A portrait of Leif Sieben, a young man with dark hair, smiling, wearing a dark blue button-down shirt. The background is a blurred image of an Arctic landscape with ice and snow.

Leif Sieben

A Warm Introduction

Geopolitics in the Freezing Arctic

About the Article

How is a thawing Arctic reshaping global geopolitics? Climate change is unlocking new strategic and economic opportunities in the Arctic, intensifying great power competition among NATO, Russia, and China. Without stronger international cooperation, the Arctic risks becoming a militarized zone of rivalry rather than peaceful development.

About the Author

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1. Introduction

Pity the real estate agent advertising this location: one of the most remote areas on the planet, peak temperatures not above 10 °C, and little to no sunlight for half the year. Despite all this, the Arctic has been inhabited since at least 2500 BCE by indigenous populations and has seen repeated waves of colonization and invasion over the past millennium. As global temperatures are rising, the Arctic is experiencing many of the effects of climate change sooner than most places, having already warmed more than 3 °C since pre-industrial times. The Arctic's climate, ecology, and economics are already undergoing major, disruptive shifts. Today, the Arctic's natural resources as well its strategic location nestled between three continents and at the crossway of lucrative new shipping lines, have catapulted it once more into the geopolitical limelight. So how will modern geopolitics be shaped by a thawing Arctic?

2. The Arctic's Past

Typically defined as the region north of the Arctic Circle (66° 34' N), i.e. the approximate southern limit where a complete midnight sun and polar night still occur, the Arctic is the region surrounding Earth's northern pole. An alternative definition, preferred by some ecologists, subsumes as arctic those areas of the Northern Hemisphere where the average temperature in the warmest month remains below 10 °C. Following this definition, the area of the Arctic itself has slowly retracted over the past century as temperatures have risen globally. The eight nations bordering the Arctic are Canada, Denmark (via Greenland and the Faroe Islands), Finland, Iceland, Norway, Sweden, Russia, and the US. Unlike in the Antarctic, border conflicts in the Arctic mostly concern the seabed and exclusive economic zones (EEZ), and land borders remain static and well demarcated today. However, owing to its remote location and few natural demarcations, the Arctic has a long tradition of squishy boundaries and international cooperation. The Sámi people, which inhabit a large part of the European Arctic known as Sápmi or Lappland,

often subsist on semi-nomadic reindeer herding. As early as 1751, during the Scandinavian expansion into Sámi lands, the so-called Lapp Codicil simultaneously established the arctic borders between Norway and Sweden as well as guaranteeing Sámi rights to cross borders for reindeer herding. Norway, Sweden, and Russia (which controlled Finland at the time) continued to extract resources, outlaw religious practices, and forcefully assimilate the Sámi people well into the 20th century. Today the Sámi are recognized as Indigenous people with limited self-governance by Norway, Sweden, and Finland. In 986, a contingent of 14 boats led by Erik the Red, a Norse explorer, founded the first European settlements in Greenland. The settlements eventually came under Norwegian rule in 1261 and through Norway's personal union with Denmark then went over to the Danish crown. However, these Norse settlements had all vanished by the early

Arctic:
The region north of the
Arctic Circle (66° 34' N).

15th century, possibly due to an onset of a cold period known as the Little Ice Age. Contact with the Indigenous population that consequently came to

dominate the island was only reestablished in 1721 by Danish missionaries. Denmark, through the Royal Greenland Trade Company, monopolized commerce and had fully colonized Greenland by the early 1800s. However, competing claims over the island remained. The US only recognized Danish control in the same deal in which it acquired the Virgin Islands from Denmark. In 1931 Norway declared part of eastern Greenland as part of its territory, a dispute that was only resolved in 1933 by the international court of the League of Nations. During the German occupation of Denmark the US occupied Greenland from 1940 until 1945, building a number of air bases across the island. While Greenland remains a part of the Danish kingdom it exercises broad domestic autonomy and the option to declare independence in the future subject to approval by the Danish parliament. The harsh conditions and low population density meant that huge swaths of Arctic land could be claimed with relative ease most notably by the two biggest nations in the Arctic by land mass, Russia and Canada. For the longest time, these regions

