TRANSPOLAR SEA ROUTE; GEOPOLITICS AND SECURITY

Master's Thesis

Aalborg University; CCG 2022-2024

Character Count: 140,213

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28/05/2024

Abstract

Arctic shipping is a topic slowly gaining traction amongst regional and non-Arctic stakeholders as well as popular media. With the thawing ice, the three main trans-Arctic sea routes become increasingly more accessible and hold an ever-growing promise of more time and cost-effective shipping of goods across the frigid waters of the High North. The so-called Transpolar Sea Route stands out as the most distant from now, yet perhaps the most promising of the three waterways in terms of more favourable natural features and still evolving jurisdictional characteristics. Its future opening is however also subject to an intricate geopolitical landscape and many security concerns in the region. With an increased susceptibility to securitisation stemming from the vast underdevelopment, an abundance of untapped natural resources, and the clashing of a variety of political and cultural narratives of the circumpolar north, it is crucial to understand the nuances of the relations between different Arctic and non-Arctic actors and their respective interests in regard to the Arctic shipping.

This thesis aims to break down the complexities of shipping along the Transpolar Sea Route including international relations, geopolitics, different security disciplines, technological limitations, legal mechanisms governing the region, and economic factors, as well as foster an educated discussion informing and educating the reader on the current trajectory of the trans-Arctic shipping and help them gain a broader understanding of different perspectives on the aforementioned aspects of the general topic. The thesis also illustrates viable scenarios for developing, governing and managing the sea route and elaborates on the implications of its future opening.

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List of Abbreviations

AC	Arctic Council
AEC	Arctic Economic Council
AE	Arctic Exceptionalism
AT	Antarctic Treaty
CAO	Central Arctic Ocean
CLCS	Commission on the Limits of the Continental Shelf
CS	Comprehensive Security
DAT	Double-acting-technology
ECS	Extended Continental Shelf
EEZ	Exclusive Economic Zone
EP	Environmental Preservation
EU	European Union
HFO	Heavy Fuel Oil
HS	Hub-and-spoke
IR	International Relations
MTWG	Maritime Transportation Working Group
NATO	North Atlantic Treaty Organisation
NORAD	North American Aerospace Defense Command
NSR	Northern Sea Route
NWP	Northwest Passage
PC	Polar-class
POV	Point of View
PRC	People's Republic of China
PSR	Polar Silk Road
TSR	Transpolar Sea Route
U.S.	United States
UN	United Nations
UNCLOS	United Nations Convention of the Law of the Sea
USD	United States Dollar
USSR	Union of Soviet Socialist Republics
WWF	World Wildlife Fund

1. Introduction and Problem Formulation

The Arctic currently finds itself on the cusp of a new era of maritime shipping as a polar region experiencing the effects of global warming ever so significantly. With the ice cap melting away at an alarming rate of almost 13% per decade (Hancock; WWF, 2024), it is soon to be faced with unprecedented attention from Arctic and non-arctic states acting in accordance with their respective interests in regard to the "far north". These interests concern namely activities such as resource extraction; The U.S. geological survey (Circum-Arctic Resource Appraisal, 2008) estimated that there are about 412 billion barrels of crude oil and natural gas lying undiscovered beneath the Arctic, which makes up around 22% of the world's total[1]. On top of that, vast deposits of minerals and rare earth elements are also to be found in the region, and will likely become viable for extraction in the foreseeable future. However, some experts, such as Arctic researcher Dr Nina Döring of the Institute for Advanced Sustainability Studies (2022) warn that these estimates need to be taken with a grain of salt, and should be regarded as only "estimates". According to Arctic sustainability experts like Döring, it is important to prioritise the preservation of the natural environment over the uncertain promise of vast natural resources mining.

In addition, another of the undeniable lures of the Arctic, on its unfortunate trajectory towards becoming a seasonally ice-free region, is a rising opportunity for intensifying maritime shipping activities. The main reason why Arctic shipping seems so attractive for many of the Arctic and non-Arctic stakeholders is because of its undeniable potential to cut down on shipment time and fuel costs. According to the Arctic Institute (2012), the Arctic shipping routes have the potential to shorten the distances between North America, Europe and Asia in comparison to the Suez Canal by up to 40%. On top of economic efficiency by reducing the number of days at sea, this also favours a significant reduction of greenhouse gas emissions by shortening the total distance of the voyage (Humpert & Raspotnik, 2012).

The incentive to develop trans-Arctic shipping routes is further driven by the shortcomings of the currently used international shipping lanes, such as the problematic breadth of the Suez Canal, which in most places is not wide enough to accommodate two large container ships at once, causing congestion, as was infamously demonstrated to the world in 2021 during the blockage of the canal by the container ship Ever Given, costing the world economy, depending on whom you ask, anywhere from 2 to 3 billion USD. Water shortages in the Panama Canal translate to similar problems. Its dependency on the nearby water sources has lately been a hindrance to the operations within the walls of the canal. There are several reasons why the seaway uses freshwater over the abundant seawater from the surrounding oceans, those include the difference in elevation, which would make pumping the seawater into the locks a costly affair, corrosive properties of seawater which would make the maintenance costs significantly higher, and avoidance of marine life invasion (Panama Canal Authority, 2023). Gatun Lake and Alajuela Lake, the two sources of freshwater in the region have been lately however running thin, following the recent droughts in the area exacerbated by El Niño, thus causing substantial setbacks to shipping operations carried out via the waterway. Researchers point

[1] The U.S. Geological Survey (USGS) has completed an assessment of undiscovered conventional oil and gas resources in all areas north of the Arctic Circle. Using a geology-based probabilistic methodology, the USGS estimated the occurrence of undiscovered oil and gas in 33 geologic provinces thought to be prospective for petroleum. The sum of the mean estimates for each province indicates that 90 billion barrels of oil, 1,669 trillion cubic feet of natural gas, and 44 billion barrels of natural gas liquids may remain to be found in the Arctic (13% of the world's total undiscovered oil and 30% of gas), of which approximately 84 per cent is expected to occur in offshore areas (Kenneth et al., 2008).

out that due to the effects of climate change, these draughts have become more prominent and unpredictable in recent years (Rojanasakul, 2024).

Moreover, the long-lasting issue of piracy along the coast of Somalia; and more recently, the Houthi missiles targeting commercial ships in the Red Sea in early February 2024 pose problems of their own.

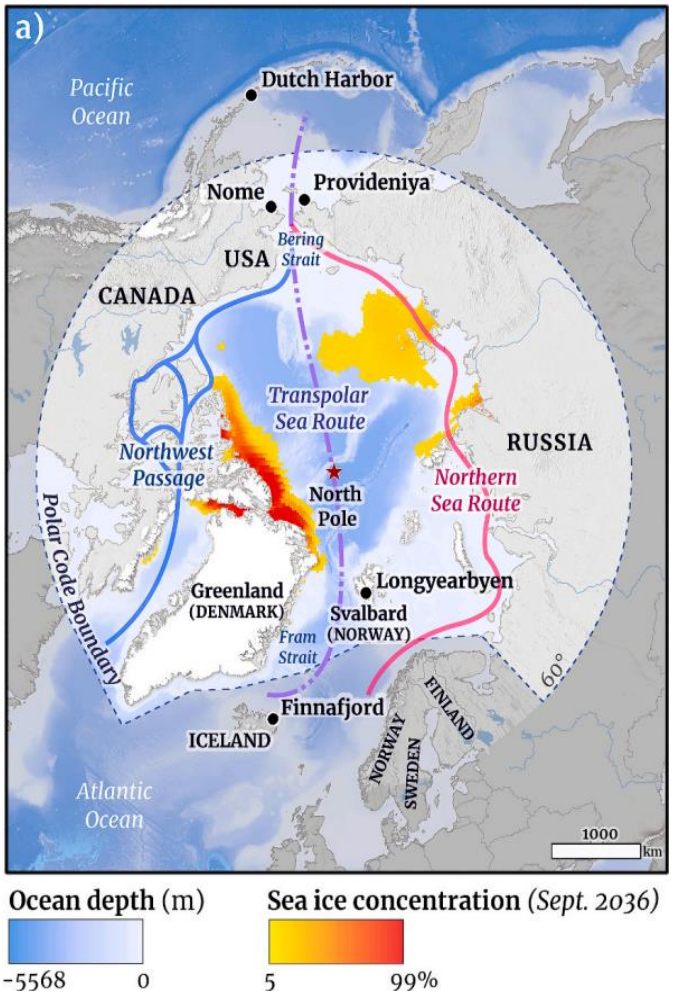


Figure A: Arctic shipping routes, ocean bathymetry, and sea ice concentration in September 2036, one of the first years in which the TSR is expected to become widely navigable in summer (under RCP 8.5 in CMIP5). Data: IBCAO Version 3.0, GEBCO, and the Community Earth System Model (CESM) in CMIP5. Source: The opening of the Transpolar Sea Route: Logistical, geopolitical, environmental, and socioeconomic impacts (Bennett et al., 2020)

As of 2024, three main Arctic shipping lanes pose alternatives to these well-established commercial waterways and currently pique the interest of international actors searching for new ways of establishing trade routes connecting East Asia, North America and Europe. The 3 routes in order according to their current navigational feasibility are:

- The Northern Sea Route (NSR) outlining the northern coast of Russia and the Scandinavian peninsula
- The Northwest Passage (NWP), running alongside North America, across the Arctic Archipelago of Canada and the West/South coast of Greenland
- The Transpolar Sea Route (TSR), navigating straight across the middle of the Arctic Ocean, through or just around the North Pole

The NSR, currently already partially operational is the first one to open to commercial shipping activities. Due to a meagre ice coverage and the largest icebreaker fleet in the world operated by the Russian Federation present in its waters[2], the NSR is possible to safely transit during the warmer season (Goldstein, 2023). Most of the shipping route falls within the exclusive economic zone (EEZ) of Russia which however does not grant them exclusive access to the route itself, although the current state of war between Russia and Ukraine (with the support of NATO) makes the

[2] According to Vitaly Savalyev, Russian minister of transport, as of 2023, Russia operates the biggest icebreaker fleet in the world with a total of 34 state and 7 non-state-owned icebreakers (out of which the total of 7 nuclear-powered vessels) with an overall output of nearly 700 MW. Reportedly, several more icebreakers are currently planned for construction.

navigation in proximity of Russia's coast potentially a sensitive topic.

At the moment, Moscow is searching for potential investors to embark on this massive project of developing the NSR, which the importance of the Kremlin stressed ever so strongly during the notorious blockage of the Suez Canal in 2021 (Goldstein, 2023).

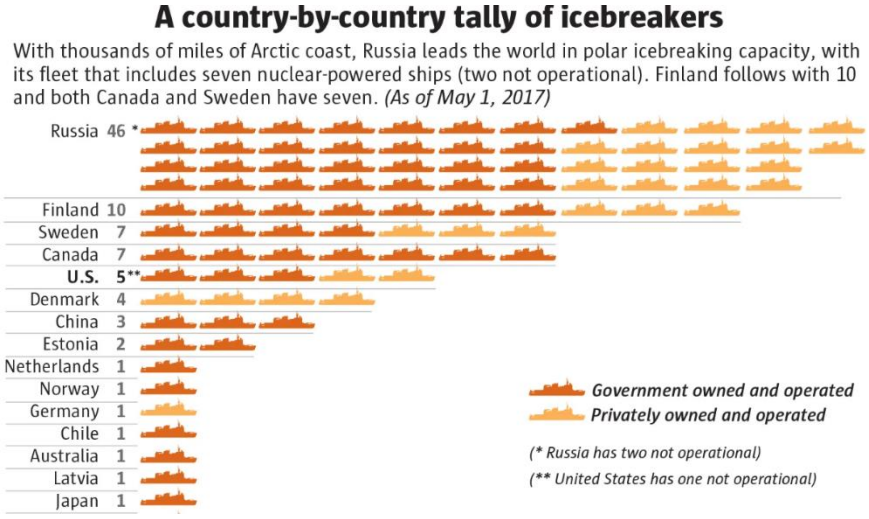


Image source: Coast Guard Polar Security Cutter Program; Background and Issues for Congress; Congressional Research Service, Updated June 12, 2019. Accessed via https://www.seattletimes.com/seattle-news/seattle-will-be-home-port-for-new-class-of-icebreakers/

People's Republic of China (PRC) has also stepped forth as a proponent of the new sea route, indicating a potential ground for a future collaboration between the two countries. In February 2022, days before Russia's invasion of Ukraine, Vladimir Putin and Xi Jinping met in Bejing where they discussed among other things, the development of the so-called Polar Silk Road (PSR) – a concept proposed by China as a part of their Belt and Road Initiative from 2013 to develop a shipping routes through the Arctic, connecting Asia and Europe (Lamazhapov et al., 2023). Moreover, although the official information is scarce, there have been talks of Korea and Japan likewise expressing their interest in developing NSR (Goldstein, 2023).

NWP is not yet safely and repeatedly navigational outside the summer months, according to the experts, however, this narrow time window will inevitably widen in the upcoming decades (Chen et al., 2021). According to Aker Arctic, a private company specialised in arctic marine transport solutions based in Finland, there have been a total of 24 commercial transits of NWP in 2023 – a 40% increase compared to the previous year (Aker Arctic, 2024).

NWP itself is, apart from others, subject to a disagreement between Canada and the U.S. regarding the rights of its usage and is also a maritime corridor in which China largely expresses their own commercial interests. PRC's interest in NWP is met with somewhat unsurprising disapproval from Washington, which paradoxically, as per not having signed the United Nations Convention of the Law of the Sea (UNCLOS), calls China's actions to be a violation of the principles of UNCLOS not unlike the stance of Ottawa (Pompeo, 2019) with which the U.S. has its own long-lasting dispute over the policy regarding the operation and use of the passage.

TSR is, as of now, by far the least suitable for nautical navigation and has to date been successfully transited only a handful of times (Bennett et al., 2020, p. 3). Although still viewed as a utopia by many, the observations from the Arctic ice monitoring suggest that the route will almost certainly open before the end of the century. Although the experts differ on the exact time, most predictions seem to indicate that the sea ice blocking the lane will disappear no later than the year 2080, while some studies suggest that it could be as early as the 2040s. The timeline of the route to be seasonally

navigable ultimately comes down to the average yearly temperatures needing to surpass the threshold of 0.6 to 0.9 degrees higher than the current (Bennett et al., 2020, p. 2).

