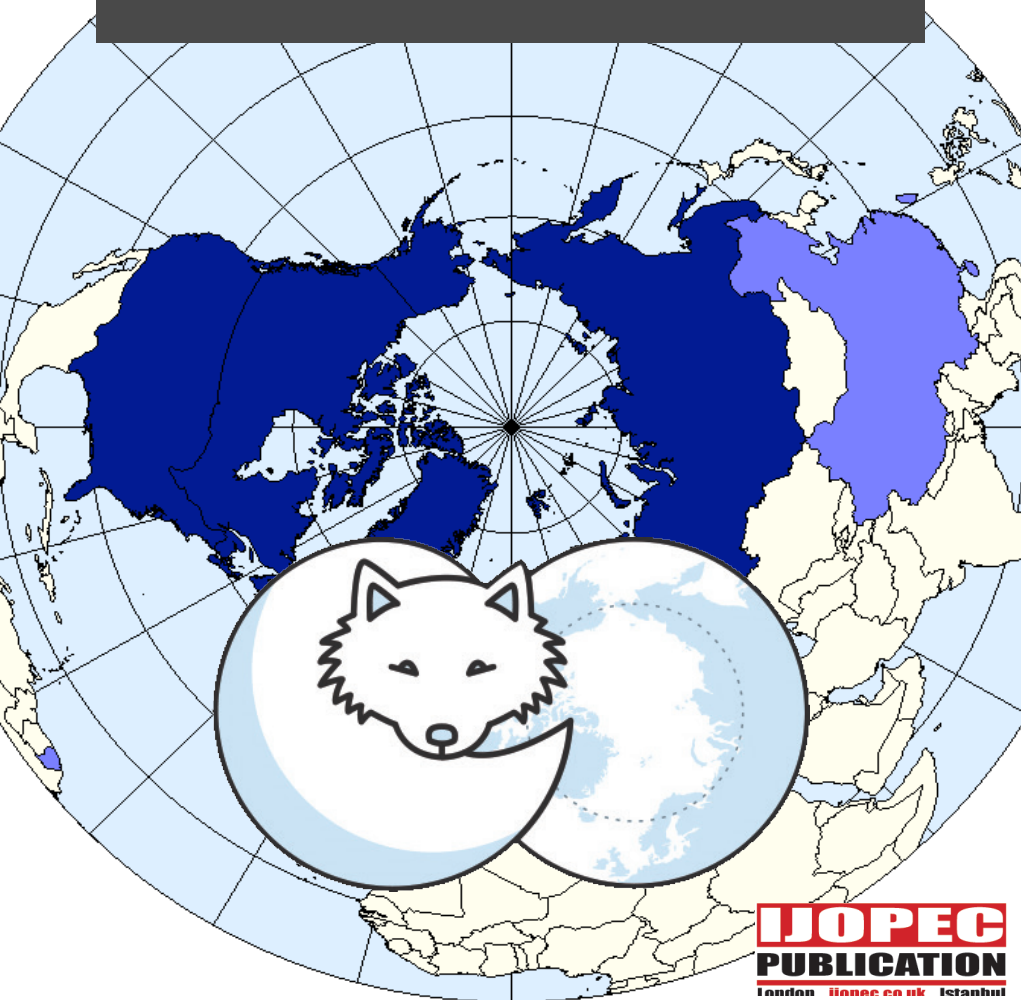


COOPERATIVE ROLE OF THE ARCTIC COUNCIL AS AN EXAMPLE OF REGIME FORMATION

ADNAN DAL



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PREFACE AND ACKNOWLEDGEMENTS

Scientific research has been conducted in the Arctic for decades. Nevertheless, the intensity of relevant research is currently increasing as the effects of climate change are becoming rapidly worse. It is a fact that the ice is melting at an astonishing rate. Because of this situation, the region has recently been witnessing both challenges and opportunities. The latter includes the exploitation of hydrocarbons and utilizing accessible maritime routes -both of which are opportunities gathering less attention- whereas conflicting issues regarding sovereignty and national security are regularly thematized by politicians and media. Here, the point is that, whereas challenges are being underlined, the opportunities are being ignored. Put differently, while politicians and the media address issues pertaining to the regional policies -especially conflicting ones and ecology of the region- on the other hand economic potential of the region triggered by the ice-melting is paid no mind. With this in mind, as the most significant institution in the region, the Arctic Council aims to manage the issues in question. Thus, through this manuscript I aim to provide enlightenment on the Arctic states' predominant intent to utilize opportunities under the auspices of the Arctic Council via neoliberal policies. I claim that the Arctic Council provides cooperation among its members and by doing so, constructs stability by focusing on the relevant opportunities. Additionally, I assert that unlike power-based or knowledge-based pillars of regime structure, the Council could be best understood via interest-based perspective. Thus, the scope of this book is related to the neoliberal perspective of the Arctic Council.

This book concludes that the Arctic Council holds its members on a common ground of cooperation. Furthermore, it indicates that the Arctic states aim to further economic development as a significant common interest. Thus, it concludes that the Arctic states opt for benefiting opportunities by taking part in the Council in place of focusing on confrontational issues. Moreover, Asian observer states of the Council as new comers to the region strengthen the cooperative mechanism of the Council. Besides, economic development has been the most significant instrument among common interests of the Arctic states so far, motivating them to take cooperative steps. All in all, it is purported that the Arctic Council

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constructs stability through neoliberal policies among its members. In other words, it is assumed that interest-based formation of regime theory has the best explanatory instruments in understanding the cooperative attempts manifested in the institutional structure of the Arctic Council.

The idea of commencing research in relation to the Arctic stemmed from my concern for climate change. As the Arctic is severely affected by climate change, even more so than other parts of the world, the consequences of this change are too numerous to mention. Nevertheless, the region is transforming into an area of increasing significance for energy resources. Additionally, there are now two new alternatives to traditional maritime routes, which make the area more accessible in comparison to the past. As the region is of vital importance to delineate, it has been my pleasure to conduct this research which aims to contribute to the current level of international relations literature.

This book is produced from my doctoral dissertation under the supervision of Assist. Professor Mehmet Ali Ugur (Yalova University). Thus, I would not have been able to provide this manuscript without the strong support of my respected advisor Mehmet Ali Ugur who has provided guidance and advice throughout the publishing process, deserve a medal. Here, I also would like to express my gratitude to Ahmet Safa Yıldırım for his helpful suggestion during the manuscript writing. Additionally, I would like to thank my beloved mom, my wife Hüda, my son Yahya Emin, and other family members whose patience has encouraged me. They have always been empathetic and supportive towards me. Thanks to everyone for their energetic support.