were not considered particularly valuable however and overlapping claims on territory consequently coexisted for decades as international borders were not universally enforced. By 1867, the US had become an Arctic nation through its purchase of Alaska from Russia although it would only be recognized as a state in 1959. Alaska is a good example of how the Arctic's geopolitical, strategic as well as economic value was only slowly becoming obvious over the 20th century as the oil reserves in Alaska were not known at the time of the sale with Russia offering it at the relative bargain price of \$129 million in today's

money. During the Cold War in particular, both the US and the Soviet Union heavily militarized the region. Notably through the placement of intercontinental ballistic missiles (ICBMs), long-range bombers, nuclear weapons, and other military resources (The Arctic Institute, 2021). The US in particular was worried about a Soviet attack via the Arctic and implemented the Distant Early Warning (DEW) Line ranging from Alaska via Canada into Greenland using a system of radar stations, which was replaced by the North Warning System (NWS) in the late 1980's.



Figure 1: The attack submarines USS Ray (SSN-653), USS Hawkbill (SSN-666), and USS Archerfish (SSN-678) surface at the geographic North Pole, 1986. Photo: U.S. Navy

3. The Arctic Council

After the collapse of the Soviet Union and the end of the Cold War, the need for an international institution to address issues affecting the Arctic became increasingly evident. In 1996, the Arctic Council was formed by the Ottawa Declaration as a forum for the promotion of cooperation, coordination, and interaction among the Arctic states and the Arctic Indigenous communities. All eight Arctic nations, including Russia, are member states in addition to representatives from the Indigenous people of the Arctic and observer states such as China and India. The

forum is headquartered in Tromsø, Norway, and mostly deals with environmental concerns and Indigenous rights. Military-security issues or territorial disputes remain expressly outside its mandate. While Arctic geopolitics had been reshifting since the early 2000s in the face of shrinking sea ice coverage, it was generally agreed that a new Arctic treaty was not needed since the Law of the Sea already provided a legal basis for regional governance. This was exemplified by the 2008, Ilulissat Declaration that discusses the effects of climate change with regard

to the marine environment, maritime shipping routes, and the livelihoods of local populations. The declaration had been spurred on by an incident in which Russia had planted its flag at the bottom of the Arctic seabed (Chivers, 2007) and outlined procedures for peaceful cooperation among the five Arctic coastal nations in the face of the melting Arctic ice pack (Breum, 2018). The Ilulissat Declaration, which had been initiated by the Danish Foreign Minister at the time, has been evaluated through the lens of small state theory (Larsen, 2020), in which smaller states are assumed to compensate for their limited military capabilities through international collaboration to achieve their strategic ends. Some observers noted Denmark's success in steering international attention and aligning its Arctic neighbours with its own interests, mostly through providing stability and lowering geopolitical tensions, despite itself not having a dominant military presence in the region. As Per Stig Møller, the Danish Minister of Foreign Affairs vividly remarked at the time: "That was my biggest fear; the Arctic becoming a *fait accompli*. After all, in that context we are the weak nation. If someone [..., were to] e.g. drill for oil without asking for permission, what could we do? [...] It is not the strong one who needs the law. It is always the weak" (Breum, 2018).

4. A New NATO Lake?

Following Russia's invasion of Ukraine in 2022, Finland and Sweden, both previously neutral states, decided to seek NATO membership which was granted in 2023 and 2024 respectively. While four of the five coastal Arctic states – the US, Canada, Denmark, and Norway – had already been members, the accession of Finland and Sweden now means that the Arctic hosts a strong presence by NATO and its inter-operating militaries across even

more of the Arctic. Russia however remains an indisputable power player in the region. Geographically, it controls some 53% of the Arctic coast and 40% of its population including the largest city north of the Arctic circle, Murmansk. Russia also maintains the world's only nuclear powered icebreaker fleet, currently operating seven such ships with five more vessels under construction. These ships are particularly vital for the so-called Northern Sea Route running along Russia's Arctic coast. The Northern Sea Route (NSR) is in fact the shortest maritime route between Europe and East Asia and some 40% faster than the current journey via the Suez canal (Schreiber, 2024). While commercial ships still require escort assistance by ice breakers for at least part of the journey as of today, the fast pace of climate change in the Arctic may soon make the Northern Sea Route a viable competitor for commercial shipping between East Asia and Europe. To

The Arctic finds itself in times of accelerating change.