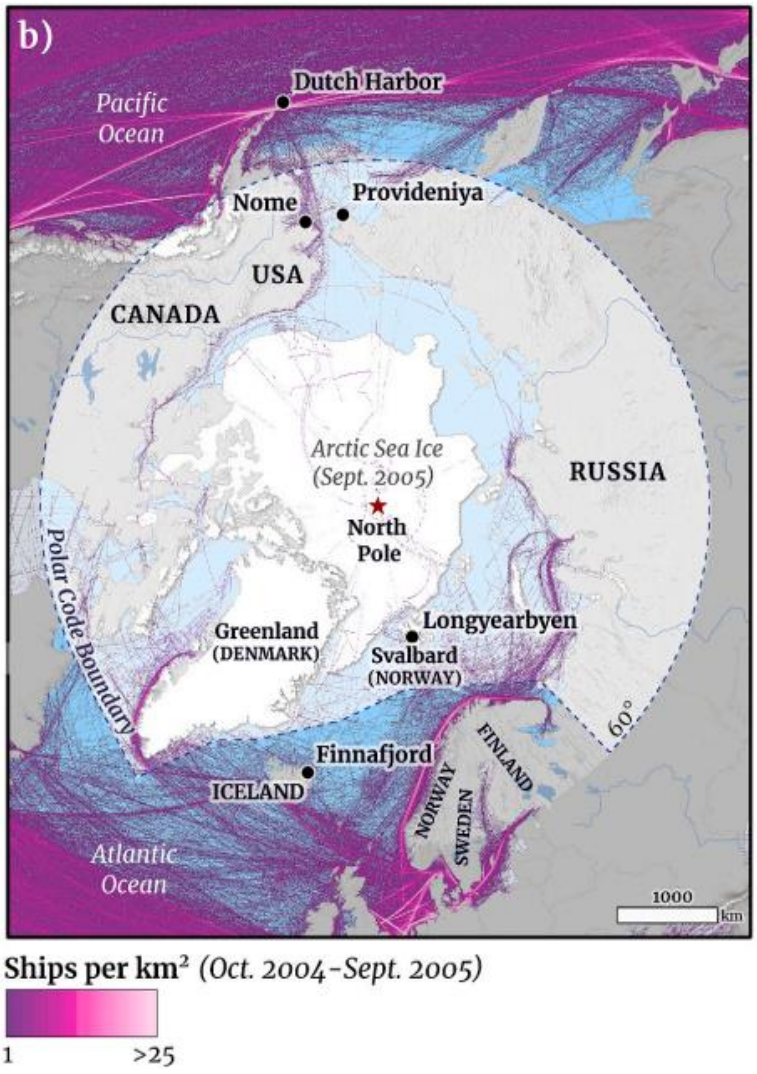


Figure B: Sea ice extent and Arctic vessel traffic from October 2004 – September 2005. Tracks comprise commercial and research vessels >1000 dwt. Data: NSIDC and Halpern et al. (2015) source: The opening of the Transpolar Sea Route: Logistical, geopolitical, environmental, and socioeconomic impacts (Bennett et al., 2020)

From more favourable bathymetry optimal for larger container ships and shorter distances between the points of destination to its current status as being partially outside any state's jurisdiction, TSR holds a number of considerable advantages in comparison to the other two trans-Arctic seaways. Although its two counterparts are currently more prominent in the limelight when it comes to the foreseeable future of Arctic shipping, with their commercial viability being just around the corner, Arctic states do not sleep on the opportunity to take their part in the development and increasing their influence over the TSR.

Many of the Arctic states hold plans for the construction of their own hubs along the way to facilitate Arctic shipping as well as to exploit the vast resources in the region, slowly uncovered by the melting ice cap (Bennett et al., 2020, p. 5-6).

Heightened interest in the region and claims to its territories and resources may however also lay the basis for potential conflicts, which leads to concerns regarding security and further militarisation of the Arctic.

Although TSR is currently considered attractive for partially pathing outside any state's internal/territorial waters, and potentially EEZ, the legal status of the waters of the TSR might however change at once, as the Arctic states appeal to the Commission on the Limits of the Continental Shelf (CLCS) – a body of the UN designated to review claims of states to extend the standard 200 nautical mile EEZ outwards. At the moment, only one of the claims has been closed, that being the successful claim of Norway to extend its EEZ 235,000 square kilometres in 2016. Russia's appeal has likewise been partially greenlit in February 2023, however still awaits the decision of the Kremlin. Other claims, out of which most are overlapping, are currently under review (United Nations, 2024).

This thesis will aim to demonstrate the complexity of the relations in the High North, explore and discuss the current status of the geopolitical landscape of the Arctic in regard to the future opening of the Transpolar Sea Route and examine the concerns regarding the issues of security and international relations as well as study the potential drivers of securitisation and militarisation of the region. Moreover, the thesis shall, in the later stages, explore and examine hypothetical future scenarios regarding the opening and development of TSR, generally moderating an educated discussion rather than proposing concrete solutions and approaches.

2. Theories and Concepts

The following section will introduce the general theory and theoretical concepts discussed and applied throughout the project.

2.1. Geopolitics

The term “geopolitics” refers to the study of the interplay between geography, power, and international relations, or in other words, how geographical features of the planet relate and impact the political situation between states, businesses, organisations etc. (Flint, 2006).

TSR currently lies outside any state’s jurisdiction and therefore is subject to international regulations, defined by internationally recognised agreements such as UNCLOS or the Polar Code. Nonetheless, the constantly changing topography of the Arctic due to the receding ice cap, renders the geopolitics in the Arctic region strongly dynamic and expected to undergo vast changes in the upcoming years. For its partially politically neutral character, the Arctic represents a geographical region where countries have limited jurisdiction to implement policies internally and hence the study of Arctic geopolitics and international relations represents a crucial element to understand in order to formulate educated predictions on how the region will evolve in the upcoming decades.

2.2. Maritime Regulations; UNCLOS and IMO’s Polar Code

The analysis of the Arctic claims made by the respective countries potentially concerning the future development and use of TSR will be carried out through a figurative lens of UNCLOS, *i.e.,* international maritime law sourcing from the United Nations Convention on the Law of the Sea (UNCLOS III). UNCLOS III is a product of the third United Nations conference on the law of the sea, taking place between 1973 and 1982 and was up to date ratified by 168 parties, including, the European Union, Russia, China and Canada (United Nations, 1982). UNCLOS was likewise signed by all of the Arctic Council members apart from the United States.

UNCLOS provides a fundamental legal framework for resolving disputes over maritime boundaries, including those in the Arctic. The agreement defines concepts such as “internal waters/international straits” and "transit passage" under Article 87 providing for the freedom of navigation through straits

used for international navigation, as well as rights of overflight, laying submarine cables and pipes, and constructing artificial islands and other marine installations. UNCLOS, under Article 76, allows coastal states to extend their continental shelf beyond the standard 200 nautical miles under certain conditions. However, this extension requires a recommendation from the CLCS.

Polar Code is a mandatory international code adopted by the International Maritime Organisation (IMO) in 2017, as apparent from the name, it directly concerns maritime conduct within Arctic waters and sets standards for ship designs, construction, crewing, navigation and most prominently pollution prevention (Bennett et al., 2020, p. 7). The Polar Code operates within the framework of UNCLOS, under article 234 which specifically allows for additional measures to be taken for the protection of the marine environment in polar waters. The Polar Code is seen as a way to implement this provision.

2.3. Arctic Exceptionalism

Arctic Exceptionalism (AE) is a concept which stresses the uniqueness of the Arctic as a region of peace and cooperation as well as a region which shall retain its policymaking rights vis-à-vis the decision-making authority shared between the Arctic countries. The concept itself first emerged as a legacy of the Cold War, with its starting point often regarded to be the "zone of peace" speech of Mikhail Gorbachev in 1987 in Murmansk (Young & Osherenko, 1992). Arctic Exceptionalists often praise the movement for fostering dialogue between Arctic countries, most notably via the forum of the Arctic Council (AC) and cultivating environmentally aware decision-making. Modern understanding of Arctic Exceptionalism (especially since 1996 onward) builds upon the idea of "Indigenous homeland" as Lackenbauer and Dean contend (Spohr et al., 2020, p. 335). The two authors also bring about the idea of how Arctic Exceptionalism may be interpreted to possibly favour different actors, such as Canada's approach to secure the rights of Indigenous Peoples or Russia's notion of deeming to inherently possess exceptional knowledge and rights to influence the region.

This thesis shall occasionally interpret issues via the lenses of arguments both pro and against the Arctic Exceptionalism and perhaps where it stands compared to alternative approaches to issues such as security, *e.g.,* Comprehensive Security.

2.4. Security and Securitisation

According to Gjørv and Hodgson (2021), security, as a concept, can be defined via five essential elements:

"(…)multiple *actors*, both state and non-state, who embody *values* (which are to be secured), ranging from the material (physical well-being) to the immaterial (identity), and who employ *practices* or methods through which security is created. In general, the values relevant to security are those values that are relevant to our *survival*, over *time*. (…)" (Gjørv and Hodgson, 2021, p. 4)

We may argue, that the first four elements are enough to define the static concept of security, while any variation in the 5th element – time, provides the concept with a certain dynamic, or alternatively, by introducing socially constructed elements, effectively rendering it a process of either securitisation or de-securitisation by framing an issue as a threat or non-threat to security.

On a fundamental level, security is about the survival of a designated object of concern in different contexts (social, political, environmental…). By establishing another object as a *security threat* the measures are taken by appointing a relevant body which, based on a justifiable cause, is permitted to exercise its power to suppress the threat and secure survival (Buzan et al., 1998, p. 21). The Copenhagen School argues threats are not inherent, they are constructed socially. Whether something is a security threat depends on how it is presented and how widely that presentation is accepted (Buzan et al., 1998, p. 26).

For securitisation to be effective, it requires general acceptance. The audience has to agree that the issue is indeed a security threat and extraordinary measures are justified. We may refer to this as intersubjectivity (Sjöstedt, 2017). (more in section 3.1.)

The authors of the widely recognised *Security; A New Framework for Analysis* (1998) outline the views of the Copenhagen School of International Relations and emphasise, that security is far from an exact and generalisable science, as the nature of the security threats varies greatly in terms of the sector, the referent object or the threat itself. To help accommodate for this variation, the author of the thesis proposes a consideration of a sub-concept referred to as *comprehensive security* (see section 2.3.2), which is used to complement the general notion of security and securitisation by allowing for a selection of a specific security discipline on a specific scale for a close-up analysis, which will be most prominent in the analysis sections 4.1.5. and 4.1.6.

2.5. Ontology Behind Securitisation

As established before, securitisation is essentially a theoretical framework that links social constructivism and realism to explain how issues become security threats. Realism, with its focus on state survival in an anarchic world, contributes to the concept of existential threats. Securitisation theory arguably adopts this idea, claiming that actors (states, leaders etc.) can frame issues as existential dangers to a state's well-being, and subsequently take otherwise extraordinary responses. Social constructivism, on the other hand, as its name suggests, emphasises the role of language and ideas in shaping reality (Amineh & Asl, 2015, p. 13), and lends the concept of "speech act theory" to securitisation. This explains *how* actors can "securitise" an issue by portraying it as an existential threat, justifying the said extraordinary measures.

In the context of Arctic security, realist concerns would most prominently include problematic aspects such as competition for resources and extension of the states' jurisdiction areas, potential military conflict over territory and resources, and climate change-induced changes to the navigability of the Arctic. These issues could be securitised by states emphasising the danger to critical resources, strategic interests, or national identity. This might lead to an increased military presence, stricter resource regulations, and worsening/tightening international relations.

Naturally, the process of securitising an issue may have various implications. In one instance securitisation can be misused by powerful actors to sway public opinions or justify actions that benefit them, regardless of the actual threat, in another it can lead to joint efforts of various stakeholders to avert crisis and foster cooperation. Arguably, the line between a real threat and a securitised issue can be blurry, making objective assessment rather difficult.

The author applies the general notion of securitisation theory throughout the project to illustrate to what extent a security issue is securitised by socially constructed perceptions of threats and comment

on the adequacy of the response of international actors. The theory will be most directly applied in section 4.1.6. discussing different notions of securitisation.

2.6. Comprehensive Security

Comprehensive security (CS) is another theoretical concept proposed by Gjørv and Hodgson that *"(…) takes into consideration the perspectives of multiple actors (state and non-state), at multiple levels (local, national, regional, and global), and across the spectrum of security topics including, among others, traditional state/military, economic, environmental, societal, and human security issues. (…)"* (Gjørv and Hodgson, 2021, p. 4)

Comprehensive security proposes an alternative to Arctic exceptionalism designed to address security issues on multiple levels and different perspectives as well as de-romanticise the narrative of ideal - conflict-free Arctic politics.

If we were to deconstruct the concept of CS, we might divide it into a "vertical" axis (local, national, global etc.), and a horizontal one (physical, social, military, environmental security etc.). While primarily focusing on, but not exclusive to, security in connection to international relations (IR), such as in global security, maintaining a peaceful and stable international order that benefits all states, this thesis applies the vertical axis of the CS framework to assess the selected security discipline on multiple levels. This may seem contradictory, as per focusing on *international* security from a regional or national level, but what it translates to is merely considering different perspectives of security issues from either a more close-up or a macro point of view, allowing for a certain triangulation of scale, fundamentally resulting in a more *comprehensive* analysis of various security disciplines. Such research design ultimately allows for better real-life applicability due to its holistic nature and consideration of multiple POVs.

Overall, with overlapping claims and incentives for international cooperation, the relevance of security studies in connection to Arctic shipping is apparent and will be addressed frequently throughout the project, most prominently in section 4.1.5. dedicated to the discussion regarding Arctic security on different levels of scale, in the fashion of Comprehensive Security. This section will most prominently address the rising security concerns in the Arctic regarding the "complicated" relations between China, Russia and the "Western" allies as well as other stakeholders with ties to either side of the rivalry.

2.7. Liberalism and Neoliberalism

This thesis frequently presents, analyses and challenges against one another some of the liberal/neo-liberal and realist approaches, inherited from a selection of relevant national/international institutions, agreements and academic/scientific publications in an effort to inspire a discussion regarding the aforementioned problem area.

2.7.1. The Rise of Cooperation in International Politics

A key work shaping the "liberal institutionalist" or "neoliberalist" perspective in international affairs is Keohane and Nye's *Power and Interdependence* (1989), where the authors argue that international

institutions, agreements, and laws play a significant role in guiding state behaviour and encouraging cooperation. Central to their work is the concept of "complex interdependence" (Keohane & Nye, 1989). This suggests that states are linked through numerous channels like trade, organisations, and cultural exchange. Liberalists argue that these connections encourage peaceful conflict resolution and the pursuit of mutually beneficial solutions as opposed to a rather realist perspective, where this complexity of relations may in turn represent a hindrance and ultimately scale up the potential conflicts by their internationalisation. Keohane and Nye however contend that growing economic and social interdependence creates a web of connections that disincentivises resorting to military force. While *Power and Interdependence* does not explicitly define neoliberalism and liberal institutionalism, however, it does advocate for their principles and has arguably laid the groundwork for future scholars of neoliberalism in international relations (IR). The general character of neoliberal international politics also often goes hand in hand with the notion of Arctic Exceptionalism, which too, emphasises economic interconnectedness, international cooperation and conflict avoidance (within the Arctic).

2.8. Neoliberalism: Cooperation and Free Markets

Emerging from the broader tradition of liberalism, “neo” – as “new” liberalism entered the scene of international relations (IR) theory in the 1970s and 1980s. It encompasses economic, political, and philosophical approaches that emphasise free markets, individual liberty, and international cooperation (Burchill et al., 2005), and although not exclusively, most prominently finds its application in economic disciplines. Neoliberalism is often linked to liberal institutionalism as a philosophy of international affairs. Liberal institutionalists see international organisations like the UN, WTO, and IMF as crucial for fostering cooperation and overseeing the global economy (Burchill et al., 2005). Neoliberalism advocates for an active role of government in creating a market-friendly environment with globalisation viewed as a positive force, as opposed to traditional liberalism, where government intervention is minimal and globalisation is not a major focal point.

