already gained a powerful political and bureaucratic momentum.

The last two years have demonstrated that politics still prevails over realistic interests in the Arctic development. The relatively holistic region will be likely replaced in economic terms by 'two Arctics': seven NATO members versus Russia, each half with its own rules.

It seems, however, that further developments will differ substantially from the Arctic rivalry of the few great European powers in 17th through early twentieth centuries, as well as from the confrontation of military-political blocks from 1950s-1980s. Nobody voices the idea of limiting Arctic access to the polar nations only. The fruits of the globalization seem to remain in place in this respect. All the Western Arctic states favor a stronger NATO involvement, leading to an increased military presence of non-Arctic European nations in the region, which corresponds well to their own intentions. The UK on its part also builds up its presence in Northern Europe through the Joint Expeditionary Force while East Asian countries develop mutual cooperation to secure them a stronger collective say in the Arctic.

### *Western Arctic Half*

The 2022 edition of the U.S. Arctic Strategy (National Strategy for the Arctic Region, 2022) demonstrates that the U.S. is determined to play the leading role in the western Arctic, while its policy seems most fundamental, reflecting the very specific national experience. Well in line with the traditional 'great power approach' to the Arctic, the U.S. strategy views the region predominantly as a geopolitical hot spot and a part of a broad green deal, which would among other seriously impact Alaska's oil dependent economy. And, while President Donald Trump has sought to unleash Alaskan resource potential and to evaluate potential business cooperation with Russia in the Arctic, he does not challenge the overall geopolitical perception of the region, clearly manifest in his attempts to gain control over Greenland.

The western rulemaking may to some extend try to continue using the Arctic Council umbrella (excluding Russia and disregarding its eventual objections), to ensure that if a comprehensive cooperation is ever resumed, Russia would face a set of new rules to comply with, including more stringent, partly prohibitive, environmental regulations. But many rules may well stay unwritten, yet with a strong real power, relying on informal understandings and institutions. The loosely formulated ESG agenda (which is now gradually replacing the clearly defined SDGs and HSE standards) or the recent U.S. banks campaign against Alaskan drilling are good examples.

The European Union will be of limited importance as an American partner in the Arctic, especially since the two Arctic EU states, Finland and Sweden, have departed from their traditional neutrality and become NATO members. The U.S. Arctic strategy does not mention the EU; in the U.S. National Security Strategy, it only appears in the context of trade cooperation, Ukraine, and countering China (National Security Strategy, 2022). Meanwhile, the EU may turn helpful as a key proponent of the low-carbon transition and phasing out Arctic oil and gas operations. The U.S. may thus propose a political deal to Brussels and other non-Arctic players like Türkiye or Japan, whereby they would obtain and/or retain the status of AC observers and get backing in their potential disputes with Russia provided their support of American approaches to the Arctic. American-based global corporations and environmental NGOs may also serve as important tools in the North.

The North Atlantic regions (Iceland, coastal Norway, Faroe Islands, and Greenland) will be most vulnerable, given their limited economic capabilities, high dependence on Arctic resource development, and immensely important geostrategic location. The U.S. will eventually encourage Iceland and Greenland to reject Chinese investments, trying, as we predicted in 2013, not that much 'to overbid' China but to apply political pressure as their key ally (Krivorotov, 2013, p. 189). Constructing military/dual use infrastructure and rare earth mines represent the few exceptions where Americans may undertake sizeable investments.

Greenland is likely to experience the biggest challenges. The rivalry between Denmark and the U.S., halted oil and gas exploration and obstacles to Chinese investments will seriously affect its socio-economic development. Together with the growing secessionism, this may cause far-reaching changes that are hard to predict.

Hydrocarbon development offshore Arctic Norway may also face harder times. The country has now mobilized fully its potential in natural gas production to fill in the gap left by Russia in the European market. While the Russian deliveries to Europe fell from 179.0bcm in 2021 to 28.3bcm in 2023, Norway grabbed the opportunity and increased its exports from 107.6bcm to 122bcm over the same period, becoming the biggest supplier to the continent. In June 2023, the Norwegian government gave a fast-track approval to develop 19 minor fields, some of them in the North, which had previously seemed of marginal interest. The EU welcomes these efforts as a tool to provide its security of energy supply. In the longer run, however, North European and Arctic oil and gas will face an increasing, environmentally motivated pressure. Norwegian top officials have already indicated that they are well aware of the risks.

Almost any practical pan-Arctic cooperation involving Russia seems unrealistic. Only some minor, still important exceptions are possible, like the continued Russia-Norway cooperation in regulating Barents Sea fisheries. Equally, we should expect enhanced efforts to obstruct Chinese projects and counter its aspirations as a 'near-Arctic state'. The Congressional Research Service suggested as early as in 2021 that the U.S. could move to suspend China's observer status on the Arctic Council as a cost-imposing action 'to respond to unwanted Chinese activities' in the East or South China seas (Congressional Research Service, 2021).

### *Russia*

Russia on its part will alone constitute the eastern Arctic half, regulating the economic activities predominantly through domestic legislation plus valid international treaties.

Since April 2022, Russian officials have declared that the country is open for cooperation in the Arctic with any interested partners and is willing to involve non-regional states and organizations, which pursue constructive policies toward Russia. In early 2023, this point was formally introduced into the Foundations of the Russian Arctic policy through 2035 and the new edition of its Foreign Policy Concept (President of the Russian Federation, 2023a, 2023b). The latter document puts the Arctic higher on the geographical priorities list, but no longer mentions cooperation within the AC, A5 or BEAR. In September 2023, Russia left the BEAR officially.

Exports of Russian, Arctic-produced oil and gas are already rerouted to the East, the prospects are also positive for coal, metal ore, and rare earth elements. Once again, the Arctic ports play the role of key logistical bases for the Russian foreign trade. This fits well into the domestic plans, including the dramatic increase of goods turnover along the Northern Sea Route. Under the new, dramatically changed situation, however, the country is likely to review some of its infrastructure development plans.

The nearly stopped Russia-West interaction does not mean that the country will avoid any western impacts. Russia will have to undergo a drastic adaptation to western sanctions (which are not going to ease up in any foreseeable future) in areas like technologies, market access, and infrastructure (Salygin & Krivorotov, 2022, pp. 13–15). Most Asian countries have not supported the Western trade sanctions, but may be exposed to their secondary effects. A politically and environmentally motivated international pressure on Russian Arctic oil and gas, shipping (including the legal status of the Northern Sea Route) is also set to grow. This poses new tasks for the domestic legislation development.

In the investment area, Russia is going to use its position as the only Asian Arctic nation to involve BRICS and SCO member states, among other Himalayan nations representing the 'Third Pole', thereby creating synergies between its large-scale Arctic resource development efforts and the 'pivot to the East'. Companies from China, India, Singapore, Arab nations, and Türkiye mull cooperation in the energy sector and/or supply goods and services to the Russian Arctic already.