Adnan Dal, Ph.D.
June, 2020

For my parents

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ABBREVIATIONS

ATS	: Antarctic Treaty System
ABA	: Arctic Biodiversity Assessment
AC	: Arctic Council
ACGF	: Arctic Coast Guard Forum
ACIA	: Arctic Climate Impact Assessment
AEC	: Arctic Economic Council
AEPS	: Arctic Environmental Protection Strategy
AGDC	: Alaska Gasline Development Corporation
AMAP	: Arctic Monitoring Assessment Programme
AMSA	: Arctic Marine Shipping Assessment
ASEAN	: Association of Southeast Asian Nations
AWPPA	: Arctic Waters Pollution Prevention Act
A5	: Arctic Five
A8	: Arctic Eight
BEAC	: Barents Euro-Arctic Council
BEAR	: Barents Euro-Arctic Region
BRC	: Barents Regional Council
B2B	: Business to Business
BB	: Billion Barrels
BBO	: Billion Barrels of Oil
BBOE	: Billion Barrels of Oil Equivalent
BP	: British Petroleum
CAFF	: Conservation of Arctic Flora and Fauna
CARA	: Circum-Arctic Resource Appraisal
CHNL	: Center for High North Logistics
CNOOC	: China National Offshore Oil Corporation
CNPC	: China National Petroleum Corporation
COSL	: China Oilfield Services Limited
CO2	: Carbon Dioxide
DEW	: Distant Early Warning

ABBREVIATIONS

EIA	: Energy Information Administration
EPPR	: Emergency Prevention, Preparedness and Response
EU	: European Union
GDP	: Gross Domestic Product
GIUK	: Greenland-Iceland-United Kingdom
G8	: The Group of 8
G20	: The Group of 20
IASC	: International Arctic Science Committee
ICBM	: Inter-continental Ballistic Missiles
ICJ	: International Court of Justice
ICRW	: International Convention for the Regulation of Whaling
IEA	: International Energy Agency
IMF	: International Monetary Fund
IMO	: International Maritime Organization
INSROP	: International Northern Sea Route Programme
IWC	: International Whaling Commission
KOGAS	: Korean Gas Corporation
LNG	: Liquefied Natural Gas
MOPPR	: Marine Oil Pollution Preparedness and Response
MOU	: Memorandum of Understanding
NAFTA	: North American Free Trade Agreement
NATO	: North Atlantic Treaty Organization
NCAOR	: National Centre for Antarctic & Ocean Research
NEP	: Northeast Passage
NORAD	: North American Aerospace Defense Command
NPC	: National Petroleum Council
NSIDC	: National Snow & Ice Data Center
NSR	: Northern Sea Route
NWP	: Northwest Passage
OAS	: Organization of American States
ONGC	: Oil and Natural Gas Corporation
PAME	: Protection of the Marine Environment
POMOR	: Joint Naval Exercises of Russia and Norway

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SAR	: Search and Rescue
SCAR	: Scientific Committee on Antarctic Research
SDWG	: Sustainable Development Working Group
SLBMs	: Submarine Launched Ballistic Missiles
SSBN	: Strategic Submarine Ballistic Nuclear
TAPS	: Trans-Alaska Pipeline System
TCF	: Trillion Cubic Feet
UArctic	: University of the Arctic
UK	: United Kingdom
UNCLOS	: Commission on the Limits of the Continental Shelf
UNCLOS	: United Nations Convention on the Law of the Sea
UNFCCC	: United Nations Framework Convention on Climate Change
USA	: United States of America
USGS	: United States Geological Survey
USSR	: Union of Soviet Socialist Republics
WBG	: World Bank Group
WTO	: World Trade Organization

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I

INTRODUCTION

This manuscript indicates that under the auspices of the Arctic Council, all the Arctic states have a consensus on economic development. It concludes that the Arctic Council has been managing to retain its members by focusing on common interests, resource extraction and opening polar routes as components of economic development. Thus, it is noteworthy to point out that the Arctic Council predominantly deals with neoliberal policies while implementing expedients. By doing so, the Council is able to provide peace and stability in the region.

The topic of the book is roughly pertaining to Arctic international relations. The fact that the Arctic is affected by climate change more than other parts of the world will turn this area into more of a focal point of interest in upcoming years. Both challenges and opportunities are on the agenda of scholars interested in the region. While challenges include climate change, environmental issues, national security and maritime disputes over sovereignty; the exploration and extraction of prominent hydrocarbon reserves and their transportation via new accessible trade routes are welcomed as opportunities. In order to manage challenges and opportunities, many regime bodies were founded. As one of these bodies, the Arctic Council is surely the most influential in the circumpolar north thanks to its structure and outputs.

Founded by the Ottawa Declaration¹ in 1996, the Arctic Council is an intergovernmental forum offering cooperation, coordination and interaction among the states and communities of the Arctic region on common issues such as sustainable development and environmental protection. The Council has awakened the interest of all stakeholders in the region as well as non-Arctic, Asian observer states. For instance, the European Union and Turkey have both indicated their decisive stands to be accepted as ad hoc observers as both aim to gain opportunities and struggle with the challenges occurring in the region. Interestingly, regardless of geographical prolongation with the Arctic, Turkey aims to enhance its scientific

1 Available in Appendices Section.

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research capacity and strengthen its presence in the region through its desired observer status. Thus, this study is influenced by the question of how the Council retains its members who have different policy perceptions and which common interests motivate them to gather under the aegis of the Council.

The significance of this book comes from the fact that there is a one-sided viewpoint regarding the Arctic. In general, scholars have so far focused on conflicting issues such as sovereignty and national security. Additionally, there is considerable research regarding climate change and its environmental consequences which could be delineated by constructivist theory of international relations. Nevertheless, it is often an overlooked fact that stakeholders interested in Arctic issues are mostly influenced by opportunities existing in the region. After the United States Geological Survey (USGS) assessment in 2008, it became public knowledge that nearly 25% of the world's hydrocarbon reserves lay beneath the Arctic Ocean. Thus, the neoliberal perspective has been focused on in the region. Unlike realist or constructivist pillars of regime structure, the Arctic is witnessing an interest-based aspect of regime theory. This idea is well supported through research in the region in parallel to the historical background given below.

Moreover, since there are no sufficient papers mentioning Arctic international relations in Turkey, this manuscript is planned to be one of the primary resources regarding the Arctic. The fact that, Turkey's Arctic engagement is not so old. Thus, this book is crucial to indicate Turkey's ambitions regarding the region. As a country seeking for being accepted as observer within the Arctic Council, Turkey aspires to strengthen its physical presence in the region as one of its strategic interests. For this reason, this book is significant to clarify why Turkey wants to engage in the region once conducting profitability.

Normally, realist-based and knowledge-based dimensions of regime theory are applied rather than interest-based perspectives. However, consistent with this book, behind the scenes, a more effective view of regime theory contains neoliberal aspects when the Arctic Council is remembered. In other words, neoliberal institutionalism is ignored once scholars write about the Arctic Council. Therefore, via this book I plan to fill a gap by encouraging scholars to investigate the neoliberal policies of the Arctic Council, the most significant institution to provide cooperation and collaboration in the region, while taking Arctic international relations into consideration.