Proponents of neoliberalism highlight the importance of economic interconnectedness. They argue that shared economic interests make cooperation between states more likely. They advocate for lowering trade and investment barriers, viewing free trade and open markets as key drivers of economic growth and prosperity (Burchill et al., 2005, p. 64).

Although this study does not explicitly concern itself with in-depth economic analyses as its primary focal point, the implications of its arguments have a direct connection to the future of the global maritime market and hence arguably the world economy.

In connection to the Arctic IR, the liberal/neoliberal tenets might perhaps be most apparent when it comes to arguments promoting international cooperation and most arguments supporting the policies of the Arctic Council/Arctic Economic Council (AEC) respectively as arguably liberal/neoliberal institutions. Naturally, a strict classification is not always feasible, and while analysing policies of various Arctic institutions, a broader palette of philosophical and political ideologies should be considered and challenged in order to arrive at credible conclusions.

2.9. Balancing (Neo)Liberalism

Scholars like Tim Dunne challenge core liberal tenets (though acknowledging multiple aspects of liberal theories, such as promoting economic growth and opportunity). Dunne criticises neoliberalism for

focusing solely on rational self-interest while neglecting ethical concerns. He argues that it often prioritises rapid economic growth without considering the negative social and environmental consequences of globalisation (Dunne et al., 2020).

Dunne further criticises liberal institutionalism for assuming self-interest and mutual gain as the primary drivers of state cooperation. He argues that it often overlooks the needs of weaker states and non-state actors, and ignores the power imbalances that shape international cooperation (Dunne et al., 2020). This criticism is reflected perhaps most clearly in the race for natural resources and economic growth in the Arctic which may in turn set up a cause for the securitisation of the region between the competing parties, somewhat paradoxically for neoliberal drivers perhaps disguised as a realist-fashioned need to secure one's survival.

2.10. Realism/Neorealism

A perhaps obvious counterargument to liberal theories would be theories stemming from the realist schools of thought such as the theory of neorealism/structural realism from the works of authors like Kenneth Waltz and his publication *Theory of International Politics* (1979). Waltz argues that the key to understanding international politics lies in the anarchic structure of the international system, and unlike a state with internal authority, the international system is devoid of central governance, meaning states operate in a fundamentally self-help environment. Neorealism differs from classical realism by emphasising the structural elements of the international system rather than human nature or domestic factors, as well as, by utilising a more scientific and parsimonious approach, drawing on concepts from microeconomics. The work of Kenneth Waltz eventually stimulated the birth of two main branches of neorealism (although Waltz does not explicitly use the terms); Defensive Realism, later associated with Waltz himself, where the states generally prioritise maintaining the status quo and a certain balance of power and Offensive Realism, where some states might actively seek to disrupt the power balance and gain the upper hand over their counterparts in potential subsequent conflicts (Lobell, 2010). The latter is typically associated with the work of John Mearsheimer, who believes that states, fearing for their survival in an anarchic world, are constantly striving to maximise power. Unlike defensive realists, he contends that there is no point where a state feels secure enough to stop gaining power (Munro, 2024).

The notion of (neo)realism is highly relevant to studies of security-related issues as they both treat the survival of a state or other relevant entity as their objectives. Therefore, this study will employ the tenets of Waltz's and Mearsheimer's neorealist theories to analyse topics related to Arctic security and also challenge the ideas and reasoning brought about by the liberal schools of thought.

3. Methodology and Sources

The thesis exercises a multidisciplinary approach combining (geo)political, economic, and legal perspectives of Arctic transportation and security/securitisation in connection with TSR, in order to understand and analyse the selected problem area comprehensively. Aspects of the wider topic, such as cultural, environmental, and technological will be mentioned throughout the project, but are not

considered a focal point of this study and serve primarily as supporting arguments to paint a bigger picture and refrain from conducting an overly narrowed-down and in turn real-life inapplicable analysis, oblivious of the real-life complexities of the general topic. The overall research and analysis concern mainly Arctic states but extend beyond the region, and are inclusive of any actors that might potentially have a significant impact on the matter, which fits in particularly well with the concept of comprehensive security as per analysing security issues on a variety of different levels of scale.

Triangulation, coincidentally a common practice used in maritime navigation, is a method used to precisely determine a location by using three separate sources of reference on the chart (Bernard, 2007). In an academic sense of the word, triangulation typically refers to a triangulation of sources, methods and theories. This study triangulates its sources of information by examining a variety of primary and secondary sources, from governmental documents, and documents of intergovernmental bodies to academic, and other peer-reviewed publications which ensures a wider informative basis for the project. Furthermore, the thesis also triangulates arguments and examples which in turn result in adding variabilities to the drawn conclusions and hypothetical scenarios at the end of the analysis section. The fundamental purpose of triangulation of all the aforementioned aspects of the study is to secure its credibility and factual accuracy as well as to showcase the consideration of a wider variety of sources, perspectives and opinions by the author in order to offer comprehensive conclusions based on an educated analysis.

On the project-wide scale, the author employs a predominantly abductive approach to reasoning, where conclusions are drawn upon the clues (in a fashion of triangulation) and are put together to ultimately formulate the most likely scenarios for the future trajectory of the TSR development, governance and management. In the context of different chapters and subchapters of the analysis that serve as building blocks of the larger argument, the thesis opts for a mixture of different reasoning approaches that are best fit for specific subtopics, not limiting itself strictly by its own methodological boundaries, which might pose as an obstruction to its fluency. For example, in the section dedicated to international relations in the Arctic, the author opts for a rather inductive form of reasoning where different actors and their relationships are described upon which it is possible to draw a more general conclusion on different ideological tendencies of the various states. This example of a case of inductive argumentation would be justified by the author's inclination to prioritise a gradual buildup to a statement, which if presented in a deductive manner might give off a notion of creating a sensation or perhaps showcasing a personal opinion/bias. In the other parts of the analysis, such an approach is not necessary due to the generally emotion-unprovoking nature of the topic, such as the technicalities of Arctic maritime transportation systems, which is also a part largely devoid of theory application and presents facts and ideas in a more unfiltered - positivist manner to support further arguments.

Overall, theoretical concepts such as the theories of comprehensive security, securitisation, (neo)liberalism and (neo)realism are used as lenses to analyse and put into perspective the different subtopics of the analysis.

The analysis itself will take off by establishing the pros and cons of an eventual opening of the TSR to illustrate whether it is even worth considering paying mind to this relatively distant future opportunity of a new sea route.

Subsequently, the analysis section 4.1.2. will open by briefly delving into the mentioned technical analysis of the nuances of Arctic shipping which may in the context of the project seem odd, but will eventually result in an ability to draw more specific conclusions which are grounded in the limitations of technical feasibility and hence are more credible and tangible suggestions rather then merely abstract thought processes which would in turn not be realistically and specifically applicable.

Thirdly, the following subsections of the analysis will complement the overall analysis by providing the context of different Arctic matters related to IR, geopolitics and security. Eventually, the analysis will culminate into a selection of potential scenarios which will incorporate the findings of the earlier sections of the analysis, as well as relevant historical precedents. The study will elaborate on three different scenarios, briefly on their likelihood as well as implications to the future of the Arctic and Arctic/global shipping.

Ultimately, the thesis ends with a short conclusive discussion which will be kept brief due to its aforementioned avoidance of concrete solutions but rather being a culmination and summary of a detailed analysis leading up to it, which in itself already aims to evoke a notion of educated discussion based on relevant sources moderated by the author.

3.1. Literature Review

The following publications will be referenced frequently throughout the project and will be built upon as well as complement the fundamental backbone of different sections of the analysis due to their high relevance and solid base for a starting point of various arguments presented across the thesis. These publications will be triangulated by being complemented and challenged by additional primary and secondary sources, as well as reflections of the author based on their research.

- United Nations Convention on the Law of the Sea: UNCLOS rather unsurprisingly represents an unavoidable must every research concerned with international maritime transport needs to account for.
- *On thin Ice; Perspectives on Arctic Security (2021)*: One of the more recent comprehensive studies on Arctic Security edited by the forefront Arctic researchers and authors, Duncan Depledge; the director of the All-Party Parliamentary Group for Polar Regions Secretariat in Westminster, former professor at University of London and an expert in the field of geopolitics, IR, security and climate change, and Whitney Lackenbauer; a professor in the department of History at St. Jerome's University at the University of Waterloo and an expert in Arctic policy and history. The publication includes various concepts of high relevance to this project, namely the concept of Comprehensive Security.
- *The opening of the Transpolar Sea Route; Logistical, geopolitical, environmental, and socioeconomic impacts:* a 2020 article published by a group of arctic researchers, provides an excellent and comprehensive basis for any of the primary topics named in its title, and will be frequently mentioned throughout the document.

3.2. Quality and Ethics

The author of the project states the intention to communicate all decisions and the usage of data transparently and understandably. All data is collected consciously and is presented in such a manner, which allows for argument transparency.

The objectivity of the thesis in a colloquial sense of the word is strived towards via the means of triangulation of multiple aspects of the thesis, and use of peer-reviewed sources, as well as retracing of the information back to its original source. All of the sources utilised in the analysis section of the document are challenged against one another as well as the expertise of the author and are typically

presented in an unchanged or paraphrased manner, followed by the author's take on the selected topic, hence clearly indicating the pursuit of objectivity of the presented data, yet offering a room for a critical discussion. The data collection of this paper, as well as the analysis, strive to be unbiased with an objective to provide a comprehensive and "intersubjective" study of the selected problem area.

Intersubjectivity is the term used to describe research as striving towards objectivity while being aware that complete objectivity in the absolute meaning of the word is not attainable, especially concerning topics where social constructs are a strong factor such as for instance the process of securitisation. Intersubjectivity, as its name suggests is defined as a step between subjectivity and objectivity (Bae, 2017). This can be achieved by, for instance, analysing various, perhaps opposing perspectives on an argument or by abstaining from emotionally tainted terminology, which might signal a bias.

The concept of intersubjectivity could also fit well within the theory of critical realism as devised by Roy Bhaskar. Ontologically speaking, the theory itself proposes a middle ground of sorts between positivist thinking (in this project more prevalent for instance in section 4.1.2.) and social constructivism (strongly applied for example in the sections concerning security and securitisation). Positivism emphasises objectivity and observable data. Critical realism agrees there is an objective reality, but it goes beyond just what we observe and studies the underlying mechanisms that cause those observations. On the other hand, social constructivism argues that reality is socially constructed through interpretations and meanings. Critical realism acknowledges the role of interpretation in our understanding of the world, but it insists there is an independent reality that shapes those interpretations (Bhaskar, 2020).

From an epistemological point of view, this thesis is naturally limited by the author's knowledge and accessibility of relevant primary and secondary data. As per sparse sources which contemplate all the variables of this study simultaneously, meaning mainly the aspects of shipping along the TSR, security (with its many disciplines) and geopolitics, the project has little to no methodological precedents, meaning it largely follows a unique methodological apparatus constructed based on the author's past experience in the field of study, studies of similar nature, consultation with academic authorities and ultimately the author's critical judgement.

4. Analysis

4.1. TSR; Collaboration and Competition

If one were to omit the fact that the discussion regarding the future opening of the TSR is merely a result of the unfortunate fact that the Arctic ice is disappearing ever so rapidly, one might realise that the premise of cross-Arctic shipping poses an opportunity for an international collaboration of an unprecedented scale. We might very well compare the conceivable multilateral agreements and construction of various hubs along the route's trajectory in the extreme and hostile conditions of the Arctic to other examples of joint human efforts that transcend the national borders such as The Montreal Protocol of 1987 or the launch of the International Space Station little over a decade later. Naturally, the opening of the route might also lay grounds for potential disputes, given the occasionally unaligned interests of Arctic as well as non-Arctic states. The following subchapters shall dive into the nuances of the TSR opening and what they translate into in terms of international relations and collaboration.

4.1.1. Why TSR

Firstly, let us glance at its advantages as well as the challenges TSR will inevitably face. As mentioned, TSR's undisputed advantage over the other Arctic sea routes is its more favourable bathymetry allowing for larger vessels to undertake the journey. It is expected that the NWP's and NSR's shallow straights will hardly be able to accommodate cargo vessels with large drafts such as the Panamax ships or bigger (Bennett et al., 2020, p. 4). Therefore, it becomes apparent right from the get-go that the TSR has, thanks to its natural features, the potential, to represent a more long-term strategy for trans-arctic shipping. What is however far more ambiguous than its attractive tangible features, are the abstract ones.

The status of TSR's jurisdiction is far from simple and currently still undergoing vast changes, which may go either way. CLCS is an expert body, established by the UN, serving the purpose of designating the outer limits of the extended continental shelf (ECS) beyond 200 nautical miles in which the coastal states retain the rights to exploit natural resources such as oil, gas, and minerals. Upon a state submitting a claim containing detailed scientific and technical data, the commission examines the claim considering factors such as bathymetry, geology and sedimentary features. Based on the commission's conclusion, the CLCS issues a recommendation to either endorse or reject the claim, based on their assessment of its compliance with UNCLOS. Ultimately, the coastal state decides to either accept, reject, or modify their claim based on the commission's feedback (UN, 2024). Following is the overview of extended claims made by the Arctic states:

- Canada's claim submitted in 2013 was partially reviewed in 2016 with recommendations for additional data collection, which is currently pending. Canada's current claim overlaps with those of Russia and the U.S. (UN, 2024).
- Denmark's claim via Greenland submitted a year later, currently has the same status and overlaps with the claims made by Russia and Canada (UN, 2024).
- Norway submitted its claim back in 2006 with the recommendation of extending the country's continental shelf by 235,000 square kilometres released in 2009. The claim was officially finalised in 2016 (UN, 2024).

- Russia submitted its claim originally in 2001, which has been revised and resubmitted in 2015 and later in 2023. Russia's claim has been partially approved in 2023 by CLCS and accepted by Russia, with some outstanding areas of the claim not yet endorsed, particularly the portion of the claim overlapping with those of Canada and Denmark, *e.g.,* areas extending along the Lomonosov Ridge towards the North Pole (UN, 2024).
- The United States carried out a vast collection of marine geophysical data over the past 20 years, releasing the geographical coordinates defining the outer limits of its claimed ECS encompassing approximately 1 million square kilometres of additional seabed rights beyond its EEZ (U.S. Department of State, 2023) The U.S. does not file its claim to CLCS in a traditional way, as not being UNCLOS signatory, however, pursues recognition of its claim based on abiding the international law and framework of UNCLOS via the publication of extensive domestic marine surveys and data collections.

If the current CLCS claims were passed, the Arctic Ocean's seabed would become mostly divided into wide areas of ECS and a smaller area of strictly international jurisdiction. Although the future exploitation of hydrocarbon resources could mean that the constructed installations could hamper shipping on the sea lane, the shipping itself, would from the legal perspective remain mostly unaffected by the status of the CAO region (Humpert & Raspotnik, 2012, p. 290).

An indirect effect of the process of the ECS is naturally the potential geopolitical tensions occurring in the region, caused by the overlapping claims, as potential disputes over continental shelf boundaries could conceivably bring about turbulence in IR in and outside the Arctic region. This could translate into heightened security concerns or increased susceptibility to securitisation of the High North by involved stakeholders pursuing to sway the perception of the general public in order to justify undertaking extraordinary measures such as militarisation of the region or perhaps construction of artificial island-like installation such as those seen in the South China Sea (U.S.-China Economic and Security Review Commission, 2024).