Russia, the Northern Sea Route promises new global influence and economic promises by claiming a part of the ca. 16.6 million

containers shipped between Asia and Europe according to PSA-BDP (2023), a shipping company. In response to Finland's and Sweden's accession to NATO, Russia announced "Fortress North", a new base near Murmansk that reinforces its military presence along the Finnish-Russian border. This comes in addition to an already strong presence in the Kola peninsula to the Northeast of Finland and a number of naval and airforce bases across the Arctic into Siberia. Today, the Arctic already provides 95% of Russia's natural gas, 90% of its nickel and cobalt, and 60% of its copper and oil, accounting for up to 20% of the nation's GDP (Pilyavsky, 2011). These numbers are expected to increase as these natural resources are becoming easier to access as temperatures rise, reducing the cost of exploitation while demand is growing in particular for critical minerals needed for the green transition.

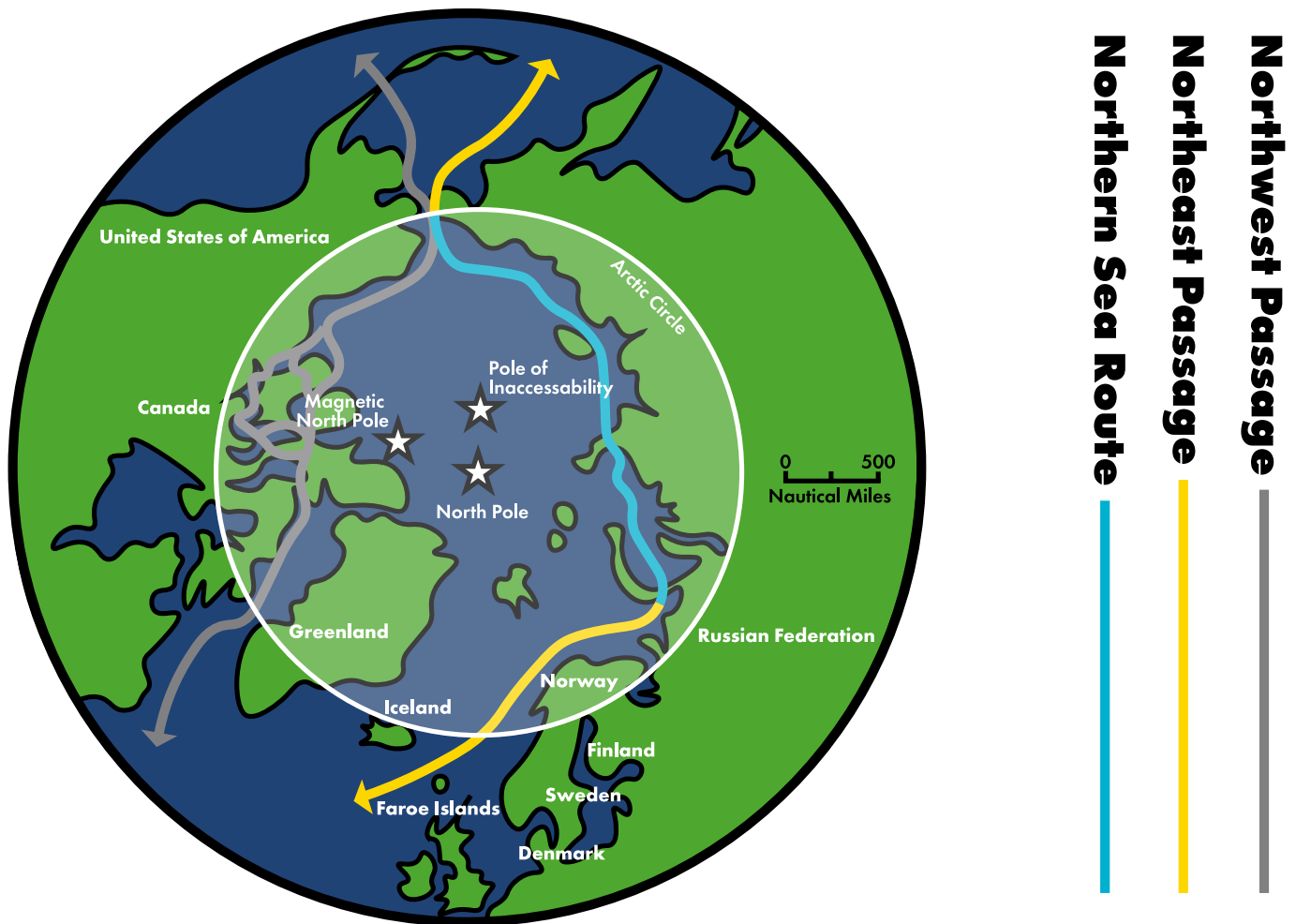


Figure 2: Map of the Arctic region showing the Northeast Passage, the Northern Sea Route and Northwest Passage (Arctic Council, n.d.)

Over the past decade, a new and geographically somewhat unexpected player emerged in the Arctic: China. Despite having no Arctic territory of its own, China considers itself a “near-Arctic state” and has built a fleet of polar ice-capable research vessels and icebreakers. Chinese interests are mostly focused on shipping resources and strategic influence in the area, while its military presence remains minimal. There has been some talk of a “Polar Silk Road” through which China seeks to integrate the Northern Sea Route into its Belt and Road Initiative. As a large manufacturer, China would naturally benefit from shorter shipping routes and thus cheaper access to the European export markets. For now, Chinese moves in the Arctic have mostly focussed on economics, such as its acquisition of 30% of Russia’s Yamal LNG, a liquefied natural gas producer, or its overtures to build railways to Arctic ports in Finland and Norway. A Chinese attempt to acquire an abandoned naval base and build an airport in Greenland raised alarms among NATO members and led Denmark to unilaterally fund the project.