Secondly, national priorities of the Arctic states are indicated in order to clarify their strategic goals. In this context, I aim to uncover economic development as the most significant common interest of the Arctic states once gathering under the umbrella of the Arctic Council. Consistently with the demands of the Arctic states, I try to evaluate natural resource exploitation and utilization of polar maritime routes under economic development targets of the relevant states.

Thirdly, I aspire to define Arctic international relations in terms of cooperative attempts. I find it necessary to manifest the evolution of policy perceptions regarding the Arctic as geopolitics, geoecology and geoeconomics, respectively. Consequently, once focusing on Arctic issues, I prefer to utilize geoeconomic assessment of the relations.

Finally, I have given the observer status within the Arctic Council so as to indicate enhancing cooperation and collaboration in the region. I plan to reveal that non-Arctic states also would like to increase their presence in the Arctic for the economic reasons. Accordingly, I assert that non-Arctic states involvement in the Arctic Council as observers contributes to multilateralism in the region, and it promotes peace and stability.

As a method, I utilized qualified document analysis within this book. All perspectives -realist, constructivist and neoliberal- of regime theories were delineated by utilizing published primary resources, relevant legal documents, archival studies and accessible databases as a process of data collection. While collecting data, reputable scholars and policy makers interested in Arctic issues were preferred. Data was collected through online databases of universities and physical resources of libraries. As a core of the book, common interests of the Arctic states in parallel with their strategy documents regarding the region were depicted to emphasize that the Arctic Council plays its role well as an example of interest-based regimes once providing cooperation and collaboration. Thus, strategy documents of the Arctic states pertaining to the Arctic were especially focused on. Subsequently, the most coherent documents were included into the diagrams in the relevant chapter in order to help a conclusion to be reached.

After focusing on regime theory, the research questions were narrowed down to the following: How effective is the Arctic Council in preventing conflicts and constructing peace and stability? What motivations help the Council to retain its members, all of which have different priority areas? What common interests

affect the cooperative role of the Arctic Council? What theoretical approaches of regime structure best express the geopolitical landscape of an opening Arctic? What discourses -conflicting or cooperative- are dominating the political terminology?

Linking national strategies of the Arctic states, including priority areas in the region, my goal is to investigate how the Arctic Council plays its role. Finally, I have reached an outcome that the Arctic Council creates cooperation among its members due to their common interest in “economic development”, consisting of energy resources and new convenient sea routes.

From the end of the World War I until the disintegration of the Soviet Union, the Arctic was confronted with the political interest of several states. The two superpowers, Russia and the US, were especially attentive to the situation in the Arctic. The tension between the states over the region transformed regional politics in favor of a realist paradigm. Accordingly, until the end of the Cold War, studies on the region were constructed on geopolitics. To illustrate this more clearly, Huitfeldt's (1992) “Strategic Interests in the Arctic” could be taken into consideration. For the most part, studies on Arctic international relations were descriptive, as Marc Jacobsen and Victoria Herrmann argued in their study (2017, 6). H. Exner-Pirot and Robert W. Murray also stated that scholars have analyzed Arctic international relations in a traditional security context (Exner-Pirot and Murray, 2017, p. 49). They utilized an English school approach to assess Arctic issues, claiming that international society promotes cooperation among Arctic states; otherwise, cooperation could be disrupted if international society does not take conscious steps to pursue a robust institutional structure (Exner-Pirot and Murray, 2017). Shortly afterwards, a post-structuralist approach to Arctic international relations was on the agenda with the studies of Iver B. Neumann (1994), Geir Honneland (1998) and Carina Keskitalo (2004).

Notably after the bipolar system, studies diversified to an omni-directional theoretical framework, thus prioritizing soft power instruments including ecological, social, and human focused relations. In this respect, studies related to the Arctic have been influenced by these instruments so that a period of cooperation began in the region. Institutionalists in particular -for the most part Oran R. Young- carried out most of these studies concerning the Arctic region (Young, 1992, 2009, 2012a, 2012b, 2013). An example of a comparative study which depicts zero-sum game vis a vis win-win game- with reference to game theory- can

be given from the study of Ana-Maria Ghimiş (2013, pp. 36-52). Ghimiş claimed that unless the Arctic rim states stop focusing on sovereignty issues, zero-sum game will probably be effective. In the case of cooperation, especially if the technological capacity of the Arctic states are different that motivating them to cooperate, zero-sum game options may be distorted (Ghimiş, 2013, p. 49). The prisoner's dilemma could also be an assertive sample of the game theory if Arctic international relations are considered. In this context, unlike individual interests, the optimal solution is to opt for group interests. If adjusted to Arctic international relations, the best option for the Arctic stakeholders is to think about common interests despite the fact that individual interests, such as national security and maritime boundary disputes, are currently being focused on. Accordingly, all parties will likely come to understand that the optimal alternative is to compose cooperative mechanisms in the region.

Additionally, constructivist movements are being implemented via the European Union (EU). It seems that in the immediate future, an EU strategy will probably be embodied regarding the Arctic. Adele Airoidi underlines the potential Arctic policy of the EU by providing a constructivist approach to international relations (Airoidi, 2014).

As mentioned above, constructivist studies on Arctic issues have been written by scholars since the end of the Cold War. Collective senses, common insights and expectations, and social interaction concepts of constructivism has arisen the interest of scholars for the Arctic. Since the social dimension of international relations is a key factor of constructivist studies, studies related to the Arctic become more "social". Consequently, such norms, identities and rules transform traditional concepts of international politics such as sovereignty, anarchy, international institutions, alignment, security, threat, balance of power and national interests. In place of these concepts, perceptions of international relations as a social reality is a basic criteria for constructivism. A good example of a constructivist perspective can be given as Iver B. Neumann's study (1994, pp. 53-74). Furthermore, Christopher S. Browning (2010, pp. 45-71) conducted an extensive analytical study between the 1980s and 1990s, which accentuated regions called "imagined communities". Considering this, the Arctic's indigenous dimension is a good example of social constructivism. Traditional lives, identities and cultures of indigenous peoples could be touched by social constructivism. Hence, by addressing social

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constructivism, studies related to indigenous peoples could facilitate gap-filling within the existing academic literature.

According to Michael Byers (2017, p. 2), in a situation of international crisis, especially in the Arctic, the complex-interdependence aspect of international relations could maintain cooperation. In his study, Byers investigates why in some conditions the Arctic has cooperation, whereas in others it does not.

In their study of the Arctic, Oyvind Osterud, and Geir Honneland stated that, although shaped by realism, institutionalism and constructivism, literature on the Arctic has been mainly empirical. They classified studies into two categories: while English-based literature was predominantly shaped by institutional terms, French literature, for the most part, was framed in a realist, geopolitical view (2014, pp. 156-76).