From a neoliberal point of view, this immediate lack of jurisdiction to significantly impede the free shipping along the TSR naturally limits the bureaucratic obstacles and promotes international collaboration in an effort to perhaps lessen the negative environmental impact, and incentivise the conception of bi/multilateral agreements, for instance concerning environmental protection or the search and rescue mechanisms.

On the other hand, from a rather realist perspective, the lack of decisive jurisdiction over the shipping in the region, could haze up the respective rights of different actors conducting shipping activities along the route, and complicate the resolution of any potential disagreements. This could in turn also result in creating a perception of the region as comprehensively lacking physical, environmental or potentially military security.

As far as other challanges to TSR shipping go, one is blatantly apparent, and it is the undisputed lack of intermediate markets along the way, which forces a sub-optimal approach of direct deliveries instead of a more common way maritime transport systems operate *i.e.,* checkpoint deliveries. In this scenario, the shipping is carried out through the TSR but never with the intent of destination shipping within the Arctic itself, as the shipping lane passes directly through the Central Arctic Ocean (CAO) without any major natural resource extraction sites currently along the way, or communities requiring resupply except the Bering and Fram Strait (Bennett et al., 2020, p. 4). This is quite contrary to the current character of shipping in Arctic waters which is mainly destinational and involves the transportation of natural resources mainly using bulk carriers shipping cargo from natural resource

mines, such as the zinc mines in Alaska or nickel and palladium deposits in Siberia (Spohr et al., 2020, p. 148).

Additionally, the insufficient hydrographical knowledge of the region and the generally hostile and unpredictable nature of the Arctic environment will likely result in insurance costs going through the roof, which is not always accounted for when drawing estimates of cost cuts using the Arctic seaways.

That said, what would be the possible technological means that would facilitate commercial shipping along the TSR and accommodate these factors?

4.1.2. Logistical Scenarios and Viable Infrastructure

According to some experts in commercial shipping, there are three main logistical options for the TSR transportation system (Bennett et al., 2020, p. 4):

Vessels equipped with DAT, source: https://www.wartsila.com/encyclopedia/term/double-acting-technology-(dat)

1. Icebreaker Escorts

Icebreaker escorts are the first and perhaps most obvious mechanism to aid large open-water carriers navigate across the Arctic Ocean. Russia, operating the largest icebreaker fleet in the world represents a clear indication of whether such a strategy is in fact feasible. According to Rosatomflot[3] (2019), Russian icebreakers escorted 510 vessels along the NSR in 2019. However, it is pointed out that in order for a large vessel to effectively transit the NSR, two icebreaker escorts are needed (Dobrodeev & Sazonov, 2018). This increases the costs of operating the sea route significantly and according to the Norwegian political scientist Arild Moe of Fridtjof Nansen Institute, this may indicate that it is possible that the NSR did not generate profit in recent years (Bennett et al., 2020, p. 4). Due to the questionable profitability of an icebreaker-reliant strategy for Arctic shipping, it is unlikely given the fact that the TSR lies largely in high seas or potentially crosses through a multitude of EEZs for any one government to manage and subsidise an icebreaker fleet.

2. Polar-class/double-acting vessels

Another option for shipping along the TSR is polar-class (PC) vessels, which is a classification of a vessel assigned by IACS and subdivided into 7 ranks according to the overall thickness of the ice sheet these ships are capable of navigating through (canada.ca, 2008). Most suitable for navigation through the

[3] Rosatomflot is a Russian federal state enterprise based in Murmansk, currently operating the only nuclear-power icebreaker fleet in the world; https://www.rosatom.ru/en/rosatom-group/the-nuclear-icebreaker-fleet/

Arctic waters including the TSR would likely be vessels equipped with the so-called double-acting-technology (DAT). In the DAT design, the vessel has its bow optimised for open water conditions, with the stern designed to break the ice and the rudder replaced with an azimuthing propulsion unit. This technology is not as cutting-edge as it may seem, as the first so-optimised ships were built as early as 1998 and were operated by the Caspian Sea Service. Modern PC vessels equipped with DAT technology would be more than capable of navigating the arctic waters and depending on the level of hull strengthening could transit the TSR for up to 2 months during the warm season compared to 2-6 months along the NSR (Bennett et al., 2020, p. 4). Proof of the durability of these vessels was demonstrated in November 2019 by an American company Pangea Logistics Solutions, which shipped 42,000 tons of titanium ore from Moriusaq, Greenland using the Chinese-made vessel *MV Nordic Barents*, which also happens to be the same ship that successfully carried out the first international transit of the NSR in 2010 between Norway and China.

3. Hub-and-spoke system in CAO

The hub-and-spoke (HS) model is known to the general public mostly in relation to avionics and is the system that nowadays most commercial carriers employ. However, it is a term well-established in the modern maritime shipping industry and became so already in the 1990s. Experts argue that such an arrangement would translate well into trans-arctic shipping due to its several benefits. For instance, transhipment hubs would offer an option to switch cargo from costly-to-operate PC vessels to regular carriers at designated checkpoints of the route to ensure cost efficiency as not all sections of TSR might necessarily require ice-breaking crafts (Bennett et al., 2020, p. 5). The HS model would be considered a long-term strategy as per its high initial cost but virtually *indefinite* usability.

None of the above-mentioned models are mutually exclusive and in reality, all of them could potentially be employed to some extent. Let us now explore what would a multilateral operation of such systems require and whether these approaches would be feasible in light of the current Arctic geopolitics and international relations.

4.1.3. Relations in the North

The Arctic houses many competing narratives as to what the Arctic is to the rest of the world (Spohr et al., p. 51), as well as different political ideologies within the Arctic itself and has historically strived to keep differences of various actors at bay by promoting the “zone of peace” philosophy and instituting fora such as the Arctic Council, which traditionally overlooks outside disputes and focuses on effectively addressing the issues related solely to the Arctic. As the Arctic heats up, however, so may the political tensions within. The increased commercial and potential military interest from the Arctic states as well as the outsiders may pose a challenge to the Arctic Exceptionalist way of addressing the Arctic matters.

Given the current political climate in the circumpolar north, it is highly unlikely for a multilateral collaboration between all of the Arctic states to take place in realising any of the aforementioned strategies. Even a forum historically detached from global events such as the Arctic Council is at the given moment compromised with Russia taking a backseat since the beginning of the military conflict in Ukraine. While cooperation amongst “like-minded” allies such as the U.S., Canada and potentially Denmark, Norway and Iceland seems fathomable, Russia currently stands as the odd one from the bunch, not too different compared to its position during the Cold War. In the context of contemporary geopolitical configuration, it is easy to envision cooperation between Moscow and Beijing. According

to Routers (2023) In 2023 the bilateral trade between the two countries reached a new historical record of approximately 240 billion USD. Moreover, Russia and China participated in several joint military exercises in the Gulf of Oman, most recently in March 2024 (Aljazeera, 2024), and jointly announced the co-development of the Polar Silk Road in 2017 (Lamazhapov et al. 2023), indicating a tendency for future cooperation.

China also seems to be firmly set on showcasing to the world its growing expertise in Arctic and Arctic shipping, ever since claiming the "observer" status at the Arctic Council in 2013, which is currently given to 13 countries around the globe. Matter-of-factly, China is currently still the only country that has successfully conducted official voyages across all three Arctic Sea routes (Nakano, 2018). PRC's interest in trans-arctic shipping is furthermore apparent with incentives such as the Belt and Road Initiative, its self-proclaimed status as a "near-arctic state"[4], or the unsuccessful attempt to claim the secretary seat of IMO in 2023 (IMO, 2023).

Russia appears to be the single most likely ally to facilitate China's entry into the Arctic politics and shipping trade. Despite the common history of mistrust and competition between the two countries, as well as the threat of sanctions against the PRC, which might pose a challenge to their future cooperation, given the current position of the Kremlin in shortage of powerful allies, future dialogue seems likely. Perhaps the greatest motivator behind any potential cooperation regarding Arctic shipping between the PRC and the Russian Federation is their common interest in challenging the U.S. dominance in the Far North.

If one were to analyse Russia's and China's historical tendencies in international politics through Mearsheimer's realist theory we may very well classify both states as offensive-realist inclined, which may both indicate a common attribute to bring the two together as closer allies, or, as per nature of offensive realism, pivot one against the other as a competitor or perhaps a designated security threat in the fashion of securitisation. This is a fitting representation of sino-russian relations as of two arguably expansionist states which have been lately becoming more inclined towards reinforcing their mutual relations, not due to common historical, cultural, linguistic or religious backgrounds, or an intention of increasing their interconnectedness in a fashion of globalisation, but rather due to the common motive of forming a stronger opposition to the "western" countries of Europe and North America (Ford, 2023, p. 435). Moreover, we may very well argue that both states are somewhat more securitisation-prone than perhaps other (near)Arctic actors due to the populist and authoritarian nature of their national politics (Lemoine et al., 2024).

The rise of Sino-Russian relations has been in the works for a while now, with one of the most prevalent indices of common interests being already the 2001 Sino-Russian "Treaty of Good-Neighbourliness and Friendly Cooperation" between Vladimir Putin and Jiang Zemin, the former President of PRC (Ministry of Foreign Affairs of the People's Republic of China, 2001).

No state can be strictly classified as entirely offensive or defensive realist, with especially the former being more prominent in the past - for instance during the era of European Colonialism in the 16-17th century and the age of "New" Imperialism in the 19th century. Nowadays, with an increasingly globalised and interconnected world, as well as the impending threat of nuclear conflict, the expansionist notion of "offensive" realism is more often than not reduced to rather offensive-realist

[4] Chinese government first officially used this term in the 2018 White Paper on Arctic policy and according to the words of the European Parliament Research Service "China's Arctic policy suggests a strong desire to push for the internationalisation of the Arctic's regional governance system. The white paper is not a strategy document, and is more interesting for what it omits, such as the national security dimension that is a major driver of China's Arctic ambitions." (European Parliament, 2018)

mannerisms and rhetorics of certain states and how they address international affairs (Walt, 2010). With some states, we may however perceive this offensive tendency stronger than others. China may serve as a prime example, with its expansionist regional politics, with affairs such as the long-lasting oppression of Taiwan, the recent activity in the South China Sea perceived as an attempt to establish regional hegemony and challenge the existing balance of power, or the politics of Chinese international economic coercion[5]. This belligerent treatment of its neighbours raises some warranted concerns in regard to China entering the Arctic politics, and could perhaps serve as a pro-Arctic-Exceptionalism argument as to why keeping Arctic "Arctic exclusive" is advised, as well as contra-AE as per it not being realistic to address Arctic affairs regionally anymore when the Arctic itself is politically "expanding" to include China and other states that strive to have a say in the decision-making processes concerning the circumpolar north.

The general political tension in the Arctic always existed despite having a joint forum such as the Arctic Council. In August 2007 two Russian submarines planted a national flag on the seabed below the North Pole, displaying Russia's Arctic ambition as well as perhaps attempting to strengthen its territorial claim to the Lomonosov Ridge, an underwater mountain range extending from Siberia. This ridge could potentially extend Russia's Exclusive Economic Zone (EEZ) in the Arctic Ocean, granting access to potential resources like oil and gas (Parfitt, 2007). Unsurprisingly, no other Arctic state recognised this stunt as bearing any legal significance, however, this course of action may have a lasting impact on the securitisation of the region from both Russia and the opposing side, given that the Kremlin upheld this mission as significant by president Putin personally reaching out and thanking the expedition members (Chivers, 2007). This political appropriation of international waters may have conceivably fueled further scramble and effectively securitised the disputed zone of Lomonosov Ridge.

The tensions are however not exclusive to Russia against other Arctic states. Examples of minor conflicts within the Arctic are for instance the dispute between the U.S. and Canada regarding the classification of NWP as an international strait as advocated by the U.S. Secretary of State Michael R. Pompeo who is quoted saying "Russia is not the only nation making illegitimate claims" thus referring to Canada claiming the NWP to be a part of their international waters. This dispute became more serious when Ottawa, much to their ally's disapproval, granted permission *to Xue Long 2* (*Snow Dragon* 2) – A Chinese Polar class 3 research icebreaker to traverse the NWP on two separate occasions (Kosnik 2020). Another, perhaps a more humorous example of an Arctic dispute is the notorious dispute between Canada and Denmark over Hans Island known as the Liquor Wars (Pope, 2022), receiving its name after its unique tradition of the soldiers leaving behind a token of their national claim in form of either Canadian whiskey or Danish schnapps. This dispute was eventually resolved by the two countries dividing the island roughly in half in 2022, firmly establishing the world's longest maritime border between Canada and the Danish autonomous territory of Greenland (Guinness World Records, 2024). Other examples of dispute settlements in the Arctic are for instance another disagreement between Denmark and Canada over the portion of the Lincoln Sea, which was likewise settled over the course of the years from 1973 until 2022 or the dispute over the Barents Sea between Norway and Russia. The territorial dispute was after years of negotiations finally closed with the 2011 Berents Sea Treaty, which apart from else, laid grounds for joint resource management and environmental protection in the area (Jensen, 2011).

[5] For instance, Lithuania's decision to allow Taiwan to open a representative office under the name "Taiwan" (instead of "Taipei") angered China. China responded by pressuring Lithuanian businesses and blocking Lithuanian goods from entering China through customs delays and unofficial restrictions. Additionally, China pressured multinational companies to stop doing business with Lithuania (Yee, 2022).

If we are to analyse the grand scheme of things in regard to the IR in the Arctic, in possibly a rather inductive research approach, we may observe that some states incline towards more liberal tendencies while others fall in line with a more realist/neorealist approach to IR and policymaking. If we were to take the (coastal) Arctic Six, we may somewhat unsurprisingly deem the governments of Canada, Denmark, Iceland and Norway to be more liberally inclined, which can be perceived through their history of international cooperation, environmental protection, multilateralism, and interdependence on various levels and may arguably stem from their overall political cultures of sorts but much more rationally from their limits posed by the meagre size of their economic and military power compared to some other, perhaps more independently consequential powers in the Arctic. Arguably, the two most powerful of the Arctic states – The U.S. and the Russian Federation, lean more towards the neorealist way of conducting international politics, which naturally stems from their "need to survive" one against the other and the ability to take this stance independently. Despite being part of joint international forums, these states prioritise their own respective security and sovereignty above international cooperation. This is showcased in numerous examples such as the U.S. abstaining from becoming a UNCLOS signatory which would mean voluntarily binding its own hands when it comes to dealing with potential dubbed security threats in an at-the-end-of-the-day (neo)realist anarchic world, or the Russia's military buildup in the Arctic.

Naturally, such categorising has its limits as all Arctic states cooperate to some extent on issues such as scientific research and environmental protection, reflecting a degree of shared interest and recognition of interdependence. However, competition for resources, strategic positioning, and potential security concerns also influence their actions, aligning with realist principles.

One may confidently say that there is ample room for both cooperation and competition in the Arctic and even argue that construction of the necessary infrastructure to facilitate shipping across the CAO via means of international cooperation is possible to envision, based on whether multilateral cooperation involving all concerned parties or the "two camps" of joint efforts of predominantly North American and European allies on one side and Russia (or Sino-Russian alliance) on the other.