The new Foreign Policy Concept also mentions, for the first time ever, that interested parties are welcome to participate in the 'infrastructural development of the Northern Sea Route', which had previously been off limits to foreign investors. Under the circumstances, much of the governance in the eastern Arctic may happen through bilateral agreements and institutions between Russia and the key investor countries.

Russian politicians and researchers are aware of the challenges of cooperating with Asian and potentially African countries that possess limited experience in polar regions. The country realizes the need to develop its own industrial and research capacities. At the same time, it is poised to take a full use of new opportunities and synergies, also in the Arctic, originating from the growing global importance of the Asia–Pacific region where it is a part.

## Conclusion

As demonstrated above, the successful, vibrant pan-Arctic cooperation since the 1990s became possible through a lucky, unprecedented combination of several major drivers:

- the Cold War end, which eliminated ideological controversies among the Arctic nations and removed the political barriers for cooperation,
- massive liberalization of international trade and investment flows, cohesion of economic policies,
- shared global consciousness and concerns about new, universal challenges (like Indigenous Peoples empowerment, protecting biodiversity, combatting climate change and international terrorism, etc.),
- rapid progress in information and communication technologies, especially mobile devices and the Internet, which helped enormously to overcome the vast Arctic distances,
- relatively low interest of outsiders with their differing agendas, etc.

This cooperation was in no way incidental. Indeed, it relied upon a very solid realistic foundation of major synergy effects of combining efforts to resolve common pan-Arctic problems. Yet, the positive political environment did help a lot to realize this constructive potential. By now, many of the above preconditions have vanished, paving the way for ideological split and mutual mistrust.

In early 2022, all of the Arctic 'crossroads' were substantially left behind. For years ahead, the region will be deeply divided in two on ideological grounds, each half with its own governance regimes, which may devalue many results of the three decades of visionary and painstaking collaboration.

This shall not be interpreted as if there were no deep-going contradictions between Russia and the West. The author acknowledges absolutely they do exist. What is deeply regrettable, however, is the fact that they have affected the global Arctic cooperation so heavily. Mutual, non-politicized interests like Indigenous rights and cultural heritage, combatting and mitigating climate change, protecting the Arctic environment at large, gathering and exchanging valuable research data, promoting business cooperation and trans-Arctic (therein digital) infrastructure, have suffered in the aftermath of events far away from the Arctic Circle. By comparison, even under the Cold War, the Arctic NATO member states

and the USSR managed to cooperate on issues like preserving the polar bear, managing common fish stocks, search and rescue operations, etc. The lack of such interaction now has already made a major impact on the accuracy of global warming forecasts, with more negative effects to follow (López-Blanco et al., 2024, pp. 152–155).

Under globalization, the Arctic regions had to go through a tough adaptation process, entering into new, international value chains and ultimately learning how to get certain benefits from this situation. Similarly, the ongoing fragmentation of the world economy, with its trade wars, economic sanctions, shorter supply chains, and reshoring poses no smaller challenges. While the risks and losses seem already evident, the new growth opportunities are yet to be identified and developed within regulatory frameworks, which are subject to changes.

It is noteworthy that economic interests, although important, have never dominated the pan-Arctic agenda, and business cooperation used to lag behind the flourishing contacts between authorities, Indigenous communities, and researchers. Arctic regional economies, specializing in extractive industries and fisheries, are more mutually competitive than complementary, providing relatively few synergies.

Through the years, we have seen a number of large, potentially viable and promising economic projects, which were put on ice or shelved. These include among others the visionary Norwegian idea of a free 'Pomor Zone' on both sides of the Norwegian-Russian border, Isua iron mine in Greenland, railroads from Rovaniemi to Kirkenes (Finland – Norway) and *Belkomur* (Russia), *Alaska LNG* project in the U.S., *Quintillion* and *Arctic Connect* projects of laying trans-Arctic subsea fiber optic cables from Europe to America, etc. Transit shipping through the North-East and especially North-West Passages has never lived up to expectations. The reasons were many: high investment risks, market fluctuations, political interventions, and lack of trust among the shareholders. In this regard, the new Arctic split will hit business to a lesser degree than other cooperation areas, but it will definitely deprive it of many opportunities.

The Arctic Council will remain in place as an institution, but in the present configuration, it will lose much of its efficiency and authority. Both Arctic and interested non-Arctic nations will be likely to seek alternative arrangements for collective rulemaking.

The increased international tensions in the Arctic will not necessarily curb foreign investments, also by countries from outside the region.

But the investment regimes in civil industries will apparently turn more stringent as the Arctic gains in politically sensitivity. This trend will be complemented by a partial Arctic remilitarization in the form of naval and infrastructure buildup on both sides, U.S. investments in the Nordic countries under the 2023 bilateral defense accords, renewed interest to the GIUK gap, etc. Military presence will thereby restore its role as one of the leading, although rather lopsided and potentially unstable, drivers of the Arctic economies worldwide.

Overall, however, the global High North will be squeezing to its millennium-long place in the periphery of global politics. The Cold War was a game changer, turning the Arctic Ocean, North Atlantic and Bering Sea into key theaters of direct contact between archrivals, the USSR and NATO countries including notably the U.S. This resulted in massive naval and air force presence, patrol activities, reconnaissance operations, etc. The Arctic enjoyed a high priority among the political and military leaders on both sides.

The situation is no longer the same. Despite the confrontation with Russia, the U.S. sees China as its key long-term rival. This attitude was increasingly manifest in the situation around Taiwan and in the South China Sea. The valid U.S. National Security Strategy, adopted by President Joe Biden on October 12, 2023, declares that 'Russia and the PRC pose different challenges' and singles out China as 'the only competitor with both the intent to reshape the international order and, increasingly, the economic, diplomatic, military, and technological power to advance that objective'.

The rise of China and India as new leading economic and geopolitical players moves the global 'center of gravity' to the South and East Asia and the adjacent seas, which have lately received the new common denomination of Indo-Pacific. From this viewpoint, the Arctic looks like just a remote ancillary theater of secondary importance for both China and the U.S.

The relevance of Arctic resources is also going to change. We can expect stable or growing global demand for specific raw materials (like rare earth elements, non-ferrous metal ores, fish, etc.), renewable energy, or tourist attractions. Meanwhile, the oil and gas consumption may face a stagnation and decrease in the longer run, with China and India being the main demand drivers. Traditional heavy industries and potentially Arctic shipping will face stricter environmental standards, and setting these rules will apparently be subject to intense international debates.