According to Artur Stein (1990, p. 36), when a state can fulfill its goals on its own, cooperation is not necessary. In this situation, conflict does not exist or a state could solve it by using its own power. Besides this unilateral action, the state may choose cooperation in order to reach some outcomes related to its interests or be isolated from outcomes which it is averse to. Stein defines these circumstances as “dilemmas of common interest” or “dilemmas of common aversion” (Stein, 1982, pp. 299-324). On that account, it is straightforward to compass acts of states within this perception. Additionally, seeing that dominant conceptions of international order, organization and authority have not gratified scholars, regimes have occurred. Both “anarchy” and “authority”, which are competing concepts, have been exaggerated while assessing cooperative behaviors of industrialized states. Consequently, the increase of interdependence after the World War II created some new types of coordination and organization which are not compatible with a realist paradigm (Haggard and Simmons, 1987, p. 491).

While the idealist perspective of international relations was dominant during the interwar period, the realist paradigm has superseded it until the 1990s. For its part, realism asserts competition and conflict between states. It is augmented by international anarchy which prevents cooperative attitudes of states although they have common interests (Grieco, 1988, p. 485).

Grieco divides liberal institutionalism into three models: functionalist theory (1940s-1950s), neofunctionalist theory (1950s-1960s) and interdependence theory

(1970s) against realism, which is a major challenge that denying all models by its controversial act against cooperation (Grieco, 1988, p. 486).

Through survival of interstate cooperation in the difficult world affairs of the 1970s, R. Axelrod and R. O. Keohane (1985) have analyzed a new type of liberal institutionalism which markedly differed from the former one of the early 1980s. They argue that states could have cooperation by means of international institutions even under an anarchic international system (Axelrod and Keohane, 1985, pp. 226-54).

As mentioned above, from the end of the World War II until the 1970s, a realist view of international relations was on the agenda. States attempted to strengthen their power capacities under harsh conditions in a bipolar system. As Joseph Grieco declared (1988, pp. 485-507), states choice to use force was still available in world politics. However, because of the effects of new developments in international politics (Cuban Missile Crisis, Vietnamese War, the Oil Crisis in 1973, military rivalry of the USSR and the United States and these states' engagement in Africa, in the Middle-East and Southwest Asia), the effectiveness of realism began to decrease. With these developments in mind, the neoliberal view of international relations started to show itself by giving voluminous solutions to states in order to reduce tensions among them.

To summarize, while an anarchic international system consisting of self-interested states existed during the 1970s, international politics has also encompassed some prominent examples of cooperation, internationalism, and multilateralism. This is evident in the existence of the North Atlantic Treaty Organization (NATO), the North American Free Trade Agreement (NAFTA), the European Union (EU), the Association of Southeast Asian Nations (ASEAN) and the Organization of American States (OAS) (Exner-Pirot and Murray, 2017, p. 48). Examples of theoretical approaches of international relations during these times are institutionalism, regime theory, complex interdependence, and functionalism. As it is compatible with the framework of this study, improvements pertaining to regime theory will be elaborated on. Here, the term "regime" will be used as per Stephen D. Krasner:

"Regimes can be defined as sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations. Principles are beliefs of fact, causation and rectitude. Norms are standards of behavior defined in terms of rights

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and obligations. Rules are specific prescriptions or proscriptions for action. Decision-making procedures are prevailing practices for making and implementing collective choice” (Krasner, 1982, p.186).

According to R. Keohane and J. Nye (2012: 16), international regimes are instruments of managing issues that affect affairs of interdependence. While E. Haas stated (1980, p. 553) that regimes include coherent sets of rules, norms and procedures; Hedley Bull (1977, p. 54) took into consideration the significance of rules and organizations in international society. Though there is no consensus over the concept of regime among scholars, it is significant to clarify this term and its usage in this study.

Helmut Breitmeier, Oran R. Young and Michael Zürn also brought many improvements to regimes in an extensive study. They evaluate regimes as social institutions aimed to react to the will for governing issues in the absence of a consolidated authority. (Breitmeier et al, 2006, p. 3). Another viewpoint of regimes, especially that of Young, is that as they are treated as social institutions, they could be incorporated into new institutionalism (Young, 1994).

The scholars mentioned above also claimed that regime theory commenced in the 1970s as a response to formalism as the accepted view on international organizations. Therefore, they heavily investigated it within international relations in order to deepen our understanding. Without a doubt, in-depth studies trade, monetary and environmental concerns, arms control, and human rights have been carried out pertaining to regime theory (Breitmeier et al, 2006, p. 2).

Richard Little explained why international relations theorists gave more importance to regimes in the 1970s with the two following substantial factors: firstly, the United States played its hegemonic role well. Many economic regimes survived through its role after World War II. Secondly, many other economies, such as Japan and European countries started growing. However, the tragic policy in Vietnam caused an interrogation of that hegemonic role (Little, 2014, p. 291).

Seeing regime studies as a trial of compromising realist and idealist theory, S. Haggard and B. A. Simmons find it essential to differentiate regime from “cooperation” and “institution”. They state that even though regimes simplify “cooperation” and there is no obligation that where a cooperation exists, there should be a regime. Regime must also be separated from “institution”, which means the

combination of converging predictions and patterns of behavior or exercise (Haggard and Simmons, 1987, pp. 492-496).

In reality, cooperative structures were implemented in the region before the foundation of the AC. Accordingly, the Murmansk Speech of Gorbachev is of vital importance in strengthening cooperation among the Arctic states. Unlike confrontation during the Cold War process, the speech has paved the way for bilateral and multilateral relations among stakeholders. Additionally, environmental concerns have triggered states to create administrative bodies in order to protect the delicate environment of the region. In the 1990s, the Arctic Environmental Protection Strategy (AEPS), the Arctic Council (AC), the Barents Euro-Arctic Council (BEAC), and the Inuit Circumpolar Council were the key players in combatting the consequences of climate change as the region is the most affected part of the world.

The above-mentioned structures have been especially decisive to overcome environmental concerns pertaining to the Arctic. To clarify, the Arctic Council has played a unique role and managed to adopt vital decisions to protect the relevant fragile environment so far. Even though it was founded for environmental concerns, the Council has also been efficient in furthering economic developmental aims of its members. Thus, while the AC insists on protecting the environment, on the other hand, it is providing significant economic cooperation among its members. By doing so, the AC has been a platform for its members to delineate their common interests, especially the underlying economic development objectives.

As realist-based, interest-based, and knowledge-based types have already existed in international regimes, it is claimed that the Arctic Council (AC) assembly is best explained by the interest-based pillar. Here, some scholars indicate prominent premises while referring to constructing such regimes. At this juncture, among the regarding premises, "common good" is a key premise for the Arctic states as the most significant one. Adapting "common good" premise to the Arctic states, within the structure of this book, it is asserted that for all the Arctic states, economic development is one of their common interests which underlines their eagerness for collaboration and coordination once policies are implemented in the region via the AC.