4.1.4. Maritime Law In the Arctic

Within the framework of the United Nations Convention on the Law of the Sea (UNCLOS), four different types of waters with varying legal statuses for coastal states and international navigation are defined. These are:

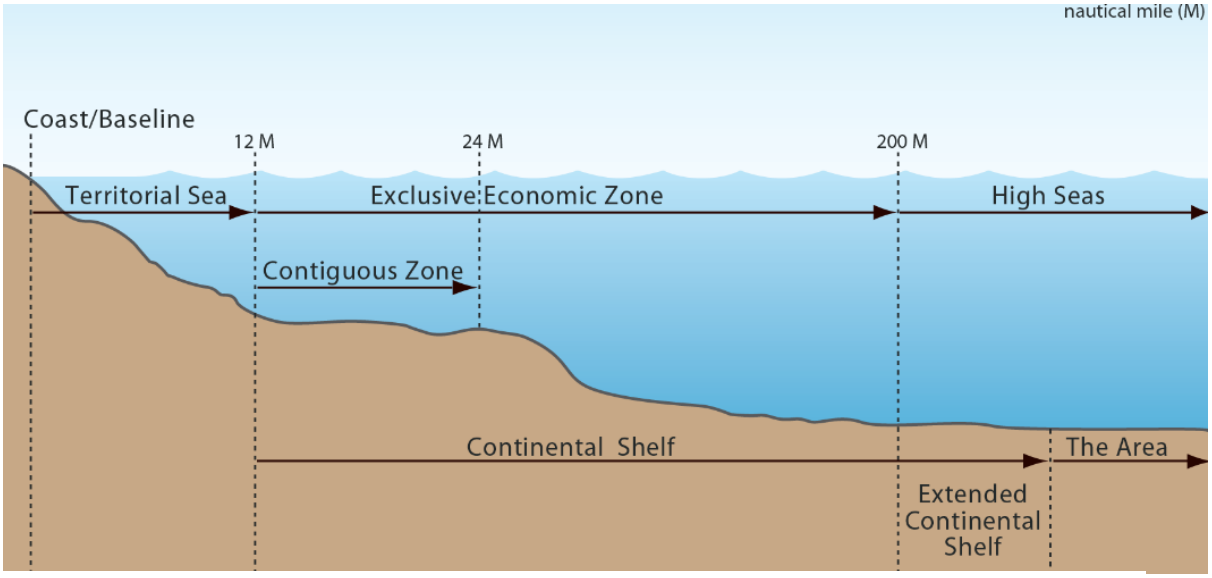
Internal Waters: Coastal states exercise full sovereignty over their internal waters. Absent express authorisation from the coastal state, foreign vessels and aircraft are entirely prohibited from navigating within these internal waters.

Territorial Sea: While sovereignty over the territorial sea also resides with the coastal state, foreign vessels enjoy the right of innocent passage, which entails specific obligations and limitations. Notably, this right of innocent passage is not extended to aircraft, which lack any corresponding right within the territorial sea's airspace.

High Seas: The concept of complete sovereignty is absent on the high seas. All states enjoy a range of freedoms on the high seas, including, but not limited to, the freedoms of navigation and overflight, as well as the potential right to construct artificial islands. The ladder specifically represents a "double-edged sword" of sorts for (not only) the Arctic, increasing both opportunities for competition as well as being a potential catalyst for securitisation. There is technically no legal reason as to why a non-

Arctic state such as for example China could not construct such an installation in the Arctic high seas, as long as the construction exercises due regard under UNCLOS.

Exclusive Economic Zone (EEZ): Unlike the internal waters and territorial sea, the coastal state does not possess full sovereignty over the EEZ. Instead, it enjoys a specific set of sovereign rights and exercises jurisdiction over certain activities within the zone. Foreign ships and aircraft retain certain freedoms within the EEZ, including, but not limited to, the freedoms of navigation and overflight.



Source: https://www.noaa.gov/maritime-zones-and-boundaries

UNCLOS establishes a distinct navigational regime for straits utilised for international navigation. This regime governs the passage of vessels and aircraft between one portion of the high seas or an Exclusive Economic Zone (EEZ) and another. The core principle of this regime is the right of transit passage, defined as "the freedom of navigation and overflight solely for the purpose of continuous and expeditious transit of the strait." (UNCLOS; Article 38)

Moreover, Article 234 confers a specific privilege bestowed upon Arctic Ocean coastal states. This article grants them the authority to promulgate and enforce non-discriminatory regulations aimed at preventing, mitigating, and controlling pollution from vessels navigating ice-covered areas within their Exclusive Economic Zones (EEZs). In exercising this authority under Article 234, both Russia and Canada have implemented more stringent regulations for shipping within their respective Arctic territories – the Northern Sea Route (NSR) and the Canadian Arctic. However, the application of Article 234 and the potential designation of specific Arctic straits as internal waters (granting absolute sovereign control) by these nations remain contentious issues. Such actions have the potential to escalate into future international disputes (Spohr et al., p. 150). In other words, it is possible to envision an extreme scenario where an Arctic state abuses the right to establish regulations within its EEZ under the cover of environmental protection to handicap another, as per the nature of the article with room for interpretation. At the given moment such potential problems are yet to be addressed. In an ideal scenario, there will be an upsurge of multilateral agreements regarding the creation of joint law enforcement mechanisms to secure unitary restrictions for vessels needing to cross multiple EEZs in order to reach and exit the CAO.

There are some hindrances to UNCLOS' universal applicability, one of which is the absence of a handful of states as signatories, most prominently the United States. The United States, however, supports the U.S. Senate's approval of the Convention even though it is currently not a party to it. Even after

numerous attempts to secure Senate approval, some U.S. Senators continue to obstruct its ratification (Spohr et al., p. 224).

Importantly, the U.S., did however, alongside Canada, Russia, Denmark and Norway adopt the Ilulissat Declaration in May 2008, acknowledging a shared responsibility for addressing the emerging challenges in the Arctic Ocean, namely due to climate change. The declaration focused on protecting vulnerable ecosystems, safeguarding the livelihoods of local communities, as well as, addressing the potential exploitation of natural resources in a responsible manner (Ilulissat Declaration, 2008).

The issuance of the Ilulissat Declaration aligns well, with Nye's liberal emphasis on interdependence and cooperation among states facing common challenges, as well as, his views on soft power resources like environmental leadership and scientific collaboration being crucial for international cooperation, and should be prioritised over military solutions which would be more direct means of securing one's survival in a rather realist perception of international politics. Furthermore, by emphasising the sufficiency of the existing international law, the declaration opposes creating a new legal regime, which aligns with Nye's belief in utilising established institutions and norms for global governance.

On the other hand, if one were to look at the Ilulissat Declaration via the neorealist lens of authors such as Kenneth Waltz, the agreement between the five Arctic coastal states might be interpreted as an attempt to maintain a stable regional order where no single power dominates the Arctic, hence safeguarding a certain balance of power necessary for the states' survival. On top of that, a defensive realist could contend that the declaration has a certain exclusivist character to it, keeping some states "on the outside", including the non-littoral Arctic states of Sweden, Iceland and Finland by creating a constructed community of "legitimate" Arctic stakeholders.

Amongst others, Ottawa's views on international maritime law are, perhaps unsurprisingly, generally somewhat liberal. Senior Canadian Naval Officer Todd Bonnar of the Combined Joint Operations out of the Sea Center of Excellence in Norfolk, Virginia, has discussed the threats China, Iran, and Russia pose to maritime freedom and the implications for the Arctic as they work to "*accumulate/consolidate power and re-define international maritime norms,*" particularly the UNCLOS. Above all, he highlights Russia's sovereignty over the Kerch Straits, Iran's claims to control the Strait of Hormuz, and China's "*attempts to rationalise and assert control of 80 to 90 per cent of the South China Sea.*"

"The world's oceans and seas comprise a single interconnected body of water. Seagoing nations must stand on the principle that maritime freedom is likewise indivisible. If the maritime community in general relinquishes its inherent freedoms in the global commons in one body of water for the sake of placating a predatory coastal state such as China, the global maritime community stands the risk some other strong coastal state will mount similar challenges in some other strategic waterway." (Bonnar, 2020).

This stance may however partially contradict the Canadian policy regarding the NWP, by which Ottawa firmly stands to be a part of their internal waters claiming full jurisdiction over the passage, even if for "all the right reasons" of environmental preservation and sustainably regulated shipping.

We may view Canada's history in the Arctic geopolitical landscape, as a considerably (neo)liberal proponent of Arctic Exceptionalism as well as being a country that played a key role in establishing the Arctic Council and was the establishing member that held the first chair of the council from 1996 until 1998 following the ratification of Ottawa Declaration (Arctic Council, 2024).

Denmark and Norway have plenty in common when it comes to their stances towards legal regimes in the Arctic, despite a few historical disputes in the Arctic waters, such as the dispute surrounding the

maritime boundary between Greenland (Denmark) and Jan Mayen Island (Norway) settled in 1993 (International Court of Justice, 2024). Both countries are signatories not only of UNCLOS but also a part of a spectrum of multi/bilateral agreements and institutions such as the agreement between Norway, Denmark and Iceland regarding the Smutt Sea, the Nordic maritime law initiative of the Scandinavian Institute of Maritime Law, as well as generally undertaking cooperation regarding joint research and fisheries management (European Commission, 2024). There is arguably no significant legal hindrance to any potential future cooperative efforts of Denmark and Norway (and Iceland) in terms of TSR development.

Russia ratified UNCLOS in 1997, however, the interpretation and implementation of specific provisions regarding the Arctic might raise concerns about full compliance. An obvious example is, similarly to Canada, but to a larger extent, the proclamation of the nearby sea lane, in this case the NSR, as an internal waterway.

In the most recent development, Chairman of the Russian Parliament Committee for the Development of the Far East and Arctic Nikolai Kharitonov, expressed via Russian online news channel Izvestia concerns about Russia's participation in UNCLOS. According to the interview, Kharitonov discussed Russia's withdrawal from the convention specifically in the Arctic, which is however not possible as the UNCLOS cannot be applied selectively depending on a region, although every state does have the right to withdraw entirely with accordance to the Article 317. This statement indicates perhaps a mixture of limited understanding of international maritime law by the committee's chairmen and a disruptive rhetoric of the Kremlin aimed at demonstrating its discontent with Russia's jurisdiction in the Arctic waters (Cooper & Chuffart, 2024). This criticism of a legal framework in which shaping Russia itself played a significant role, we may deem to be damaging towards international law and cooperation and arguably a driver for a unilateral securitisation of the portion of the Arctic that Russia lays claim to. Nonetheless, the Arctic played a pivotal role in moulding Russian history and national identity and will likely play an even more significant role with the increased accessibility of the region, thus similar displays of Russia's Arctic ambition are not unlikely to amass in the future.

If one can take away something from how different states regard and interpret the international law set by UNCLOS, we may observe a certain pattern of rather (neo)realistic behaviour where even predominantly liberal-inclined states are unwilling to voluntarily forfeit an immediate advantage in favour of international cooperation such as Canada and Russia asserting internal control over the adjacent waterways or the U.S. abstaining from a legal ratification of UNCLOS.

4.1.5. Comprehensive Security

We were thus far able to establish that the political climate in the Arctic, although turbulent, does allow for multilateral cooperation when it comes to developing the TSR and is governed by both general and Arctic-specific legal frameworks, most notably of UNCLOS. This framework fundamentally asserts exclusive rights of certain states within designated areas, however, also incorporates rights of freedom of navigation and rights to construct installations that have the potential to facilitate shipping in the CAO for both Arctic and non-Arctic states.

That said, let us now explore the intricacies of Arctic security on various levels, being an element must-to-be considered when devising strategies for effective, conflict-free trans-Arctic shipping.

The most prominent discussion regarding the security in the Arctic on an international level concerns mainly the intensively worsening relations between the Russian Federation and other Arctic states

with China as a sort of “wild card” in the deck. Russia, together with China and Saudi Arabia has opposed the decision to ban the heavy fuel oil (HFO) during the 2020 meetings on amendments to the Polar Code. This opposition to the immediate ban of the HFO indicates Russia’s sector’s economic importance to the country, which the future opening of the TSR could potentially undercut. With the thinning ice and the shipping shifting north towards shorter routes, the Russian government could encounter difficulties attracting trade to NSR, thus however, reducing the negative impact on the coastal environment and the Indigenous Peoples in the region who rely upon it (Bennett et al., 2020, p. 9). Whilst potentially creating jobs for the local communities, increased shipping activity in the Arctic also represents a threat to the traditional way of living of those very communities. Indigenous societies in the Bering Strait where the Chukchi, Inupiat, and Yupik peoples reside are still heavily dependent on the local marine environment, which is increasingly disrupted by the growing shipping industry, thus threatening the food security in the region (Bennett et al., 2020, p. 10). Environmental security is naturally at risk too, given the negative impact of large ships on the life cycles of sea mammals and other wildlife in the north (Walker et al., 2019). Moreover, the extreme conditions in the Arctic can make it immensely difficult to contain and clean up oil spills, which can spread quickly and become more challenging to manage (WWF, 2021). Cold temperatures and limited sunlight may slow down the natural process of oil degradation, making it that much more difficult and slow for the ecosystem to recover (WWF, 2022). Not mentioning, the absence of existing infrastructure designed to deal with such events (Committee on Responding to Oil Spills in the U.S. Arctic Marine Environment, 2014).

A popular theory which unpacks the Arctic geopolitics and security on multiple levels of scope is the allegory of “*Good, Bad, and Ugly*” by Andreas Østhagen. “Good” defines the Arctic relations on a regional level, meaning relations amongst the Arctic states, namely via the means of the Arctic Council, which seems to historically as a rule of thumb prioritise the cooperation within the Arctic concerning the regional matters regardless of the international disputes. Where we nowadays however see the fora such as AC underperform is when it comes to problems outside the region which are no longer possible to ignore, such as the increased perception of Russia as a security threat by the other members of the Arctic Council following the war in Ukraine or the all-time low relations between the U.S. and China. The forum fails to address the problems of the Arctic as a whole without one of its biggest members (Simpson, 2023). As per the nature of its origin and limited international jurisdiction, the AC focuses primarily on scientific research and on addressing environmental problems and issues regarding the rights of Indigenous Peoples (Spohr et al., p. 382). AC seems to however lack the authority to mediate any impactful discussions on the development of trans-arctic shipping in regard to international relations and only acts as an international arbitrator and a knowledge-gathering institution (Smieszek, 2018). As important as the EP is, we may conceivably argue that the AC’s EP mechanisms would be more functional and impactful if other decisions regarding the region would also be regulated by the very same organisation, allowing for more effective implementation of the eco regulations.

Since the issuance of the Ottawa declaration in 1996 henceforth giving birth to the Arctic Council, the AC has pursued joint environmental initiatives and the promotion of sustainable local development rather than decisions related to militarisation and other similar security issues. The declaration in fact included a footnote that stated that the group should not deal with matters related to military security (Spohr et al., p. 382). It is up for debate, whether this is the most effective approach to address the Arctic matters, as some could conceivably argue that a forum addressing the Arctic-related concerns holistically with perhaps different specifically dedicated sub-forums could be more adequate in terms of dealing with highly interconnected affairs of the Far North.