The heavy dominance of geopolitical thinking, combined with rigorous climate policies, threatens to turn the Arctic back into a 'voiceless', potentially deserted global outskirt. On the other hand, the two Arctic halves will compete for third parties' interest in terms of creating a more attractive future vision and offering a better investment climate. This may provide Arctic regions with a new chance to 'reinvent themselves' harnessing cutting-edge technologies. And it does not matter much for the regions who will bring about these technologies, be it companies from resource sector, IT giants or the military. The key challenge is to 'domesticate' them, adapting them to the specific local conditions.

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# The Rotating Wheel: A New Cycle of Pacific Relations in the Emerging Arctic and the Role of the Middle Powers

*Christopher R. Rossi*

## Introduction

Rapidly receding ice (Samenow, 2013), which once covered huge deposits of living and mineral resources ("90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic", 2008), threatens to turn the Arctic cryosphere into a contested sphere of influence involving superpower competition and global interest. Formerly regarded as an area too remote and inhospitable to sustain human activity, the Anthropocene is transforming this mostly landless geo-space into a gigantic territorial temptation, far beyond the interests of the five Arctic littoral powers—Canada, Denmark, Norway, Russia, and the United

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States (the Arctic 5). This small group claims stewardship rights over the Arctic's environment, littoral indigenous communities, and natural resources (The Ilulissat Declaration, Arctic Ocean Conference, 2008). However, when they are not staking claims against each other in the Arctic (Antsygina & Overfield, 2022), this group is contending with emerging global issues in the High North. These issues now include potential commercial rewards such as lengthening summer open-ice transit periods as well as an array of problems. These problems include Arctic Amplification (Harvey, 2022), the diminishment of what is called old sea ice ("Climate Change Indicators: Arctic Sea Ice", 2022), thawing permafrost (Staalesen, 2021), migrating species (Rossi, 2017a, 2022; Sundet & Håkon Hoel, 2016), secondary spread infestations (Rossi, 2022), and pathogenic problems of acquaculture and parasites introduced from warmer waters (Troell et al., 2017). Moreover, Russia's invasion of Crimea in 2014 and full-scale aggression against Ukraine in February 2022 have brought to a halt almost all cooperation with Russia. Much of the activity of the Arctic Council, the leading intergovernmental forum for promoting cooperation in the Arctic ("Arctic Council", n.d.), has been suspended, as has been discussions of the Northern Dimension cooperative initiative among the EU, Russia, Iceland, and Norway, the Barents Euro-Arctic Council, numerous education exchanges and all science diplomacy initiatives. With more than half of the Arctic Ocean coastline adjacent to its shore ("Russia", 2022), Russia's pariah status appears to be the Anthropocene's most complicating factor.

This chapter investigates Asia-Pacific Arctic developments in light of changing geopolitical interests, with particular emphasis on competing regional strategies. As the first quarter of the twenty-first century unveils its Pacific Century, what prospects emerge for Asia in the Arctic? What prospects does the Arctic hold for promoting regional cohesion in a climate of increasing competition?

## A Flurry of White Papers

US policy stumbled with the Obama Administration's pivot to Asia. Its centerpiece of a Trans-Pacific Partnership (TPP) with twelve Pacific Rim countries collapsed in 2017 under the weight of internecine Congressional squabbling. It was followed by the Trump Administration's rejection of the TPP and its supplanted Asian strategy of free and open trade

and investment (Ayres, 2017; McBride et al., 2021). The Biden Administration's rebuilt Indo-Pacific Strategy White Paper, which asserted that the "United States is an Indo-Pacific power," promised an intensified focus on all Indo-Pacific countries in light of rising China (Indo-Pacific Strategy of the United States, 2022), its alleged debt-trap diplomacy, and its assertive rhetoric across the region. Given its emphasis on the "premier regional grouping" of the Quadrilateral Security Dialogue (QUAD: Australia, India, Japan, and US), the US strategy oriented heavily toward the Indo-Pacific oceans ("Geopolitics in the Indo-Pacific: Major Players' Strategic Perspective", 2023; "Indo-Pacific Strategy of the United States", 2022). However, trilateral references to Japan, the Republic of Korea, and the US in relation to "the coming energy and climate transition," ("Indo-Pacific Strategy of the United States", 2022) suggest implied Arctic concerns as well. These concerns are reinforced from a flurry of updated Arctic White Papers from circumpolar powers and North Atlantic States (Arctic & Northern Policy Framework, 2019; National Strategy for the Arctic Region, 2022; Wegge, 2020), Japan (Japan's Arctic Policy [Provisional Translation], 2015), China (China's Arctic Policy, 2018), the European Union (EU) ("Joint Communication on a Stronger EU Engagement for a Peaceful, Sustainable and Prosperous Arctic", 2021), India (India's Arctic Policy: Building a Partnership for Sustainable Development, 2022), and Norway (Melding til Stortinget, Svalbard, 2023–2024).

Asia's third largest economy, India, now asserts an extended neighborhood to the Association of Southeast Asian Nations (ASEAN) through its Act East Policy ("Act East Policy", 2015). Japan has shifted to East Asia, the Middle East, and Africa through its Free and Open Indo-Pacific Strategy (Langa, 2017). Since 2012, Russia's turn to the East involves creation of a Far East Development ministry ("Ministry for the Development of the Russian Far East", n.d.), advanced special economic zones, the proclamation of Vladivostok as a free port, and strengthened economic ties with Asia Pacific countries (Lee, 2017a). South Korea announced in 2013 its Eurasia Initiative to restructure the geopolitical and security architecture of Northeast Asia, with a network of energy connections linking the Korean Peninsula with Central Asia and Europe. Crafted with South Korea's middle power status in mind, which characteristically favors multipolarity, rule-based order, institutional governance, and shared global responsibilities (O'Neil, 2015), the initiative has encountered operational difficulty, particularly given the collapse

of a key element, the Rajin-Khasan inter-Korean rail link to Russia's ice-free port. It also created friction with China and the latter's attempt to reconfigure the post-war architecture of US regional relations through its massive One Belt, One Road initiative (Ekman, 2016). However, melting Arctic ice may create a pelagic opportunity for Asia-Pacific countries. While increasing attention on Pacific Rim issues focuses on strategic rotations turning east and west, interests invariably will turn north and have done so already. A new cycle of Pacific relations will present strategic challenges in the coming age of the global Arctic.

## Energy Reliance

The geostrategic importance of access to Arctic energy sources is already clear. South Korea's icebreaker RV Araon plies Arctic waters. Three of its major industries (Albert, 2018), Daewoo, Hyundai, and Samsung, operate marine engineering shipyards to manufacture icebreaking liquefied natural gas (LNG) carriers. These carriers aim to transport Yamal gas out of the Russian Arctic to global markets. As the world's largest importer of liquefied natural gas, Japan depends heavily on Russian Arctic gas to secure its future energy needs. Japan's public financial institutions have invested substantially in the development of Russian natural gas production along its Northern Sea Route, although many of its investments and loan agreements have been suspended because of the war in Ukraine (Thompson, 2022).