Put differently, to mention common interests of the Arctic states, the fact that all of them have updated their strategy documents regarding the Arctic. When the

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documents in question are analyzed, it can be clearly seen that there is no caveat for all to underline pioneering strategy as “economic development”. Thus, economic development issue is a key factor for all to underline policy perceptions within the relevant documents. Here, significant components of economic development, such as resource extraction and maritime transportation, have been the leading objectives of the Arctic states. As a conclusion, it is claimed that the Arctic states have been utilizing cooperative mechanisms in the region, especially the AC, to manage their strategies. Accordingly, the AC has been a key institution for its members to determine their common interests and implement them efficiently. Thus, in the next chapters, resource exploitation and maritime routes are indicated as common good premises of the Arctic states which signifies economic development as independent variable.

In the first chapter, the theoretical framework is given. Some significant types of international relations theories, including realism, neoliberalism, constructivism, green theory, and feminism, are covered in relation to Arctic politics. Then, three significant pillars of international regimes are given in order to clarify which is the most relevant for the Arctic Council.

In the second chapter, three progressive terms are examined in order to support the theoretical framework through historical background. Firstly, it is clearly stated that the Arctic was seen as a place of military rivalry until the end of the Cold War. As the Bering Strait is the shortest distance between the US and the Soviets, both block leaders of the bipolar system attempted to assert their hegemony over this region. During this period, both parties had a chance to test and advance their military capabilities, such as early warning systems, defense systems, and anti-aircraft missiles. Thuile Air Base, owned by the US, and the Northern Fleet of the Union of Soviet Socialist Republics (USSR) were significant indicators of military presence in the region.

Although the geopolitical concept was in effect in the Arctic, courtesy of the Détente Period in world politics, the region itself witnessed a distinct shift. In contrast to the militaristic concept, the Arctic was a zone of peace and stability. As an extension of this period, the Murmansk Speech of Gorbachev in 1987 is of vital importance in offering cooperation rather than confrontation. Following this well-known speech, the Arctic has witnessed cooperation, especially on environmental concerns. As components of these concerns, some significant ventures

mentioned above were effectuated. Therefore, surely, the Arctic Council has been the most significant institution so far to combat the consequences of climate change and environmental concerns.

Apart from its delicate environment, the significance of the Arctic is also closely connected to its considerable hydrocarbon reserves and the unfolding shorter navigation routes. According to the US Geological Survey (USGS), nearly 13% of the world's total undiscovered oil and 30% of its natural gas reserves are expected to lie in the region. Thus, leaving the challenges to one side, the Arctic has been recently gaining importance due to its potential resources. Moreover, the unfolding maritime routes -the Northwest Passage (NWP) and the Northern Sea Route (NSR)- provide shorter distances in contrast to traditional maritime routes, such as the Suez and Panama Canals. If these opportunities are evaluated, it is undeniable that the Arctic will also become a zone of economic interest.

What is important here is that all the Arctic states are aware of these concerns. Since the region has gained geoeconomic importance, they have shifted their priorities while declaring economic development aims to be their primary strategies in the region. Thus, in this section it is stated that, even though sovereignty and environmental concerns were importantly considered, economic concerns have been prioritized since the appraisal regarding the hydrocarbon reserves and opening polar routes have been considered in the Arctic. This is clearly consistent with all strategy documents of the Arctic states pertaining to the region.

In the third chapter, initially the concept of economic development is elucidated as all the Arctic states see it as a significant priority area when considering their region. As a tool strengthening economic development, in this chapter hydrocarbon reserves of the Arctic are mentioned. Now that fossil fuel consumption is increasing and is expected to further increase until the 2050's, the appraisal of the USGS regarding energy deposits in the Arctic is of vital importance.

It is a fact that the demand for oil and gas is increasing. Apart from the energy demand of developed western countries, the energy demand of emerging Asian economies will especially create significant outcomes since Asian economic growth has a close correlation with the consumption of fossil fuels as energy resources. Thus, the more Asian countries grow, the higher consumption rate of hydrocarbons will be. Here, the most sensitive issue is to predict when hydrocarbons resources will come to an end. Nevertheless, in the coming decades, it is probably

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safe to assume that the demand for hydrocarbons will increase, even considering the emergence of renewable energy sources. Consequently, the Asian economic boost will put the spotlight on the Arctic as a new energy hub.

Another significance of the Arctic is hidden in the fact that it is one of the most secure and stable regions in the world. When especially taking the instable geographies of the Middle East and Africa into consideration as energy suppliers, the Arctic will importunately whet the appetites of energy-dependent countries. This claim explains why Sino-Russian cooperation in the High North became stronger and why energy giants take part in resource extraction and transportation within the region. For instance, the Yamal LNG Project has a unique role indicating multilateral cooperation as being implemented among the Chinese, Russian, and French companies. Thus, in this chapter on the one hand global energy statistics are given so as to clarify the reasons of the Asian new-comers to the Arctic region. On the other hand, oil and gas potential of the Arctic and its implications on economic development aims of the Arctic states are given in order to stress on geoeconomics of the region.

The fourth chapter is regarding climate change and its implications as Arctic international relations can not be considered without reference to this. The faster climate change affects us, the more world politics focusses on that region. It is surely because of climate change that the Arctic politics is becoming a global issue. Thus, incorporating climate change dimension is of vital importance when taking Arctic politics into consideration.

As the Arctic ice is melting at an alarming rate, it will be possible to see an ice-free Arctic in the near future according to the scientific observations. Here, the vital question to ask is when the Arctic will be ice-free. Even though uncertain, supportive projections see an ice-free Arctic in the 2050's. Under these circumstances, the exploitation of hydrocarbons will be likely and the existing alternative transport routes will be more accessible in the near future. Thus, the melting process and commercial shipping are closely interrelated.

In the light of climate change, both the Northern Sea Route (NSR) and the Northwest Passage (NWP) are seen as prominent maritime routes between the Asia, Europe and North America. In terms of distance, the routes in question provide significant savings -approximately 30% decrease in comparison to traditional routes- meaning lower costs for commercial shipping. Additionally, the

aforementioned routes are advantageous in terms of their secure environment away from terrorism and piracy. Thus, in the near future, the region will witness increasing traffic volumes by shipping companies. To illustrate, this projection is best supported by Sino-Russian cooperation on energy and transportation. Norway-Russian cooperation on the Barents Sea is another joint venture for energy cooperation. By doing so, the Arctic and non-Arctic states will further their economic development due to climate change.