When it comes to arctic shipping, the council's one of the only two bodies currently dedicated to naval activities is the *Task Force on Arctic Marine Cooperation,* which via its 2015 report primarily addresses environmental concerns connected to marine activities, but abstains from devising concrete propositions on tangible plans for international arctic shipping. On the other hand, one could advocate for a need to establish a sub-forum specifically dedicated to commercial arctic shipping which would, in turn, apply the EP politics of the council, it is, however, questionable whether the AC currently possesses, or will in the foreseeable future, the agency to mediate such affairs.

A more extensive study which concerns the different aspects of arctic shipping is the 2009 Arctic Marine Shipping Assessment (AMSA) – comprehensive research of the AC's working group on the Protection of the Arctic Marine Environment (PAME). The report is a culmination of the findings of an extensive 4-year-long study on the evolving marine environment but due to its early 2000s origins primarily focuses on the concerns regarding the development of the NWP and NSR sea routes. Its key findings include:

- Increased economic activity due to resource exploration
- Challenges and opportunities for Arctic communities and governments
- Potential impact on Indigenous cultures reliant on the Arctic ecosystem
- Safety and rescue operations

The latter amongst other items, is more closely addressed in the latest update to the status of the report's implementation in 2017. The report addresses problems in a general way and lays a moral and technical framework for the short-term future of Arctic shipping, as well as serving as a demonstration of the complexity of the drivers and uncertainties that can influence the future of Arctic navigation. The 2009 report in its outdatedness fails to assess the evolution of Arctic shipping beyond 2020 and begs for a perhaps more up-to-date acknowledgement of the latest trajectory of the shipping industry in the region, which gradually becomes more accessible to a trans-shipping over the traditional in-Arctic destination-bound shipment of resources than before.

As Østhagen suggests the regional relations in the Arctic are rather acceptable, and so perhaps one was to uncover security issues or motives for Arctic securitisation on different levels, such as the "global" and "bilateral" to which Østhagen refers as being on the "bad" and "ugly" side of the spectrum (Depledge et al., 2021, p. 26).

From the perspective of global power politics, the Arctic has been historically viewed as a "buffer zone" between two major superpowers, Russia and the U.S., with the Arctic airspace comprising the shortest distance for long-rage bombers to reach the enemy's shores during the Cold War (Depledge et al., 2021, p. 26).

Nowadays, it is not only the opposition posed by Russia in the Arctic that troubles The White House, but also the presence of China, which may have been perhaps most clearly demonstrated by former president Trump's statements about "buying" Greenland – a stunt indicating strategic security concerns over Chinese investments in Greenland. The reopening of the US consulate in Greenland's capital, Nuuk, in 2020 (U.S. Mission Denmark, 2020) signals the importance of the Arctic in the U.S.-China rivalry and opens up another arena of growing competition between the two superpowers (Depledge et al., 2021, p. 27). China is not the only Asian country staking a foothold in the Arctic. Apart from others, India, South Korea and Japan have also demonstrated their own respective interests in the far north. In 2008, India established "Himadri," the first Indian research station in the Arctic, located at Ny-Ålesund, Svalbard, which highlights their commitment to establishing itself in the region (Indian Ministry of Earth Sciences, 2008).

Since the 1990s, South Korea has been involved in Arctic research, initially collaborating with Japan and then moving to independent research programs. They established the Korea Arctic Scientific Committee in 2001 and joined the International Arctic Science Committee. Former President of the country Park Geun-Hye, who took office in 2013, announced the Arctic as a priority for the national government to achieve a "creative economy" (The Arctic Institute, 2022). Moreover, in 2017, South Korea announced the "Nine Bridges" initiative aimed at strengthening its ties with Russia in nine areas of potential cooperation. The initiative, however, came to a gradual halt after the escalation of the Russian-Ukrainian conflict (Yea & Yeon, 2023). South Korea itself is navigating a precarious situation, given the over-70-year-long-lasting security alliance with the U.S. as well as its vast economic ties to China (Stangarone & Work, 2003). With U.S.–Chinese relations at an all-time low, South Korea walks on a tightrope maintaining good international relations with both superpowers. At this stage, it would however likely be mere guesswork trying to imply any translation of these intricate relations to the Arctic, as the Korean position of an Arctic observer is rather meagre compared to other perhaps more impactful actors in the region.

Lastly, Japan has also been engaged in Arctic research for decades. They actively participate in international research projects and maintain research stations in the Svalbard archipelago (Japanese National Institute of Polar Research, 2024).

The involvement of several non-arctic states in the research of the far north indicates that "the scramble" for the Arctic spans way beyond the geographical borders (however defined) of the region, making the security concerns on a global level that much more intricate. However, we may argue that (for now) the mostly scientifically motivated presence of some non-Arctic; global actors in the region partially contradicts the "bad" connotation between the global geopolitics and the Arctic.

When Østhagen refers to "ugly" bilateral relations in the Arctic, this mostly regards relations between Russia and the Nordic allies of NATO, namely Finland (land-based military security) and Norway (maritime military security). The word "ugly" refers to the fact that there are a number of bilateral agreements between the northern European countries and Russia[6], yet their international relations are subject to increasing tension with the immediate security concerns much stronger compared to those in North America, due to the geographical proximity, resulting in increasingly amounting and scaling NATO and Russian military exercises in the region. Finland in particular is a country notorious for its "complicated" relations with its eastern neighbour.

Formerly a part of the Russian Empire until the Bolshevik Revolution in 1917, Finland participated in the 1939 "Winter War" against the Soviet Union in which the country ultimately ceded territory but maintained its independence. Subsequent to the war, Finland adopted a policy of "Finlandisation" whereby it retained a neutral status in order to avoid antagonisation of the Soviets. This policy expired with the fall of the USSR in 1991 and Finland joined the European Union (Zetteberg, 2017). After decades of relatively peaceful relations between Finland and Russia, the situation deteriorated again in 2014 with the annexation of Crimea by the Russian Federation and the later open war between Russia and Ukraine (Feldman, 2024). Ultimately, Finland's decision to join NATO along with Sweden significantly altered the security landscape in the Arctic and expanded the potential of the conflict between the two states out to not just the whole of the Arctic, but arguably the rest of the world as well. Some may reasonably argue that it is unlikely for Russia to wage an offensive war against the Nordic countries backed up by NATO, especially with the ongoing (and likely costly) war in Ukraine,

[6] There is a number of bilateral agreements between the Nordic countries and Russia, including for example, co-management of fisheries and joint search and rescue operations between Norway and Russia (Depledge et al., 2021, p. 29) or a Bilateral Investment Treaty (BIT) from 1989 between Finland and Russia (World Trade Institute, 2024).

which is seemingly taking a course far from the expected one for the Russian invaders (Kauranen, 2024). Nonetheless, the increasing tension along the Russian-Finnish (and Norwegian) border certainly provides a catalyst for further military securitisation in the region.

4.1.6. Two Faces of Securitisation of the Arctic

The drivers behind the process of securitisation in the Arctic as a social construct are apparent and arguably most prominently include the previously illustrated concerns regarding the tensions among Russia, and other Arctic states and perhaps the looming ambiguity behind China's Arctic endeavours, as well as the general pursuit of natural resource extraction in its northern abundancy, and the climate change. In recent years, this notion of increased security risks in the region manifested in the appearance of several security mechanisms, one of them being for example the establishment of the Arctic Regional Centre by the U.S. Department of Defense, which ought to "bring increased cooperation on the unique challenges and security concerns related to the Arctic region." (U.S. Department of Defense, 2021)

Alaska is naturally one of the grounds where the effects of securitisation may be perceived more strongly and has arguably been securitised by being gradually over the years labelled as one of the most likely avenues of the military actions against the United States; "Alaska is America's Arctic guardian", said the former U.S. governor of Alaska Sean Parnell (Paul, 2023). This idea of Alaska as an Arctic stronghold to repel a potential military strike has led to its vast militarisation, *i.e.*, in the fashion of securitisation justified the adoption of extraordinary measures. Currently, there are more than 20,000 troops stationed in the Alaskan bases such as Eielson Air Force Base and Fort Wainwright in the Fairbanks area, Joint Base Elmendorf-Richardson in Anchorage, and Coast Guard Air Station Kodiak (Baker, 2022). Naturally, the recent development in Ukraine has but strengthened the perceived need for increasing military security in the North American circumpolar region. This ongoing war has introduced the reality of the impending military threat posed by Russia into the consciousness of the general public, hence opening up the doors for taking further security measures against Russia and other states that may in the public perception represent a similar threat.

That said, the process of securitisation may often be associated with rather negative connotations of mechanisms that do not necessarily promise the employment of soft power in a conflict resolution and perhaps even contribute to the escalation of international disputes, such as an increase in scope and frequency of military exercises in the Arctic region. Securitisation may however also bear a rather positive impact on IR. An obvious example would be the Arctic Council waging against climate change, by encouraging the international stakeholders in the Arctic to contribute to the research regarding climate change and limit the processes inducing global warming as well as voicing its concerns towards the public (Arctic Council, 2024).

A fitting example of securitising climate change in the north would be the notorious depiction of a polar bear as a symbol of the worsening climate situation in the Arctic, which gained enormous traction in the early 2000s. Although polar bears undoubtedly are one of the inhabitants of the Far North that suffer from the melting ice, the strength of this message lies in its powerful storytelling of a *magnificent* force of nature displayed in an iconic apex predator of the northern regions of the planet starved to the bone or stranded on a floating iceberg. Although this image might be in many ways reductionist, it served its purpose of attracting public attention towards the north and hence arguably oiling up the gears of international cooperation in an effort to combat global warming and its impact on the natural environment.

Similarly, in terms of maritime navigation, the security issues concerning the environmental preservation or the physical security of the workforce operating the Arctic infrastructure serve as the basis for "positive" securitisation which in turn develops and strengthens the already existing international mechanisms designated to address these issues. The "polar bear" for maritime operations in the Arctic could be initiatives such as The Blue Arctic, a marketable name under which the U.S. Navy released a strategic blueprint in 2021. According to the official channels "A Blue Arctic provides the general idea that the Arctic is gradually turning from 'White' to 'Blue'— and by that, reduced ice coverage is making Arctic waters more accessible and navigable, which will enable nations and their navies to access new sea routes, resources, and markets." (U.S. Navy, 2021) The document specifically addresses concerns regarding the maritime activities of Russia and China and advocates for a "tailored" approach to the U.S. Arctic militarisation.

Overall, securitisation's downsides arguably outweigh the positives, and instances, where issues such as global warming are securitised to spread awareness by applying clever narratives, are rather sparse. According to scholars like Allan Behm, securitisation in a general sense diminishes the autonomy of an individual citizen, and normalises practices whereby the state proceeds to confect emergency or panic while addressing the symptoms of a problem rather than its cause. Ultimately, over-securitising an issue may lead to its militarisation and involvement of law enforcement and intelligence-gathering mechanisms to resolve matters that are fundamentally economic, political and social (Behm, 2020, p. 15).

4.1.7. Militarisation of the Arctic

In recent years Russia has been ramping up its military presence in the Arctic, reopening Cold War-era bases, conducting more exercises, and deploying advanced weaponry. This includes a powerful nuclear icebreaker fleet and ballistic missile submarines (Pedersen & Fouche, 2022). In response to Russia's actions, NATO countries, including the United States, have increased their own military presence in the Arctic. This includes exercises, deployments, and investments in cold-weather warfare technology. In March 2023, 20,000 NATO troops carried out the largest-ever military exercise in the Arctic named "Joint Viking" including the participation of the newest NATO members – Finland and Sweden (CSIS, 2024).

The gravity of the perceived security threats in the Arctic (and overall) is clearly indicated by the massive investments in the binational North American Aerospace Defense Command (NORAD) approved by the Canadian government in June 2022, announcing the plans for its modernisation via the investments of 38.6 billion USD over the course of the next two decades (Canadian Government portal, 2024). NORAD has been historically associated with defending the Arctic, suggesting that the avenue of a potential attack against North America leads through the Arctic (Depledge et al., 2021, p. 64). One of the prominent criticisms of the current state of NORAD is its lack of interconnectedness with other systems, which may in a critical situation result in loss of time and invaluable information, ultimately leaving the allies out of the loop, as suggested by Dr Andrea Charron, an expert in Canadian security (Depledge et al., 2021, p. 65).

From the "Western" point of view, the "togetherness" of the allies in the Arctic is a key element when it comes to Arctic security as well as the physical development of the TSR and to some extent the NWP. On October 20, 2023, the Chair of the NATO Military Committee Admiral Robert Bauer, during his attendance at the 10th edition of the Arctic Circle Assembly in Iceland formulated his concerns regarding the security in the Arctic by saying:

"The increased competition and militarisation in the Arctic region, especially by Russia and China, is concerning. The melting ice in the Arctic is creating new sea routes that would facilitate the movement of large vessels and shorten navigation times. We cannot be naïve and ignore the potentially nefarious intentions of some actors in the region. We must remain vigilant and prepare for the unexpected (…) JFC Norfolk sees to it that NATO's force posture supports Arctic operations and provides greater Arctic defence coherence. This ensures that forces and equipment can flow between the continents in conflict and peace and protects our freedom of navigation." (Bauer, 2023)

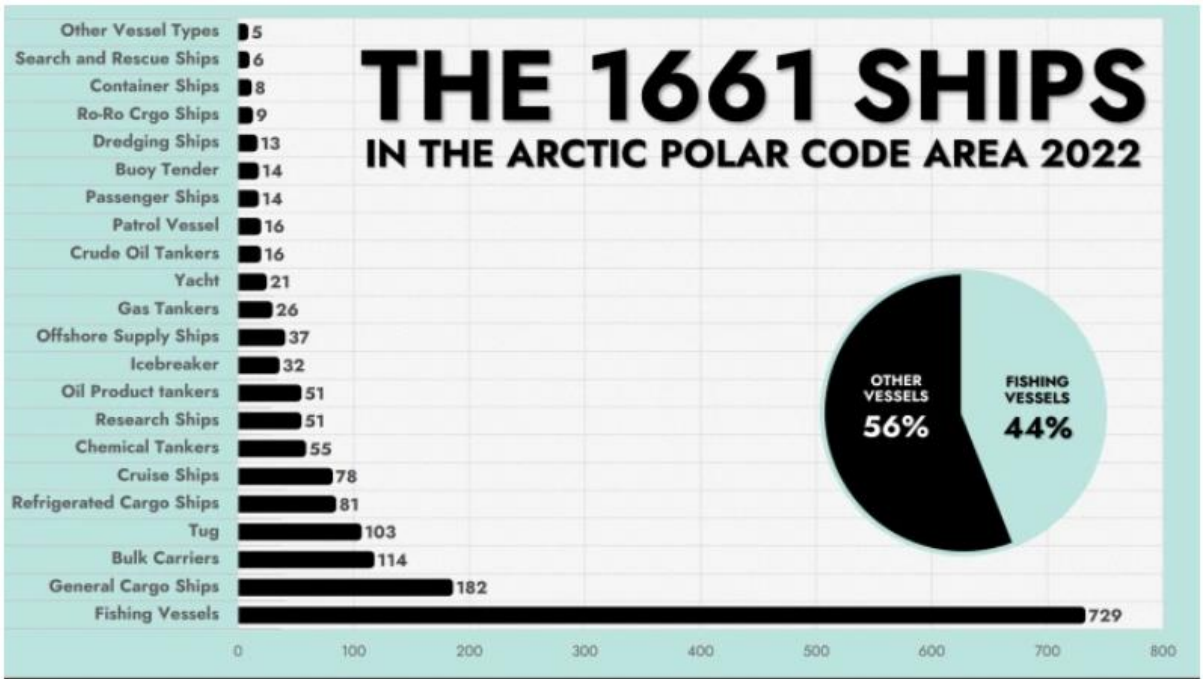
Map of Russian and NATO's military bases in the Arctic; Source: https://www.reuters.com/graphics/ARCTIC-SECURITY/zgvobmblrpd/

According to the chairman, Iceland specifically plays a crucial role in Arctic security and may prove to be a member of NATO of significant importance in the north (NATO, 2023). Iceland also has its own plans for Arctic shipping and intends to partake in the development of the TSR (more in section 4.2.1.), which could conceivably substantially reinforce its strategic power in the north and increase its influence over the trans-arctic shipping and security-related decisions in the region.