Western sanctions against Russia in the wake of its invasion of Ukraine have created trade leverage for China to widen Russia's rupture with the West. Russia's trade with China reached record heights in 2022 and recent quarterly projections indicate that this trade will continue to increase (Korostikov, 2023). Russia's constricted avenues for energy exports are not likely to translate into a dependency on China, however, as the geopolitical and strategic advantages Russia maintains over the High North resources remain as great as the shared vision the two countries hold on establishing a global realignment against Western multilateral institutions and world order.

## An Already Congested, Contested Space

Contested sovereignties in the Arctic already include numerous disputes. Principal conflicts involve boundary disputes, such as in the Beaufort Sea between the United States and Canada (Baker & Byers, 2012), and in the Bering Sea between the United States and Russia (Konyshev & Sergunin, 2014). They include bilateral and multilateral disputes over the waters adjacent to the Svalbard archipelago (Rossi, 2017a). Major disputes seem certain over competing claims to extended Arctic continental shelves (Antsygina & Overfield, 2022). These are mineral and energy-rich areas of seabed and subsoil beyond the 200 nautical mile (nm) breadth allowed by the UN Convention on the Law of the Sea (UNCLOS) that may extend up to 350 nm from coastal state baselines (UNCLOS, art. 76). Russia's extended continental shelf claim alone covers an astonishing 1.2 million square kilometers ("Continental Shelf Claims in the Arctic", 2018). The outer limits of its claim, which includes the massive Lomonosov Ridge, conflicts with Danish, Norwegian, Canadian, and probably United States claims ("Commission on the Limits of the Continental Shelf (CLCS), Oceans & Law of the Sea, United Nations", n.d.). The United States is not party to UNCLOS. However, former President Obama acknowledged US interests, noting that the country's "extended continental shelf claim in the Arctic region could extend more than 600 nm from the north coast of Alaska" (National Strategy for the Arctic Region, 2013).

The US Navy's Arctic Roadmap projects ice-free conditions for the Arctic summer, beginning as early as 2030 (Titley & St. John, 2010). By century's end, projections of an almost completely ice-free ("All About Sea Ice: Characteristics", 2018) polar season have stimulated thoughts about transforming the High Arctic (Limits of Oceans & Seas, 1986; "What Is the Arctic?", 2016) into a viable economic and commercial geo-spatial region. A much-cited study estimates that 22% of the world's "undiscovered, technically recoverable resources" exists in the area north of the Arctic Circle, including 13% of undiscovered oil reserves, 30% of undiscovered natural gas, and 20% of undiscovered natural gas liquids ("90 Billion Barrels of Oil and 1,670 Trillion Cubic Feet of Natural Gas Assessed in the Arctic", 2008). An open waterway across the top of the world presents exceptional commercial rewards, in addition to mineral or energy exploitation. It would be the fastest, most direct surface route between Asia and Europe, the world's two largest regional trading blocs ("EU Position in World Trade", 2014). Such a route would save more

than a week of transit time per voyage, thereby significantly reducing energy, environment, and transportation costs as compared to more expensive southern routes through the Indian Ocean and Suez Canal (Jones, 2013; Tschudi, 2013). Although not without safety and security problems of its own (Smith, 2017), an Arctic route would also avoid the politically turbulent waters off the Horn of Africa (Masters, 2013; Treves, 2009).

As congested and contested as Arctic Ocean prospects appear, important points of agreement—specifically the 2021 agreement to implement a 16 year moratorium on the unknown ecosystem of the Central Arctic Ocean (CAO Treaty) ("An Introduction to: The International Agreement to Prevent Unregulated Fishing in the High Seas of the Central Arctic Ocean", 2021), and the 2023 Biological Diversity of Areas Beyond National Jurisdiction agreement (BBNJ Treaty) to conserve and sustain marine biological diversity in the High Sea ("Intergovernmental Conference on Marine Biodiversity of Areas Beyond National Jurisdiction, UN", 2023)—suggest that substantial portions of the Arctic Ocean will remain as part of humanity's common heritage, but for how long?

## Russia as Gatekeeper

Turning the melting Arctic seascape into the next frontier for development presents numerous challenges and opportunities. As Russia is the only circumpolar state with millions of its citizens living above the Arctic Circle ("Population, The Arctic", n.d.), and as its Arctic landmass already generates 15–20% of its gross domestic product (Brigham, 2017; Eilertsen, 2017), it is already heavily invested in and well situated to capitalize on its dominium over these resources. Russia also has buttressed its military presence in the Arctic. Since 2014, it has created new Arctic brigades, re-opened Soviet-era military bases, deployed early-warning Arctic-based radar systems, and established the Arctic Joint Strategic Command, a new military district designed to coordinate its expanded northern military presence (Foxall, 2017; "Russia's Militarisation of the Arctic Accelerating", 2017). Since 2014, fortifications to its 24,140 km northern shore now include an additional 475 military sites, 50 reactivated Soviet outposts (Gardiner, 2023), improvements to Russia's Nagurskoye Air Base on Franz Josef Land and the Temp Air Base on Kotelny Island, and infrastructure upgrades along the Yamal Peninsula (Humpert, 2019). In January 2021, Russia upgraded its Northern Fleet

at Severomorsk to military district status ("Putin Signs Decree to Transform Northern Fleet into Military District", 2020) and placed this fleet on a level equal to Russia's four other military districts.

Russia has a deep, emotional attachment to the Arctic that it will not cede willingly to globalizing interests (Hille, 2016; Hønneland, 2020). The idea of mastering its nature and preserving its gatekeeper status is very much part of Russian identity and mythos (Hille, 2016; Hønneland, 2020). Geir Hønneland imagined the Arctic as the ballroom for a Russian dance across the ages and its expanse (Hønneland, 2020). Problematically, the Russian Deputy Prime Minister turned this attachment into a political statement, assertively declaring in a surprise 2015 visit to Norway's Arctic archipelago, Svalbard that "the Arctic is a Russian Mecca" (Tharoor, 2015). In another surprising move, a Russian Orthodox prelate consecrated a seven meter cross (adorned with the ribbon of Saint Georg on the "holy lands" of Russia's abandoned mining town of Pyramiden, Svalbard (Nilsen, 2023b), impliedly challenging Norway's "full and absolute" sovereignty over territory granted to it by the 1920 Spitzbegen (now Svalbard) Treaty. This event followed symbolic military parades ostensibly commemorating WWII Victory Day in the nearby Russian mining community and waters off Barentsburg (Nilsen, 2022, 2023a; Staalesen, 2023). Skeptics viewed the displays as provocative forms of lawfare (Nilsen, 2023b), whereby Russian authorities intentionally engaged in manipulations of a rule-based Arctic order to obliquely remind the West (and in the case of Svalbard, Norway specifically) of Russia's unrequited historical claims, revanchist potentiality, and ability to plant the Russian tricolor flag on the seabed of the North Pole, as it did in 2007.