Thus, in the relevant chapter, the challenges for commercial shipping with regards to these routes are examined. Accordingly, legal claims, shipping types, insurance and also environmental and geographical risks are clarified. Since the most important factor to be tackled is related to legal claims over these routes, claims regarding international straits and internal waters are both delineated in terms of the LOS Convention in this chapter. Consequently, it is argued that conflicting claims regarding the legal status of the routes in question have been in the shadow of economic grants. Thus, it is claimed that for all parties the optimal solution is perhaps to put aside legal claims pertaining to the routes to enjoy opportunities in the region. The fact that this idea has been consistent so far with the state relations since they have opted to be part of cooperative mechanisms so far. Or, cooperative steps among energy companies of the Arctic states are also significant to indicate cooperative attempts in the region. Thus, such attempts are placed in this chapter. Moreover, as an output of this chapter it is asserted that all stakeholders have been obliged to take cooperative steps for the sake of economic development objectives.

In the chapter six, common interests of the members of the Arctic Council are given. It is argued that economic development aims could be considered together with common good of all stakeholders in the region. Accordingly, it is claimed that stakeholders attach importance to taking cooperative steps for economic relations. Thus, it could be deduced that by doing so, all parties have preferred cooperation rather than confrontation. In this context, two prominent components of cooperation are delineated as cooperation on energy exploitation and transportation within this chapter.

The fact that maritime cooperation in the Arctic is not new. For decades, bilateral or multilateral agreements regarding maritime cooperation have been in effect. Especially after the significant Murmansk Speech, maritime cooperation has

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been a substantial part of the concept of international maritime cooperation. Here, environmental concerns have been cornerstones for maritime cooperation in the region so far. To tackle these concerns, regulations regarding environmental contamination and shipping activities, including search and rescue operations and oil spills, have been effectuated. Additionally, collaboration with the International Maritime Organization (IMO) has been especially crucial in generating regulations for shipping activities which are also significant for commercial shipping.

In recent years, economic concerns have also been significant in accelerating maritime cooperation processes. Especially after the appraisal of the energy resource potential of the Arctic, stakeholders have insistently examined the economic potential of the region. Thus, it is necessary to note that this maritime cooperation is strengthened by economic concerns. For instance, resolved or ignored maritime disputes have been attempts to prioritize the economic potential of the region so far. With this in mind, Norway-Russia border delimitation on the Barents is the most significant example of these attempts. Accordingly, both parties fairly opted for economic concerns by signing an agreement in 2010 which concluded with settlement. Additionally, ignored claims regarding the legal status of the NSR and the NWP indicate that stakeholders preferred cooperation for the sake of economic concerns.

Resource extraction is another important instrument for the stakeholders in the Arctic which creates cooperation. As the Arctic holds considerable amounts of energy resources, the Arctic states have been especially eager to utilize this wealth. Moreover, the high cost of resource extraction makes it essential to have collaboration among stakeholders. In this context, investments and advanced technologies are needed to facilitate resource extraction as the Arctic is insufficient in terms of infrastructure. For instance, welcoming of Asian countries to the Arctic Council and to Arctic politics in general is an output of this need. Thus, cooperation is crucial for all stakeholders to utilize the economic potential of the region. This point of view gives an explanation why the Arctic states opt for cooperation under the auspices of the Arctic Council and how it holds its members in collaboration and coordination.

II

INTERNATIONAL REGIMES AND THE ARCTIC COUNCIL

It is noteworthy to point out that the agenda of the Arctic is more complex than it appears. Due to this complexity, several types of theoretically based studies will be utilized: realism, constructivism, regime theory, green theory, post-colonialism, feminism, post-structuralism, and complex interdependence. Here, the Cold War is a critical period which shapes the theoretical approach to Arctic studies in international relations.

In this chapter, the neoliberal view of the Arctic Council as an example of regime formation will be scrutinized as the heart of the manuscript. Initially, events in the Arctic, especially from the early 1970s until present, will be examined. Secondly, the scope of regime theory will be explicitly investigated. Next, questions such as “why regimes exist and how they have evolved in the Arctic” will be dealt with. Here, definitions and types of international regimes will be given in order to strengthen the theoretical framework of this paper. After the basic arguments of some schools of thoughts are given, three diagrams consisting of different variables pertaining to the national strategies of the Arctic states will be portrayed.

2.1. Broad Schools of Thoughts about International Regimes

After examining basic definitions of regimes from different scholars, it will broaden our horizons to examine their theoretical approaches. Some scholars (Hasenclever et al, 1997, p. 6) use three theoretical approaches related to realism, neoliberalism and cognitivism. Others use different concepts of regime formation: power-based, interest-based and knowledge-based (Young and Osherenko, 1993, pp. 223-251). Peter M. Haas emphasizes on three regime types which have been influenced by neorealism, institutionalism and cognitivism (Haas, 1993, pp. 168-202). Haggard and Simmons illuminate a four-fold distinction of approaches to regimes: structural, game-theoretic, functional and cognitive (Haggard and Simmons, 1987, p. 492). Hasenclever and his colleagues determine (1997, p. 14) the

following three substantial approaches which conceptualize international regimes into behavioral (Oran R. Young, 1989; Mark Zacher, 1987), cognitive (Kratochwil and Ruggie, 1986), and formal terms (Keohane, 1993). In short, theoretical approaches on international regimes can be divided into three main categories: realism, neoliberalism and cognitivism.

Table 1. Schools of Thoughts in the study of International Regimes

	Realism	Neoliberalism	Cognitivism (especially strong cognitivism)
Central Variable	power	interests	knowledge
Institutionalism	weak	medium	strong
Meta-theoretical Orientation	rationalistic	rationalistic	sociological
Behavioral Model	concerned with relative gains	absolute gains maximizer	role-player

Resource: (Hasenclever et al, 1997: 6)

To start with a brief explanation of the realist perspective: it emphasizes that power is an instrument by enhancing the utility of states. A basic assumption of realism is that in the international system, states are the most important actors. Although this factor determines that in realism cooperation is impossible, this makes no sense for realist scholars as they think in some circumstances states may cooperate, even in an anarchic international system. According to the realist perspective of regimes, relative power capacity is a main definitive variable and although it has a different view on states' function, accepting rationalism is a common element to both realism and neoliberalism. In this context, the theory of hegemonic stability will be assessed as an instrument of realism or power-based theory so as to enlighten the realist view of international regimes.

As Haggard and Simmons (1987, p. 500) state, hegemonic stability is the most resolute expression of regime dynamics. Hegemonic stability links the regime to a dominant power in the international system which means that the regime is somehow affected by the relevant power's dynamic position; from time to time it may be weakened or strengthened by the hegemony. This both explains why and when international regimes exist and are effective (Hasenclever et al, 1997, pp. 84-86). While based on the work of Charles Kindleberger (1973, p. 305)

entitles “The World in Depression 1929-1939”, linking firstly regime dynamics to power with Nye (2012, pp. 50-51), Keohane pays decisive attention at first, he then explicitly follows this up, later, he rejects its crude version and begins to criticize it. Keohane asserts that the role of international institutions makes sense only if their outcomes providing cooperation are not managed by power and interest. He accepts that in the formation of international regimes hegemony often plays a considerable role (Hasenclever et al, 1997, p. 87). In summary, hegemonic stability has two claims regarding international regimes: that dominant power in the international system establishes and maintains regimes and that regimes persistence depends on the dominant power’s position among other states (Hasenclever et al, 1997, p. 90).