The one forum specifically dedicated to military cooperation in the Arctic is The Arctic Security Forces Roundtable (ASFR). Established in 2010, the relatively young forum, co-chaired by the U.S. European Command and the Norwegian defence staff, addresses the military security concerns in the region and reflects the importance of collaboration between European and North American countries in Arctic security. The ASFR brings together senior military leaders from member countries to discuss shared security challenges, promote peaceful resolutions, and enhance cooperation in areas like search and rescue. The ASFR currently houses 11 member states composed of Arctic and Arctic-proximate countries with its 12th member – Russia being currently sanctioned and suspended which has not participated since 2014. China, despite having a similar relation to the Arctic as some of the member states such as Germany or France is likewise absent from the conference. This raises a question of the relevance of such a forum and if the absence of two nations which may potentially raise security concerns in the north does not defeat the purpose of a forum established with a goal to foster dialogue. With its limited member palette centred around the dominant power of the U.S., the ASFR resembles an Arctic NATO-like forum however lacking similar enforcement power.

In a more tangible sense, the waters of the High North are also a place where military vessels are increasingly sojourned (Larter, 2020), possibly raising questions about how the region would handle an increase in both military and commercial traffic and the security of commercial voyages under the risk of unwanted incidents. These concerns are warranted, given the intricacy of navigation across the frigid Arctic waters and the overall harshness and unpredictability of the regional weather conditions, not to mention any concerns which may arise from the future technological development of autonomous ships (more in section 4.2.3.). South China Sea dispute illustrates how such encounters may look, in instances like the 2014 encounter between the Chinese military fleet and the Vietnamese vessels acting against the oil drilling platform placed in the Vietnamese EEZ in discord with the international law set by UNCLOS (Leaf, 2014), or the ramming of a Vietnamese fishing boat by a Chinese

coast guard vessel near the Paracel Islands in 2016 (Joscelyn, 2020). Another fitting example of a potentially devastating encounter between military forces and commercial ships would be the conflict



Source: https://arctic-council.org/news/types-of-ships-operating-in-the-arctic/

in the Strait of Hormuz, where the cargo vessels were targeted by the military actions of Iran's Revolutionary Guards (Reuters, 2019). On top of commercial and military traffic, recreational vessels such as cruise ships and private yachts are with thawing ice also becoming more common in the Arctic waters, together with the ever-present fishing crafts in the region, adding additional variables to possible tense encounters.

4.1.8. Economy of Arctic Shipping

The Arctic holds an increasing economic interest from governmental organisations as well as public companies in connection to both commercial shipping and other industries in the region. Besides Artic's key role in the mitigation of the climate change impacts, or as a neutral zone between the world's military powers, it has the potential to shape the world's economy due to its vast estimated resources as well as the potential to ship goods more cost-efficiently compared to other maritime corridors around the globe. Arctic Economic Council (not to be confused with the Arctic Council) is a naturally neoliberal and independent international organisation established to facilitate sustainable economic development in the Arctic. AEC is a membership-based organisation with representatives from companies across a variety of sectors including mining, shipping, Indigenous economic development corporations and more (AEC, 2024). The Maritime Transportation Working Group (MTWG) is a body of AEC specifically designated to gather and exchange available information on national and international Arctic maritime traffic, address related regulations, as well as development and status of hydrographic mapping.

MTWG's 2019 report on the state of maritime transportation in the Arctic provides an overview and valuable insights into national regulations and the development of Arctic shipping infrastructure. In the report, the AEC stresses that more and stronger public-private partnerships are needed for

infrastructure developments in the Arctic. The AEC criticises the approach of the U.S. government when it comes to not making any significant investments into developing Arctic shipping infrastructure that hence, as we may reflectively argue, lacks a proper competitive edge compared to an Arctic shipping powerhouse such as the Russian Federation. According to AEC, foreign investors from Singapore have recently shown a notable interest in Arctic Alaska. Reportedly, many U.S. actors have recognised that public-private partnerships are the only feasible model for developing shipping infrastructure in Alaska, as experts expect that there will be minimal investment from federal funding in the years to come (MTWG, 2019 p. 12). On the other hand, In Denmark, there are already talks of possible public-private partnership models with the purpose of sharing the capital expenditures and operating expenses in improvements of the maritime infrastructure in Greenland. An example of such a public-private partnership in Europe is Norway's SARiNOR project, which has since its launch in 2012 received positive recognition across the country's search and rescue community. Nevertheless, at the moment, all infrastructure in Greenland is publicly owned (MTWG, 2019, p.13). Russia is notably the country with the single most developed Arctic infrastructure with both public and private sectors closely intertwined with special projects such as the Socio-Economic Development of the Arctic Zone of the Russian Federation from 2014 (government.ru, 2024).

4.2. Scenarios for Opening of the TSR

Understanding the important variables and nuances of the intricate Arctic international relations, law, economy and security, let us explore the possible future scenarios for the opening of the TSR devised on the basis of the current geopolitical climate in the circumpolar north as well as the historical precedents concerning similar cases.

4.2.1. Cooperative Governance

This scenario envisions a collaborative effort by Arctic states, potentially under the framework of the Arctic Council or another Arctic forum - specifically created to address concerns regarding Arctic shipping, to establish a governance regime for the TSR. This arguably (neo)liberal approach to regulation of maritime transportation of goods across the Arctic region is based on the premise of already existing multilateral international forums and agreements in the Arctic and overall, such as the AC, AEC, the Ilulissat Declaration, UNCLOS and others, that as a rule of thumb, are built around and reflect common interests and values of the Arctic states. Such a regime would encompass the ideas of freedom of navigation while upholding environmental regulations and safety standards. Moreover, an upsurge of new joint search and rescue systems would likely be a necessity and one of the first steps in building cooperative governance over the TSR. Implementation of strict measures to minimise the environmental impact of shipping, including pollution control and potential oil spill response protocols would also be one of the defining characteristics of a successfully shared TSR administration. An internationally regulated shipping would also likely translate into a more uniform recognition of the interests of the Indigenous communities and ensure their involvement in the decision-making process regarding shipping in the region.

There are several historical precedents to back up such a form of shared jurisdiction, including for example:

- The Antarctic Treaty System – a model which could serve and is often discussed as one of the potential templates for cooperative governance in the Arctic from the opposite side of the planet, The Antarctic Treaty (AT) established a unique framework for international cooperation in managing a vast, resource-rich continent with no clear territorial claims. The treaty prioritises scientific research, prohibits military activity, and emphasises environmental protection (Antarctic Treaty, 1959). Nevertheless, some experts i.e. Lackenbauer and Dean argue that this association of the Arctic and its southern counterpart is not entirely adequate as Antarctica is unlike the Arctic a continent with no permanent human residents and no previously adopted legal structure such as the UNCLOS (Spohr et al., 2020, p. 335). Lackenbuer and Dean's take on the sufficiency of UNCLOS in managing cooperative governance over the Arctic Ocean rhymes well with Nye's neoliberal inclination of employing established institutions to address concerns regarding international relations. This would also apply to employing principles of the Antarctica Treaty to the Arctic today. One of the perhaps most important takeaways from the AT is the establishment of a dedicated framework for peaceful cooperation and demilitarisation, hence arguably limiting the effects of socially constructed securitisation not only in terms of the threat of militarised conflicts but other security disciplines too, due to the treaty's promotion of (international) scientific research and therefore arguably fact-based – informed decision making. The treaty was likely single-handedly responsible for excluding Antarctica from the Falklands War as well as playing a crucial role in the prevention of the Cold War by encouraging discourse between the U.S. and the USSR (Antarctic division of Australian Department of C.C.E.E.W., 2024) UNCLOS, on the other hand, focuses rather on legal frameworks for resource allocation and dispute resolution but does not explicitly promote cooperation or prevent militarisation. Naturally, the AT (Article III) focuses on fostering scientific cooperation rather than competitive commercial activities[7] and can hardly be deemed to have any implications on items such as commercial shipping. We may argue, however, that commercial and scientific activities fall into the same category when it comes to benefiting from preventing militarisation and securitisation of a scientifically/commercially alluring region of the planet. All that said, it is warranted to say that the AT is not bulletproof either. In the most recent turn of events, Russian research ships have discovered vast deposits of oil lying beneath Antarctica[8], most of which are located beneath the territory claimed by the United Kingdom[9]. At the moment, Russia's official channels claim to have no interest in exploiting the natural resource and entering a dispute with other nations present on the continent. This might, however, in light of the recent military campaign in Ukraine, and talks of Russian withdrawal from another international agreement; UNCLOS, be taken with a grain of salt.
- The International Space Station – Despite having hardly anything in common with maritime shipping, bound by the 1967 Outer Space Treaty (OST) likewise based on the incentive of the Antarctica Treaty and heavily pushed for by the 34th U.S. President Dwight D. Eisenhower (U.S. Department of State, 2024), the ISS demonstrates an example of successful international collaboration in managing a shared resource in a previously unclaimed and hostile domain. Thanks to the OST and the AT, space and Antarctica are still considered international zones free from international discord and national appropriation. Although this does not apply to the majority of the Arctic, principles of international collaboration and a conflict-free zone could

[7] Article IX of the treaty makes it illegal for states to directly profit from Antarctica (The Antarctic Treaty, 1959)
[8] An estimated total of 511 billion barrels of oil are reportedly found, which represents around 10 times the North Sea's entire 50-year output (The Daily Guardian, 2024).
[9] Although the Antarctic Treaty prohibits staking national claims on the continent, some claims that mainly concern locations of scientific research stations pre-date the treaty. These claims are however officially unrecognised by most states.

still find their way to the modern age of Arctic governance much in the fashion of Arctic exceptionalism and a collaborative approach to comprehensive security. Since according to the OTS, no nation has any jurisdictional right to any regions of outer space[10], the land and resource motivation for the public sector is effectively out of the way and therefore, perhaps contrary to a common-sense assumption, potentially slowing down the process of space exploration. On the other hand, this might only represent a further incentive for private organisations to venture into space and exploit natural resources. We may perceive this nowadays with the rise of companies such as Deep Space Industries and Space X. This does not mean that such a system should be or could be adapted by the Arctic institutions, although Arctic shipping would likely benefit from an increased amount of investments flowing from the private sector, especially in some regions such as the Alaskan Arctic, where the government-funded Arctic infrastructure is currently inconceivable, as demonstrated by the AEC report (see page 26).

The obvious main hurdle in devising such a regime in the Arctic is the current tension namely between Russia and other Arctic states. Russia considers parts of TSR to be falling within its own EEZ, if not territorial waters, especially the sections of TSR closest to Russia's northern coast, on top of which the Kremlin does not seem to be on the same page with the other Arctic states regarding the environmental regulations in the Arctic and any dialogue between Russia and other Arctic states is convoluted by the ongoing war in Ukraine. Russia would be likely to oppose such a regime which could otherwise be possible to envision amongst other Arctic and non-Arctic states.

Moreover, the precedents based on the Antarctic and space treaties propose a limited inspiration, given the Arctic already has established legal jurisdiction and is populated by inhabitants.

4.2.1.1. Development of the TSR Under Cooperative Governance

If a cooperative regime was established, construction of two main series of transhipment hubs alongside the TSR would be very likely, effectively creating a basis for a hub-and-spoke system in the CAO in between which smaller hubs could be constructed and icebreakers/polar class vessels would operate.

The first series of hubs would most likely find its place in the Fram straight between the coasts of Greenland and Svalbard with two viable sites eligible for construction of centralised shipping stations.

Longyearbyen – the main port of the Norwegian-administrated archipelago of Svalbard could serve as a potential transhipment hub. The archipelago is subject to a 1920 Svalbard Treaty which protects its signatories' rights to international maritime trade within the archipelago, grants all parties the right to embark and discharge passengers and/or cargo, as well as includes a non-discrimination clause, which essentially establishes that Norway cannot favour its own companies or citizens over those from other signatory nations when it comes to certain activities, (*e.g.,* finishing, owning property, or engaging in commercial activities) within the defined scope. That said, other Arctic or non-Arctic states could potentially build their own ports in Svalbard, as several have already done in building research stations (Bennett et al., 2020, p. 6). Moreover, recent growth in tourism and scientific research resulted in a significant increase in port calls over the recent years and eventually stimulated renovation of the port

[10] For instance, when Apollo 11 planted the American flag on the moon, NASA publicly clarified that this act had no legal significance, hence not staking any claims to the lunar surface (NASA, 1993).

which can now accommodate ships of up to 335m in length, and is expected to receive further upgrades in the near future (Bennett et al., 2020, p. 6).

Iceland is another country which aspires to construct a TSR transhipment hub and is set to do so on its northeast coast in Finnafjord. The project is a result of a cooperation between the Icelandic public and private sector as well as the German company Bremenports. The government-commissioned study in 2019 revealed that shipment via Iceland is likely less commercially viable than shipping through, say, Svalbard, although, the port would offer a significantly more favourable bathymetry than its Norwegian counterpart, thus being able to station far larger ships with bigger draft. Nevertheless, this also means that the Finnafjord hub holds a rather long-term potential for Arctic shipping, once the sea routes are navigable for the truly large container ships, *i.e.,* Handymax and Panamax vessels (Bennett et al., 2020, p. 6).

Another region of the Arctic likely most eligible for a centralised hub system construction would be the waters of the Bering Strait which links the Pacific shipping lanes to the CAO and hence would be a natural choice. There are a number of different locations eligible for the construction of the hub in the Strait on either the Russian or American side of the waterway. It is difficult, however, to imagine a hub system operated by both states bilaterally, given both the current and the historical tension between the two powers as well as the (neo)realist inclinations of both entities and the military ramp-up in the region. Unilaterally developed shipping stations are for the time being perhaps more realistic take, and viable sites for such constructions could be the city of Nome, the world's largest zinc mine – Red Dog, or the Aleut Islands further down south, whose corporate official already sought out investment partners for maritime infrastructure development and cooperation with the Indigenous Peoples, amongst which, most prominently stand out investors from Singapore (Bennet, 2017) On the other hand, ports in Provideniya, Anadyr, Evgenikot, and Beringovsky would all be possible locations for transhipment hubs on the Russian side of the strait with some infrastructure already in place, such as the oil spill response equipment (Milaković et al., 2018).