Russia's domineering interest over the Arctic dates to Tsarist imperial and managerial policies to control Moscow's extensive periphery (Emmerson, 2010). The Stalin era consolidated Arctic agencies under the institutional and mythmaking framework of Glavsevmorput (1932–1936) (McCannon, 1998), a British East India-type company that grew to administer the Northern Sea Route and "control over all Soviet territory east of the Ural Mountains and north of the 62nd parallel," almost one quarter of all Soviet territory (McCannon, 1998). The agency formed out of recognition of the region's "colossal wealth" and the need to quickly organize this wealth into the "socialist economic structure" (McCannon, 1998). The project comprehensively combined executive and political administration, transport and civil aviation, science and weather, mining, and culture activities with a plan to domesticate and

settle the Far North (McCannon, 1998). It was overtaken by Dalstroi, the Main Administration for Construction in the Far North, which transposed into Stalin's nightmarish gulag system (McCannon, 1998). General Secretary Mikhail Gorbachev outlined the Soviet's reinvigorated commitment to conquering the Far North as a restylized 'zone of peace' instead of a military and mining encampment in his 1987 Murmansk Initiative (Åtland, 2008). Russian President Vladimir Putin reworked that commitment with his 2013 pledge to develop the Northeast Passage (and its lesser included stretch called the Northern Sea Route (NSR)) into a trans-arctic trade route, which he announced in Russia's Arctic development strategy through 2020 (Heininen et al., 2013; "Putin Approved the Arctic Development Strategy to 2020", 2013). This passageway sits atop Eurasia and connects Murmansk on the western Barents Sea with Providence Bay on the Chukchi Peninsula in northeastern Siberia.

Putin's goal of establishing the NSR as a rival to the Suez Canal is far-fetched (Brigham, 2017; Bryanski, 2011). On average, twenty-three cargo ships transited the entire trans-arctic route between 2011 and 2016, as compared to 16,800 ships passing through the Suez Canal in 2016 (Brigham, 2017). While cargo volume has remained roughly stable since the Ukraine invasion, China's COSCO shipping company did not conduct any trips along the NSR and the vast majority of vessels now on the route fly the Russian flag (Humpert, 2023). "In fact, there was no international transit traffic in 2022, meaning not a single vessel traveled from a non-Russian port to another non-Russian port using the NSR," (Humpert, 2023) out of concern for incurring Western sanctions.

Was that the only concern. Risk assessment procedures developed for transiting the NSR note myriad additional concerns, including the lack of sufficient hydrographic surveying and charting maps in this remote region, Russia's need to develop marine infrastructures, the need for Russia to bring into compliance its own domestic navigation rules with the International Maritime Organization's Polar Code, and the need for modernized icebreaking vessels (Brigham, 2017; Northern Sea Route Navigation: Best Practices and Challenges, 2017).

Navigational difficulties include notoriously shallow and narrow straits along the route (Brubaker & Østreng, 1999; Pruyn, 2016). This treacherous geomorphology creates underwater chokepoints that may impede the speed and size of transiting vessels, ultimately creating "major obstacles" involving the overall economics of the route (Pruyn, 2016). Key strictures include (1) the Matochkin Shar, the Kara Gate, and the

Yugorskiy Shar Straits in the Novaya Zemlya archipelago, which is the easternmost entry point from Europe along the Northeast Passage; (2) the Longa Strait (Proliv Long) off Wrangel Island, and (3) the Dmitriya Lapteva and Sannikova Straits separating the East Siberian Sea from the Laptev Sea en route from Alaska. Given its geo-strategic station, Russia stands as the Northeast Passage's gatekeeper at both eastern and western portals of entry. The Vil'kitskogo (Vilkitsky) and Shokal'skogo (Shokalsky) Straits, situated at the mid-point of the route, separating the Sevemaya Zemlya archipelago from Siberia's Taymyr Peninsula (the northernmost point of the Eurasian landmass), are perhaps the key chokepoints along the entire Northeast Passage. Control over these short-cuts along the route, particularly the Vil'kitskogo Strait, may affect the entire economic viability of the route (Byers, 2013; Franckx, 1991). Indeed, control over the Northeast Passage depends on control over its chokepoints (Solski, 2022).

In 2012, Russian President Putin consolidated Russian Arctic policy and defined this area as internal to Russia ("Federal Law of the Russian Federation on Amendments to Specific Legislative Acts of the Russian Federation Related to Governmental Regulation of Merchant Shipping in the Water Area of the Northern Sea Route", 2012; "Legislation, N. Sea Route Info. Off.", n.d.). In terms of the international law of the sea, a right of innocent passage (Article 8(2)) or transit passage (Article 35(a)) would still apply to such waters, unless they were deemed historic waters. A degree of artful ambiguity hovers over Russia's specific legal classification (Solski, 2019), perhaps in an attempt to homestead over the issue of sovereignty while allowing the passage of time to perfect that claim through less acquisitive and assertive means. The United States Navy considers some of the NSR straits as subject to international navigation (Solski, 2022). Russian Federal Law empowers a specialized administrative agency to license traffic and apply pilotage and safety regulations ("Federal State Institution: The Northern Sea Route Administration", n.d.). The international law on this matter contrasts the United States' 'freedom of the seas' policy against Russia's claim of historic title. However, the remoteness of the region from the world's perspective, and Russia's proximity to it given its expansive Siberian coast-line, suggest the pelagic extension and application of international law's principle of uti possidetis—as you possess, so you may possess (North Sea Continental Shelf Cases, 1969; Aegean Sea Continental Shelf Case, 1978; Case Concerning Maritime Delimitation and Territorial Questions

between Qatar and Bahrain, 2001; Maritime Delimitation in the Black Sea, 2009). In a region known for dramatic climate changes that can trap vessels in rapidly growing ice at temperatures plunging to −40 degrees Celsius, mariners marvel that such a "maritime highway functions" at all (Brigham, 2017), much less as an object of territorial temptation.