Taking ideas and knowledge as the main variables, cognitivists criticize realists and neoliberals as they take rationalistic view into consideration. Put differently, they assert identities and interests of states are “exogenously given”. It is a necessity to evaluate normative and causal beliefs during a working foreign policy which means that any variation of beliefs could change the policy itself. Thus, international regimes must be supported by distribution of knowledge, including states’ identities, policy options and references, since a rationalist perspective of international regimes is insufficient (Hasenclever et al, 1997, p. 136). Here, weak cognitivism evaluates causal beliefs in regime formation while strong cognitivism- known also as constructivism- stresses the social dimension of international relations (Hasenclever et al, 2000, p. 10). In short, it is crucial to state that the expectations, misunderstandings, choices and perceptions of states are influenced by ideas, beliefs, identities and knowledge.

As a result, three voluminous utilities of knowledge-based approaches to international regimes can be given. Firstly, cognitivists treat domestic politics as if it is a determinant of international politics though previously ignored. Secondly, cognitivists have a dynamic character that in a quickly changing world, they can adapt themselves to the evolution of social institutions. Finally, reducing ambiguity between state’s knowledge facilitates cooperation, therefore, cognitivism opens a cooperative door for its part (Rowlands, 1995, pp. 26-27).

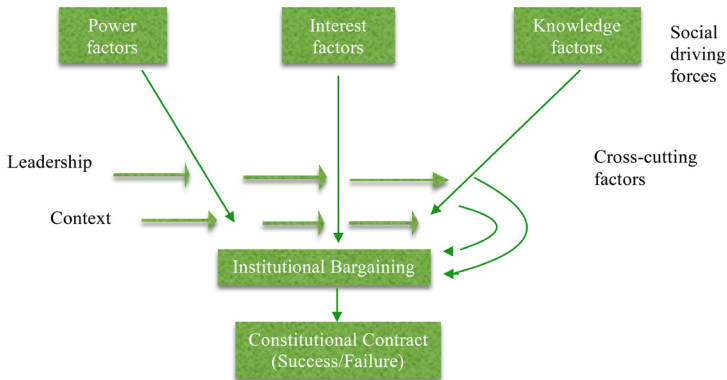
As a supporting theory of this paper, the neoliberalist approach of international regimes became a mainstream approach to analyze regimes according to many

scholars' views in the 1990's (Hasenclever et al, 1997, p. 23). As R.M. Crawford states (1996, p. 54), it became a pioneering approach of international regimes.

In general, neoliberalism may be looked upon as an opponent of the neorealist approach of international relations. Neoliberalists' beliefs regarding "the international system is characterized by anarchy" is true but they find it deficient as well. Even if it is anarchic, it does not follow that it is also chaotic, therefore, cooperative attitudes are possible if states demand it. Another criticism by neoliberalists is related to the character of states. They take the neorealist view that "states are selfish, rational actors", but they do not evaluate it as an obstacle for cooperation. Additionally, neoliberalists see the foundation of international organizations as essential in such circumstances like providing cooperation.

It is vital to elaborate Young's (1977; 1980; 1982; 1983) ideas on international regimes as he is a leading scholar in regime studies. Young initially defines three paths to regime formation as spontaneous, negotiated and imposed (Young, 1983, pp. 98-101). Subsequently he focusses on the negotiation process, and edits his regime formation model entitled "institutional bargaining" (Young, 1991, pp. 282-285). The model in question takes selfish actors confronting both the possibility of reaching joint gains by organizing their behavior and the difficulty of compromising on norms and rules for the objective they define (Hasenclever et al, 1997, pp. 68-69).

Figure 1. A Multivariate Model of Regime Formation



Source: (Young and Osherenko, 1993: 239)

Young and G. Osherenko (1993) launched a research project including six cases and hypotheses in order to empirically test the regime formation in the Arctic region. In this project, which is modelled above, "institutional bargaining" is a process of creating an institution as targeted (Hasenclever et al, 1997, p. 69). Young and his colleague concluded the project by emphasizing some basic premises for all three regime patterns. In the end, in the interest-based regime formation -the most attractive one for this study- ten premises were detected; *"integrative bargaining and a veil of uncertainty, equity, salient solutions, exogenous shocks or crises, policy priority, common good, science and technology, relevant parties, compliance mechanisms, and individuals as leaders"* (Young and Osherenko, 1993, pp. 249-250). Here, the premise "common good" can be defined as an eagerness to lay aside tight national interests on the side of more comprehensive perception of the common good is essential to make success in regime structure (Young and Osherenko, 1993, pp. 249-250).

Young's studies are substantial for the most part since he is trying to figure out regime formation in world affairs. Another example of this study is that of Young and his colleagues, H. Breitmeier, M. A. Levy and M. Zürn, who tried to create a database of international regimes as an element of studies regarding international cooperation. The relevant database contains substantial information on international regimes as a computerized system and it was planned to contain 60 regimes by 2000. Its intention is to scrutinize knowledge about the formation, effectiveness, and dynamics of regimes (Breitmeier et al, 1996, p. 2).

Finally, there is one major question to answer: how do regimes function? A main function could be given as follows:

"International regimes are useful to governments. Far from being threats to governments (in which case it would be hard to understand why they exist at all), they permit governments to attain objectives that would otherwise be unattainable. They do so in part by facilitating intergovernmental agreements. Regimes facilitate agreements by raising the anticipated costs of violating others' property rights, by altering transaction costs through the clustering of issues, and by providing reliable information to members. Regimes are relatively efficient institutions, compared with the alternative of having a myriad of unrelated agreements, since their principles, rules, and institutions create linkages among issues that give actors incentives to reach mutually beneficial agreements. They thrive in situations where states have common

as well as conflicting interests on multiple, overlapping issues and where externalities are difficult but not impossible to deal with through bargaining. Where these conditions exist, international regimes can be of value to states” (Keohane, 1984, p. 97).

Incorporating our topic to a regime structure -in our study the Arctic Council- Young’s “common good” premise is a touchstone for us as it is at the heart of our study. Here, success is available where parties are willing to put away their restricted national interests pertaining to the Arctic. Therefore, our intention is to determine national interests of the Arctic states in order to clarify through which factors the Arctic Council could be a successful regime formation. Below the Arctic states with their national strategies in the region and their involvements in Arctic affairs is given. Additionally, via the relevant tables, initial cooperative steps in the Arctic should be stressed in order to facilitate the understanding of the Arctic states.