5. A Thawing Arctic Amidst Icy Geopolitics

The Arctic finds itself in times of accelerating change: Major power conflicts, both old (Russia and NATO) and new (the US and China) continue to dominate the region; while its traditional natural resources in fish and whale populations are declining through climate change and overextraction, new critical resources are becoming more economically viable, including oil, gas, as well as rare earths and minerals. Paradoxically, the Arctic as a region is poised to both suffer some of the most devastating effects of climate change and simultaneously reap substantial economic benefits as lucrative new shipping routes begin to open and natural resources become easier to access. These challenging circumstances fall into a time of growing international uncertainty and the slow erosion of international institutions of cooperation in the Arctic. Since its invasion of Ukraine, the other member states of the Arctic Council have refused to attend mee-

tings chaired by Russia. China's claims as a global power extend into the Arctic, further destabilizing a region rife with maritime border disputes and increasing remilitarization. Today, the Arctic reflects many of the geopolitical realignments observed in other parts of the globe: A Europe that sees itself forced to remilitarize and take up increasing responsibilities within NATO. An increasingly contentious relationship between the US and China in which both vie for commercial dominance and military influence in the region. As well as the increasing isolation of Russia from Europe and its growing commercial and

military relationship with China. In conclusion, the Arctic is set to remain a theatre of great power rivalry for the foreseeable future. Its natural resources and strategic position between America, Europe, and Asia will only grow in value as climate change reduces the Arctic ice pack opening up new shipping routes and critical mineral repositories. The strengthening of existing and the development of new mechanisms and institutions for international cooperation among all stakeholders, including those not directly bordering the Arctic, are sorely needed if a new Arctic arms race is to be avoided.

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