However, Russia now has constructed seventeen deepwater ports along its 17,500 km Arctic coastline, including a new multi-billion dollar entrepôt at Sabetta on the Yamal Peninsula (Staalesen, 2017). This network links Russia's historic cabotage system (the NSR) that moves resources from its Siberian interior to internal and external eastern and western termini. Cargo traffic at these high latitudes "totaled 2994 voyages along the NSR conducted by 314 different vessels in 2022," with an overall relatively stable cargo volume of about 34 m tons (Humpert, 2023). If Russia turns the fabled Northeast Passage into an aquatic highway of commerce, it will have demonstrated the ability to maintain a safe and open passageway along the NSR, contrasting the United States' claim of freedom of navigation against Russia's claim of sovereignty (Blunden, 2012). Moreover, the United States (H.R. Rep. No. 111–491, 2010; National Security Strategy of the United States of America, 2017; National Strategy for the Arctic Region, 2013; The White House, National Security Presidential Directive and Homeland Security Presidential Directive Nspd-66/Hspd-25, 2009) and Canada (Plouffe et al., 2016; "Statement on Canada's Arctic Foreign Policy", 2013) join Russia in expressing national security interests in the Arctic. In December 2017, President Donald Trump's National Security Strategy restated the United States' "central" commitment to keeping Arctic passageways free and open (National Security Strategy of the United States of America, 2017). With the onset of the Anthropocene, the Arctic could become an ocean of great power rivalry.

One factor added to Russia's anxiety about its mastery over the Arctic is the prospect that its proximity to the NSR and de facto control over the mechanisms ensuring safe passage may shift in accord with the melting polar cap. Were a Transpolar Sea Route (TSR), or Central Arctic Shipping Route (CASR) to develop, transit avenues would shift away from the pathway hugging the Russian Arctic coastline, possibly avoid or moot out many disputes about Russian sovereignty and servitudes (Bennett et al., 2020; Lynch & Li, 2022), allay several US-asserted concerns about freedom of navigation, and establish and even straighter and faster pathway across the North Pole region (Norchi, 2017). Alternative TSR

projections orient toward a more westerly route "passing from Norwegian waters to the central Arctic just north of Svalbard" or through Danish waters off Northeast Greenland (Lynch & Li, 2022). Whether directly traversing the pole or not, the prospect of the TSR suggests a transformative shift in the geopolitics of the High North. The effects of a TSR are most imagined in terms of connecting global markets. However, the environmental and human impacts for peoples living along the TSR's entrances in the Bering and Fram Straits could be as dramatic as Russia's recalibration of its diminished status in relation to the Arctic Ocean were the TSR to open up (Bennett et al., 2020).

China's historical preoccupation as a dynastic land power takes on added dimensions and rotates northward (Chen, 2012) into the "blue-colored land" of the Yellow and East China Seas (Guangqian, 2010) and beyond. In May 2017, during its Belt and Road Forum, China formally incorporated the Arctic into its vision of maritime cooperation for the One Belt, One Road Initiative, referencing Arctic cooperation interests nine times ("Full Text; Vision for Maritime Cooperation under the Belt & Road Initiative", 2017). More explicitly, while attempting to build a "blue economic passage" southward from the South China Sea into Oceania and the Pacific, China also envisions "[a]nother blue economic passage… leading up to Europe via the Arctic Ocean" (Yingqin, 2019). This rotation has led to speculation that China's greater design is to circumvent the strictures of Russian coastal dominance over the Northeast Passage, when not partaking in bilateral economic ventures to strengthen Sino-Russian far-east ventures (Tselichtchev, 2017), by positioning itself for the Anthropogenic age of trans-polar transport (Brady, 2017), beyond the jurisdictional reach of any coastal sovereign claim. If fanciful, it helps to explain China's extensive relations with Iceland and its myriad deep ports (de Gruyter, 2020; Ford, 2013; "Iceland Sea Ports", n.d.), and forestalled mining ventures and infrastructure projects in Greenland (van Brunnersum, 2022).

## The Post-Ukraine Invasion Global Arctic: What Role for Soft Power of the Arctic Council? What Room for Asia?

As is well known, the high-level membership forum called the Arctic Council claims preeminent stewardship over non-political governance issues in the High Arctic ("Joint Communiqué and Declaration of the Establishment of the Arctic Council", 1996). Its focus on functional issues of common concern has produced three legally binding agreements ("Agreement on Cooperation on Aeronautical and Maritime Search and Rescue in the Arctic", 2011; "Agreement on cooperation on Maritime Oil Pollution Preparedness and Response in the Arctic", 2013; "Agreement on Enhancing International Arctic Scientific Cooperation", 2017), and it six working groups ("Working Groups, Arctic Council", 2015), guided by consensus decision-making, have produced numerous policy-relevant assessments undertaken to promote programmatic ventures (Stone & Reiersen, 2016).

To parry criticisms of its clubbish behavior (Rossi, 2015), and perceptions of dominance by its sub-set of five Arctic littoral powers (the Arctic 5) (Kuersten, 2016), the Arctic Council granted permanent participant status to indigenous groups ("History of the Arctic Council Permanent Participants", n.d.) and observer status to China, South Korea, Japan, Singapore, India, and seven European states ("Observers", 2017). Countries bestowed permanent observer status have been able to expand their Arctic footprint and intentions (Kim et al., 2015). Notwithstanding attempts at internal reform, proposals to create a new Arctic treaty (Koivurova, 2008), and emerging, more inclusive fora for discussing Arctic issues, such as the Arctic Circle Assembly ("Arctic Circle", n.d.), competing jurisdictional designs on the increasingly accessible Arctic Ocean keep the Arctic regime soft and within the control of the circumpolar powers (Rossi, 2015). However, events in Ukraine have diminished the dimensions of Arctic Council, and are contorting the meaning of soft power as applied to this institution (Simpson, 2023).

Geographical circumstances necessitate soft power approaches to Asia-Pacific Arctic interests. Contrasted with hard power, which in a legal sense gives rise to precise binding obligations that "delegate authority for interpreting and implementing the law" (Abbott & Snidal, 2000), soft power reflects the ability to secure objectives through means that avoid coercion or payment (Nye, 2004). Soft law adapts sociological approaches

to decision-making and now forms part of the "complex architecture of international agreements" (Lipson, 1991). Soft law approaches are valued for their flexibility, for minimizing costs associated with breaking commitments, for providing governments with decision-making options that avoid the formality of the legalization process, and for securing a degree of political autonomy during periods of rapid change or uncertainty (Abbott & Snidal, 2000). Soft power arrangements admit a variety of intentional if not preferred ways for states to promote informal cooperation. However, Realpolitik circumstances may also inform reasons for pursuing soft power as a course of action, particularly among Asia-Pacific countries. Russia's northern seaboard stretches along 24,140 km of coastline, accounting for 53% of the entire Arctic Ocean landscape ("Russia", n.d.). While international law treats terrestrial and pelagic landscapes separately, these spatial regimes share one generic and historically validated point of legal contact: the land dominates the sea (North Sea Continental Shelf Cases, 1969; Aegean Sea Continental Shelf Case, 1978; Case Concerning Maritime Delimitation and Territorial Questions between Qatar and Bahrain, 2001; Maritime Delimitation in the Black Sea, 2009). Russia has no intention of relinquishing its role as Arctic gatekeeper for Asia-Pacific countries. Russia's commanding and, in important safety respects, essential presence over this projected waterway instantiates a soft law wait-and-see posture among Asian powers as the emerging legal dispute over the status of the Northeast Passage takes shape. In the meantime, the remaining Arctic Council member states nuance the disfigurement of their organization, given their clubbishly phantom amputation of Russia: "Russia has not been expelled…it has not withdrawn…there are no plans to expel Russia from the Council;" but for an apolitical forum governed by the principle of consensus, "business as usual…is out of the question" (Bye, 2023).