4.2.2. Unilateral control

Although unlikely, but not entirely impossible, this scenario revolves around a single Arctic state, most likely Russia, asserting greater control over the TSR. It is not a unilateral control in a true sense, but rather a dominance of one state over the other's. Russia would be a natural candidate for asserting such control over a significant part of the route, as a large portion of it lies in proximity of its coastline. Russia's already well-established presence in the Arctic, in the form of military bases, logistical infrastructure and a vast ice-breaker fleet, could give it an upper hand in a scramble over the control of a portion of the sea route. Moscow's tightening relations with PRC, which also exhibits an increasing interest and expertise in Arctic shipping, as well, as, the general unpredictability of its attitude towards IR, as often leaning away from fostering international cooperation and peace. Such a turn of events could conceivably result in the mobilisation of NATO members on Russia's doorstep and in the worst scenario turn into a nuclear "Mexican standoff" not too different from the status quo of the Cold War. This example would reflect a notion of extreme realism, where the Arctic is perceived as a buffer zone between inherently anarchic parties, all attempting to secure one's survival with the Russian Federation as a driving force, which is effectively over-securitising the matter of Arctic shipping. From a neoliberal perspective, we may argue that in such a scenario, the TSR would, apart from abstaining from any positive international interconnectedness, likely remain commercially underdeveloped and

the eventual sites for construction of hubs would possibly not reach their economic potential on account of increased military activity in the region.

There are several precedents for such a scenario from around the globe such as China claiming almost the entirety of the South China Sea despite overlapping claims with several Southeast Asian nations (Zhang, 2024), or Iran asserting significant control over the Strait of Hormuz – a critical checkpoint for oil exports from the Persian Gulf (Esmael et al., 2022). In this case, both states are considered potential allies of Russia, which poses a precedent case on its own with its partial control over the NSR and while not claiming complete ownership, Russia imposes strict regulations on the passage, requiring permits and levying icebreaker fees (Todorov, 2023).

Another possible scenario for a unilateral, yet also collaborative governance of the TSR, includes the possibility of Greenland (whether still as an autonomous part of the Danish kingdom or independently) acting as a neutral manager of the shipping lane which passes in its proximity, effectively not too different from the position of Egypt in regard to the Suez Canal. The Suez Canal, likewise a product of international collaboration, came under the management of the Suez Canal Authority – an Egyptian governmental entity, in 1956 (SCA, 2024).

4.2.3. The "Wild West" Scenario

This dystopian scenario depicts a lack of effective governance, leading to a chaotic situation with unregulated traffic and increased shipping activity without clear regulations or safety standards, potentially leading to accidents and environmental damage. Intensified competition for resources in the Arctic would potentially lead to disputes and resource grabs, as well as, an increased likelihood of piracy, illegal activities, and potential for military confrontations. Given the strong relations among most Arctic states, as well, as the observer states, a full-blown "every man for himself" scenario appears extremely unlikely. However, with rapid advancements in maritime technology, such as autonomous icebreaking/shipping technology (Rolls Royce, 2024) the ability to establish a robust and effective governance framework could be simply outpaced. Furthermore, outside factors such as global economic crises, could motivate an increased need for states to secure their own survival, incentivise securitisation and further limit the impact of liberal organisations such as the Arctic Council.

The reality that a large portion of the TSR, as of current, lies in the high seas, gives conceivably any state a right to construct an artificial island in its waters, thus staking a foothold in the Arctic, such as for instance China did in the South China Sea (Lin, 2018). UNCLOS does not explicitly prohibit construction of the artificial islands on high seas, and rather, under Article 60, defines the exclusive rights of coastal states to carry out such constructions within their respective EEZs (UNCLOS, p. 45). Here we arrive at the problematic outdatedness of the UNCLOS which does not sufficiently contemplate new technological advancements which have the potential to allow projecting power (Lin, 2018). For instance, autonomous shipping is a technology which is expected to become more prevalent in the upcoming years, with no clear international regulations in effect (IMO,2024). International Maritime Organisation is currently preoccupied with establishing a regulatory framework for autonomous shipping, which started with the regulatory scoping exercise in 2021 and is expected to release a non-mandatory MASS Code in 2025, which if successful, should form the basis for a mandatory goal-based MASS Code to enter into force on 1st of January 2028 (IMO, 2024).

A historical example of such a scenario where technology preceded relevant regulatory measures could be the Cold War itself, where the appearance of new technology, initiated the "space race"

between the two nations with access to state-of-the-art space tech - the U.S. and USSR. Both superpowers then prioritised achieving milestones like the first satellite launch, lunar landing, and spacewalk, often at the expense of collaboration or long-term planning (Dinkel, 2010). Another example could be the North Sea oil boom in the 1960s through 1970s when the discovery of oil and gas reserves in the North Sea led to rapid development, which resulted in eventual disputes, increased tension and environmental damage (Fernie, 2008).

Naturally, one must understand that establishing regulations and governance over the TSR is a dynamic process and what may commence as one scenario may eventually turn into a different one, much like the precedents these possible scenarios are rooted in. That said, none of the above-described scenarios are mutually exclusive and elements of all will most likely find their way to the actual state of things in the politics of the Arctic waters.

The following, and the last section of the analysis will lead a discussion regarding the possible outcomes the opening of the TSR in either/a mixture of the aforementioned scenarios, could have on the Arctic states, as well as the economy, international relations and distribution of power on a global scale.

4.3. Predictions

The emergence of a new maritime corridor such as the TSR with an undeniable potential to make the global shipping of goods more efficient, would conceivably result in a minor technological revolution in Arctic shipping aimed at devising shipping technologies best suited for the hostile Arctic environment. The private sector would likely benefit from the demand for new vessels which adopt the newest technology such as double-acting PC vessels, modern icebreakers and autonomous carriers. As most Arctic states lack sufficient infrastructure and suitable vessels to operate along the route, the construction and operation of the shipping fleets and hubs across the TSR would likely create new jobs and grow the Arctic shipping industry exponentially (Buixadé Farré et al., 2014, p. 305-316).

Countries bordering the Arctic Ocean will almost certainly be the ones to benefit from the booming industry the most as they become hubs for refuelling, resupplying and repairment of the transiting ships. Apart, from the Arctic states, the points of departure (namely the countries of East/Southeast Asia) and the arrival of the cargo (namely countries of the E.U.) will also benefit from the shorter shipping times and potentially decreasing costs. Through the connection of Europe and Asia via the Arctic, we might observe an increasing number of bilateral agreements to appear designed to facilitate commercial shipping and hence arguably indirectly strengthen the effect of globalisation by increasing economic interconnectedness.

On the other hand, unless a cooperative governance system is established, environmental security may be put at further risk by not having unified restrictions and encouraging competition at the cost of environmental protection, such as during the years of oil discoveries in the North Sea through the 1960s and 70s (Fernie, 2008). Furthermore, melting ice and rising job opportunities would likely attract increasingly more people to the Arctic, potentially disrupting the traditional way of life of the local communities. We have seen this process unfold previously in the Arctic[11], which has been underway for decades and would likely only escalate with further development of the region.

[11] The discovery of oil in Alaska in the 1960s brought about rapid change. The construction of the Trans-Alaska Pipeline disrupted caribou migration routes, a crucial food source for many Alaska Native communities (James, 2016) Additionally,

The impact of the opening of Arctic shipping lanes on other economies around the globe, namely those dependent on shipping is perhaps the most debatable. We may observe a certain relief of the intense shipping traffic from the maritime corridors in other parts of the world that may in turn diversify and focus on regional and other niche markets, such as the transportation of oil and natural gas (which could otherwise represent an increased environmental hazard, if shipped across the Arctic) or catering for the world's largest container ships that would be unable to safely transit the shallower Arctic straits.

From a rather neorealist point of view, we may observe a shift in the power dynamics northward, conceivably negatively impacting some economies, especially those closely dependent on transhipment such as Panama or Egypt, which if failed to adapt, could face economic turbulence caused by a likely decline in transhipment of goods. We may observe the impact of this focused economic dependency via the Panama Canal's setbacks caused by the severe draughts, or the blow to Egypt's economy caused by Houthi's response to Israel's war on Gaza, with the Suez Canal's revenue plummeting by 40% per cent compared to the previous year (Cafiero, 2024).

On a different note, one way or another, Russia is a country certain to participate in the scramble over the division of the Arctic. Whether it will be as a part of a larger coalition of partners, under the forum of the Arctic Council or another, or by waging a dispute over the portion of the TSR lying in proximity to its coast, it is easy to envision Russia occupying a dominant position in the field of Arctic shipping. Given the noticeable margin by which currently the Russian Federation is separated from other Arctic states in terms of infrastructure (Sherwin & Bishop, 2019) and the sheer size of the adjacent Arctic waters surrounding the longest world's Arctic coastline of over 24,000 km (The Arctic Institute, 2022), it is likely to benefit from the thawing waters as one of the first amongst the Arctic states. It will, however, likely prove difficult to efficiently manage the trade along the route unilaterally, as showcased by the questionable profitability of the NSR in recent years (Bennett et al., 2020, p. 4). At the moment, it is anyone's guess whether the Kremlin will be in the future able to find further common ground with the rest of the Arctic states or whether it will turn its favour to their potential ally China and strive to counter the liberal - "Western" countries and institutions.

As previously argued, China is another country which finds itself in a rather favourable position. Not only does the opening of a new Arctic shipping lane mean the facilitation of the export of Chinese goods, such as electrical machinery, plastic articles, and vehicles[12] but also, as seen by the recent active approach of Bejiing, a chance to enter the new arena of the Arctic and Arctic shipping. China is already considered an undisputed powerhouse in the global maritime trade[13], and reinforcing its position by establishing itself in the far north may come much to the dislike of some of the "traditional" Arctic actors such as the United States or Canada. Increased power and political influence in favour of China may conceivably add to the current disarray in the South China Sea. In order to balance the growing influence of the PRC, other states may likewise seek to secure a position in the Arctic. This could arguably be one of the motivators behind other Asian countries, such as India, Singapore, South Korea, and Japan aspiring to participate in Arctic matters. With a further widening pallet of Arctic actors, new

increased economic activity may be one of the factors that brought social problems like alcoholism and drug abuse to some indigenous cultures. Furthermore, During the 20th century, the Soviet Union forced Siberian Indigenous Peoples, like the Chukchi and Yakuts, to abandon nomadic herding lifestyles for collectivised agriculture. This disrupted traditional land use patterns and caused social and economic hardship for the local communities (Minority Rights Group, 2024).

[12] Machinery such as computers, broadcasting technology, and telephones as well as transport equipment make up the largest part of Chinese exports. This category amounted to approximately 1.69 trillion U.S. dollars in export value in 2022 (statista.com , 2024)

[13] The United Nations Conference on Trade and Development (UNCTAD) estimates that roughly 80 per cent of global trade by volume and 70 per cent by value is transported by sea. Of that volume, 60 per cent of maritime trade passes through Asia (UN, 2016).

and more robust security measures will be likely to take effect. This may conceivably lead to an increased securitisation of the north, by states framing the resource competition as a national security threat, justifying increased militarisation of the region. On the other hand, as previously mentioned, securitisation can also be a tool for cooperation. By collectively framing environmental degradation as an existential threat, Arctic states can work together on regulations and mitigation strategies. The success of the 2018 Agreement on Preventing Unregulated High Seas Fisheries in the Central Arctic Ocean exemplifies this approach (Arctic Council, 2021).

5. Conclusion

5.1. Perspectives

Many of the geopolitical dilemmas including those in the Arctic are often subject to assuming a perspective. While the AC – a primary example of liberal Arctic exceptionalism usually addresses concerns from within the Arctic itself, other, perhaps more realist-oriented international institutions such as the UN might undertake matters concerning the Arctic by looking in from the outside. This may often result in two fundamentally different approaches, where one's goal represents the concept of "greater good" and the other entertains the idea of righteousness – both being morally conscious, with however two fundamentally opposing solutions. A fitting example to represent this complexity of the bilateral relations in the region would be once again, the current position of Russia in the Arctic. In 2010, Russia and Norway were able to resolve a long-lasting dispute over a maritime boundary in the Barents Sea and have ever since established cooperation over an oil spillage response system alongside the northern coast of Europe and Asia. From the perspective of the inside-arctic *i.e.,* the "greater good" point of view, such bilateral agreements are considered an undisputed success. In a hypothetical scenario of similar new bilateral agreements occurring today, any cooperation with Russia in the eyes of NATO and other IGOs would be considered against the principles of conflict mitigation. This philosophical conundrum may also be viewed as an adequate example of an argument both pro and against Arctic Exceptionalism as an ideology given that the cooperation might be based on *pro-bono* motives, yet some matters arguably transcend the borders of the Arctic and hence need to be addressed holistically.

5.2. Conclusive Discussion

In an increasingly globalised world, with interdependent mechanisms of *e.g*., oil trade, food and water supply, and the intricate interconnectedness of global economies it becomes apparent that the concerns regarding a certain region of the planet, the Arctic included, will soon, if not already be impossible to address internally. This thesis demonstrated the complexity of Arctic relations which transcend the borders of the northern regions of the planet and have the potential to effectively influence patterns around the world. Given the possible impact of the soon-to-be reality of trans-Arctic shipping on, apart from others, the environment, economy and geopolitics within and outside the Arctic, the Arctic and non-Arctic states should strive to foster cooperation and joint (environmental, physical…) security mechanisms to secure "sustainable" and conflict-free shipping along the Transpolar Sea Route and other Arctic maritime corridors. Moreover, the Arctic states arguably ought to consider opening a stronger dialogue forum with the new potential Arctic actor China, which with its increasing Arctic prowess and conceivably forming a partnership with another Arctic superpower – Russia could, if unaddressed represent a serious concern to the Arctic security and the cooperative development of the TSR (and potentially other Arctic sea routes). Furthermore, both China and Russia hold the potential to vastly securitise the matter of trans-arctic shipping due to the authoritarian nature of the state's politics, giving yet another reason why international dialogue may prove more beneficial than leaving some Arctic/near-Arctic stakeholders out of the loop potentially stimulating unilateral Arctic policy-making. Despite representing a possible securitisation catalyst, it can hardly be said in an unbiased fashion, that the Chinese interest in entering "the Arctic arena" is not understandable. Much like the U.S., China is arguably too being driven in perhaps a neorealist sense by increasing its

geopolitical influence and securing a stronger position in a global power configuration, indicating that the U.S. and its allies might be more concerned about China's growing power and influence, as well as conducting affairs closer to the North American doorstep, than any specific threat China poses to the Arctic itself.

Circling back to the beginning of section 4.1.3., the Arctic always hosted a spectrum of different narratives and definitions of what the Arctic is as well as political cultures of the countries that have historically bore the label of being Arctic states, which has eventually been partially given away to others as well. In a rapidly globalising world, it is perhaps unrealistic to expect that this process will cease at once and the Arctic will stay exclusive to those who have already secured or inherited its position in it. We might say that despite the Arctic ice coverage shrinking, the Arctic is, in a geopolitical sense, expanding by being more and more prominently put in the spotlight of various state actors as well as private stakeholders. It is besides the point whether this process of “expansion” is right or wrong towards the states placed at the centre of Arctic affairs such as the Arctic Council founding “eight”, the fact remains that if a proper dialogue is not held, the “far north” may soon become divided into two or more opposing camps driven by the similar, yet competing goals, laying grounds for further securitisation of the region and potentially escalating to future conflicts.

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