## Changing Arctic Dynamics

An expanding interest in the High North and in Arctic governance regimes indicates a new polar dynamic. Propinquity to the pole has invested in the circumpolar few a status and capacity to steer the agenda in the soft law forum of the Arctic Council; however, exogenous factors present new avenues of involvement for non-Arctic states. China has proclaimed itself a "near Arctic state," with a third research icebreaker under construction (Bronder, 2021). Its Arctic policy "attaches great

importance to navigation security in the Arctic shipping routes," with an object of building a "Polar Silk Road to facilitate connectivity and sustainable development of the Arctic" (China's Arctic Policy, 2018). The EU calls itself an 'Arctic entity' and a geopolitical power with "strategic and day-to-day interests [] both in the European Arctic and the broader Arctic region" ("Joint Communication on a Stronger EU Engagement for a Peaceful, Sustainable and Prosperous Arctic", 2021). India directly links its food security and rural sector to Arctic climate change and its effect on what India refers to as the Third Pole, the Himalayas (Suryanarayanan, 2022). Singapore, China, and Japan have Arctic ambassadors. The US announced its first Ambassador-at-Large for the Arctic Region in 2023. It also established a diplomatic presence post in Tromsø, Norway (situated at the 69° parallel North) after reopening its Cold War consulate in Nuuk, Greenland (population 17,635, and, and ten countries now operate permanent research stations at Ny-Ålesund, in the Svalbard archipelago ("Research Stations in Ny-Ålesund", n.d.).

Economic throw-weight provides countries such as Japan and South Korea with more leverage in coming Arctic discussions than the foothold provided by observer status in the Arctic Council. Recently, Japan, China, and South Korea agreed to conduct a joint study assessing the functional convergence of interests on pollution and climate issues in the Arctic, although the backdrop of untapped access to Arctic resources looms large in these discussions ("Japan, China and South Korea OK Joint Study on Arctic Development", 2017). Despite the potentially devastating effects of climate change on all Asian Pacific Economic Council (APEC) countries, the energy security benefits appear substantial (Peimani, 2015). Coordinating disparate interests within an international structure of cooperation requires a reformulation of multilateral processes such as ASEAN, where states have been known to step away from multilateral discussions when independent comparative advantages prevail (Lidow, 2015).

## Realpolitik, Nordpolitik, and Arktik Politik: South Korea's Eurasia Initiative and Arctic Master Plan

In 2013, South Korea's President Park Geun-hye announced an ambitious Eurasia Initiative (Korean Institute for International Economic Policy Conference on Global Cooperation in the Era of Eurasia Conference on Global Cooperation in the Era of Eurasia, 2013; Lee, 2017a), recommitting the nation to a Northern Policy forwarded by President Roh Tae- Woo's administration in the late 1980s (Cotton, 1993). Employing the taxonomy of "One Continent," "Creative Continent," and "Peaceful Continent," Park proposed expanded transport, energy, and trade networks; extended culture and human exchanges; and, enhanced regional integration through the "Trust Process on the Korean Peninsula" and the "Northeast Asia Peace and Cooperation Initiative" (Kim, 2015b). The reinforcement of multi-level economic ties throughout the region intended to establish a basis for reunification efforts (Lee, 2017b). However, haphazard implementation, decentralized supervision, problems of political access to key decision- makers, Park's political implosion, and an assortment of additional constraints now stall implementation (Lee, 2017a).

Complicating South Korea's Eurasian Initiative was the policy oscillation embedded in a single roadmap that attempted at once to forward security and economic objectives while reframing foreign relations to allow more South Korean autonomy from major power politics. South Korea's vulnerable trading status encourages development of a middle course prophylaxis to buffet against political whipsaws: The percentage of Gross Domestic Product deriving from international trade places South Korea at the top of the G20 economies (Kim, 2015b). Its exports to China and Hong Kong more than double exports to its ally, the United States ("South Korea: Trade Statistics", 2018). This trade dependence and asymmetric regional orientation may outmatch the waning political rhetoric of its middle power autonomy (Robertson, 2016), replaced by a Realpolitik reliance on established and enhanced commercial relations as the avenue for continued prosperity. Opening South Korean economic connections with Russia and Central Asia, and reinvigorating its Nordpolitik, create discernable and attractive prospects given the country's trading nation status. If managing trilateral aspects of the Eurasian Initiative (as between the two Koreas and Russia with Park's idea to construct

a "transnational transport infrastructure") proved too much of a task over land, much more success appears likely with regard to a rotation of interests into the Arctic waters.

An amalgam of seven government ministries and agencies, put forth in December 2013 as South Korea's Master Plan for Arctic Policy, emphasized three policy goals, four strategies, and thirty-one specific Arctic projects covering the period between 2013–2017 (Kim, 2015a). The overarching vision of the Master Plan was to situate South Korea as a "reliable and responsible partner in the polar region, opening a sustainable future for the Arctic" (Kim, 2015a).

## Japan's Ocean Policy for the Arctic

In 2015, Japan promulgated its own white paper forwarding its Arctic policy, which similarly emphasized the need to cooperate and participate through the Arctic Council while engaging economically and bilaterally in the development of the NSR and offshore natural resource exploitation (Ikeshima, 2016). Japan is the closest Asian country to the Arctic Ocean, and has a history in the Arctic dating to the 1957 Hokkaido research expedition to Greenland (Hataya, 2023). This history has been marked by an interest in Arctic research (Babin & Lasserre, 2021), and by the prospect that Japan has the potential to benefit most from a viable commercial pathway across the top of Eurasia (Moe & Stokke, 2019; Tonami, 2021). By 2018, Japan Ocean Policy had cycled through three iterations, for the first time including the Arctic as one of the plan's main measures (Third Basic Plan on Ocean Policy, 2018). The three pillars of Japanese Arctic policy include research and development, international cooperation, and sustainable use (Third Basic Plan on Ocean Policy, 2018). In more tangible terms, these Arctic interests include energy and food security, shipping opportunities, and resource extraction (Almazova-Ilyina et al., 2020). Despite its strong emphasis on international cooperation, and a focus on the economic and commercial opportunities in the Arctic, Japan has discontinued research and data sharing with Russia due to the invasion of Ukraine, and opted for bilateral and multiparty cooperative ventures to promote dialogue (Hataya, 2023). At some cost to its carefully cultivated middle-power role as mediator between other states in East Asia and the Arctic (Almazova-Ilyina et al., 2020; Ikeshima, 2016), Japan has also shifted its military posture toward southwestern Japan, including Okinawa and remote islands just east of

Taiwan in view of China's growing military assertiveness in the East and South China Seas (Mahadzir, 2022).

However, China's newfound great power ambition, as demonstrated by its sovereignty designs over Asia's "crucible of conflict" (Hayton, 2014)—the South China Sea (Rossi, 2017b)—draws into question the trajectory of former President Hu Jintao's, 2012 quest for maritime security ("Full text of Hu Jintao's Report at 18th Party Congress", 2012). Timed, as it seems to be (Day, 2017), to balance or offset China's multi-trillion dollar plan to unite land-based and maritime economies of Eurasian and East Africa (the One Belt, One Road initiative), the quest to exercise dominium over the South China Sea reconceptualizes the fifth largest body of water as an antechamber leading through the Malaysian straits and into the greater Indian Ocean in order to project power into East Africa and the Mediterranean Sea (Rossi, 2017b). China's ambitious projection of economic power westward also envisions a land-based corridor through Eurasia (the Silk Road Economic Belt), a "signature foreign policy priority of Chinese President Xi Jinping" (Parameswaran, 2017). Part of the interest in a land corridor, and in the energy-rich South China Sea, are the energy hedges that would be secured over reliance on maritime transit passageways through the narrow and vulnerable straits of Malacca, Sunda, Lombok, and Makassar (Feng, 2014; Kaplan, 2015). Over half the volume of global shipping transits the Strait of Malacca (Thomassen, 2017), the second largest volume in the world (Paszak, 2021); it accounts for more than 70% of the PRC's petroleum and LNG exports. China's vulnerability in terms of the Malacca Dilemma and access to the Indian Ocean necessitates northward strategic rotations for the Middle Kingdom.

Speculation also inclines in the direction that China's grand intention in the Arctic could reduce to a bargaining strategy to exchange sovereignty disputes in the South China Sea (and in the East China Sea) for a withering drain of the US' security commitment to Taiwan (Glaser, 2015). Here, Russia serves as a useful Chinese proxy by mandating Western military planning and resource deployments toward the Northern flank of Europe, making more vulnerable the defense of the Taiwan Strait. As likely, however, is China's unfolding interest in securing diverse export pathways as it seeks to become the maritime gatekeeper for Asia-Pacific trade, notwithstanding numerous geostrategic impingements in the crowded and contested waters of the South and East China Seas (Zhang, 2017). A government restructuration in 2018 placed most

of China's extensive polar research program (administered by its State Oceanic Administration) under the Ministry of Natural Resources, which also is in charge of South China Sea research activities. Oceanographic and acoustic modeling surveys in the South China Sea are thought also to have provided essential military information for the PLA Navy, point meant to undercut the Pacific purpose of China's involvement in Arctic waters and maritime highways leading to it (Funaiole et al., 2023).

## Conclusion

From the Asia-Pacific perspective, Arctic avenues of commercial exchange float like an enticing lure on top of the world. When contrasted with forestalled efforts to penetrate across the Korean Peninsula into Central Asia, or through the increasingly choppy waters of the South China Sea, a northern route presents commercial rewards and bilateral economic opportunities. Arctic ice melt likely will develop along two tracks for Asia-Pacific countries. For middle powers such as Japan and South Korea, the geo-strategic circumstance of Russia's proximity to opening Arctic waterways, coupled by its historical development of its cabotage system involving the Northern Sea Route, requires engagement with Russia. The soft law structure of Arctic governance promotes functional rewards relating to common scientific interests but remains soft in important respects because circumpolar powers have yet to perfect territorial designs. Moreover, circumpolar powers show no willingness to expand UNCLOS or fundamentally reorder the extant soft law Arctic regime because of uncertainty with regard to the speed and extent of the Anthropocene's creation of Arctic blue water. As a consequence, one track for Asia-Pacific countries in the Arctic will be to secure bilateral opportunities for resource extraction and trade in conjunction with Russia's Far East development plan and exploitation of its Siberian interior. These opportunities will enhance development of the eastern stretches of the Northeast Passage, which despite enthusiastic portrayals of launching a new transcontinental maritime highway across the top of the world, more likely will merely facilitate the cabotage system that hugs Russia's Eurasian shore.

Here, Asia-Pacific countries can benefit from comparative advantages associated with shipbuilding, technology, and access to capital in exchange for Russian energy and resources while expanding their Arctic foothold in ways that observer status in the Arctic Council cannot promote. While collaborative engagement with the apparatuses of the Arctic Council helps

to legitimate Asian states' involvement in Arctic affairs, and provides a method for instantiating more active involvement in Arctic governance, the economic prospect of penetrating Central Asian trade through the opening NSR passageway to Siberia presents an Anthropogenic opportunity to restart multiple Eurasian initiatives. Developing this relationship balances Asia- Pacific middle power economic and energy interests with strategic commitments that emerging China and Russia would seek to weaken and, consequently, is not without risks. However, Japan and South Korea, and China as well, have now incorporated Arctic strategic policies into their national security calculations, which present pathways for international trade expansion that Asia-Pacific countries intend to promote.

A second Arctic track for Asia-Pacific powers combines the melting polar icecap with long-term great power interests. If indeed a transpolar or mid-ocean (over-the-pole) route develops (Patel & Fountain, 2017), not only would it be shorter than the coastal Arctic routes involving the Northern Sea Route and the Northeast Passage, but it would circumvent problems of contested sovereignty and the strictures of navigation that accompany transit along the Eurasian Arctic coast. China seems intent on securing its presence in a transpolar commercial world and appears to be posturing to secure its stakeholder status through Iceland, with access into European and North American markets.

Circumpolar geography and the extant soft law forum of the Arctic Council once may have suggested that the High North bore characteristics of a closed sea (mare clausum), projecting traits more of a gigantic frozen lake rather than a high seas regime (Lakhtine, 1930; Rothwell, 1996). Policy rotations on three continents draw anthropogenic attention to this once ice-covered landscape, making it more than before an object of increasing international attention. The globalizing Arctic challenges clubbish state behavior and the region's soft law governance, presenting widening pathways for Asian-Pacific involvement amid the ever-diminishing Arctic ice.

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