2.2. Cooperative Steps and National Strategies of the Arctic States

As a primary cooperative foundation in the Arctic, the Arctic Council takes its origin from the 1987 Murmansk Speech by Mikhail Gorbachev. The relevant speech includes six significant points:

- Nuclear-free zone,
- Limited naval activities,
- Peaceful cooperation in development of Arctic resources,
- Scientific research,
- Cooperation to protect the Arctic’s environment,
- Benefiting from the Northern Sea Route (NSR) for international shipping (Gorbachev, 1987)

The scope of the speech can be summarized with one term: “the peaceful Arctic”. For decades, states have pretended to abide by the speech in question despite formulating different national Arctic strategies. Even though the interest perception of each state poses differences, peace and cooperation has also survived in some ways. Even so, until the collapse of the Soviet regime and the end of the bipolar system, power-based factors determined the Arctic international relations.

After the Cold War, the Arctic has encountered some new developments similar to many other regions in the world due to “peaceful Arctic” discourse conducted successfully by the Arctic Environmental Protection Strategy (AEPS) and its extension, the Arctic Council (AC). For decades, alongside the Arctic Council, many cooperative steps, such as the Northern Forum (NF), the International Arctic Science Committee (IASC), the Inuit Circumpolar Council (ICC), the Nordic Council of Ministers (NCM), the Barents-Euro Arctic Council (BEAC), the University of the Arctic (UArctic) have been taken and also many agreements regarding indigenous peoples, environmental issues, climate change, scientific cooperation, sustainable development have been signed by the Arctic Council. For the most part, the above-mentioned developments from the 1990s can be predominantly incorporated into knowledge-based approach of international regimes.

Energy resources exploitation and new sea routes has transformed the Arctic Council regime structure from a cognitivist to a neoliberal perspective; especially after the publication of the U.S. Geological Survey which predicts considerable sources of undiscovered hydrocarbon reserves in the Arctic. Thus, energy resources and potential new trade routes- “common good” for all Arctic states- could be declared to be the only important factor, which constitutes a turning point for the Arctic international relations. Thus, interest-based regime formation of the Arctic Council constructed peace and stability between the Arctic states, even if they have different backgrounds such as maritime disputes and national sovereignty issues. In other words, while realist and cognitivist approaches of international regimes are effective, after appraisal on energy resources and opening new sea routes, the interest-based pillar of regime theory composes a basic motivation for the Arctic Council to construct a permanent cooperation.

It is incontestable that the top of the world is melting. As well known, climate change has been affecting the Arctic more than the rest of the world. The quick melting of the ice in the region generates considerable opportunities. Besides its prominent mineral and hydrocarbon reserves, the melting Arctic is also going to have two new potential maritime routes: The Northwest Passage (NWP) and the Northern Sea Route (NSR). With reference to the aforesaid routes, transport links between Europe and Asia will potentially become shorter and much cheaper. Thus, for every Arctic state developing their national Arctic strategies means taking climate change consequences into consideration since it has been providing opportunities in terms of hydrocarbons and accessible polar routes. These attempts

signify soft power instruments in the region where states try to construct cooperation in order to take a piece of the “Arctic pie”. At this point, it is noteworthy to point that there are many differences regarding the Arctic states’ strategies. While some states prioritize geopolitical views or quickly carry out military activities, others try to reduce the damages of global warming. Consequently, the “Arctic pie” directs all the Arctic states to concentrate on the potential of cooperation. To summarize, “common interests” form an empirically sound basis to explain the Arctic international relations. Below, an analysis of the national strategies of the Arctic states is given.

The strategy of Canada pertaining to the Arctic is entitled “Canada’s Northern Strategy: Our North, Our Heritage, and Our Future” was published in 2009 by the Canadian government (Government of Canada, 2009). Then, the “Statement on Canada’s Arctic Foreign Policy” was published in 2010. Assessing both strategies and statements, it can be seen that they revolve around four elements: sovereignty, social and economic development, environmental protection and governance (Lackenbauer and Dean, 2016, p. 101).

For Canada, exercising its sovereignty means sustaining strong assets, advancing its stewardship in the region, defining spheres and enhancing knowledge levels on the Arctic (Lackenbauer and Dean, 2016, p. 103). Canada aims to support its second strategy statement through resource exploration, development and infrastructure. Thus, potential future income may be obtained from diamond mines, oil and gas reserves, commercial fishing and tourism (Berg, 2014, 31). Lassi Heininen (2012, 17) also interprets the second strategy as “exploration and utilization of natural resources”. In order to implement its third strategy, Canada wants to be a leader in the Arctic’s science and protect the Arctic’s land and waters. Finally, Canada aims to give some rights to territorial and indigenous governments by transferring authority over some concrete land and resources (Broonan et al, 2011, p. 179).

The Arctic strategy of the Kingdom of Denmark is called the “Kingdom of Denmark Strategy for the Arctic 2011-2020” and was published by the governments of Denmark, Faroe Islands and Greenland, although only the latter is geographically located within the Arctic Circle. In this document, priority areas are defined as a peaceful, secure and safe Arctic, sustainable development, environment, and cooperation with international partners (Kingdom of Denmark’s Strategy for the

Arctic, 2011). Additionally, giving special reference to the Arctic, Denmark's "Foreign and Security Policy Strategy", published in November 2018, promotes sustainable economic development for the local peoples in the region (The Danish Government, Foreign and Security Policy Strategy 2019-2020, 2018).

The second and fourth priority areas stated above are significant for our assessment. They encompass the exploitation of mineral resources and renewable energy potential, sustainable exploitation of living resources, integration in international trade and enhanced cooperation in the Arctic Council (Kingdom of Denmark's Strategy for the Arctic, 2011). These priority areas are compatible with our key word as "common interests" which will be clarified after giving all states' strategies pertaining to the Arctic.

"Finland's Strategy for the Arctic Region 2013: Government Resolution on 23 August 2013" was published in 2013. It covers: "local residents, education -a major export element- research, the economy, infrastructure, the environment, stability and international cooperation in the Arctic". Finland's new strategy contains four dimensions of government policy: "*Arctic country, Arctic expertise, sustainable development and environmental considerations and international cooperation*" (Finland's Strategy for the Arctic Region, 2013).

Finland holds an important position in various industrial business operations including energy, maritime, mining, shipping, and renewable natural resources. Therefore, in order to facilitate these operations, Finland prefers to reinforce its cooperative role in the Arctic Council, while enjoying international cooperations and bilateral Arctic partnerships and using its EU membership to implement the EU's Arctic policy strategies (Finland's Strategy for the Arctic Region, 2013).

Iceland -chairs the Arctic Council from 2019 to 2021- published its report called "Iceland in the High North" in 2009, which states its position and status in the Arctic and then its interest regarding the region followed by another report in 2011 entitled "A Parliamentary Resolution on Iceland's Arctic Policy". While the first one consists of the six prominent elements of "*international cooperation, security, resource development and environmental protection, transportation, people and cultures and international cooperation on research and monitoring*" (Heininen, 2012, p. 29), the second one contains twelve principles, including the most relevant ones as: strengthening cooperation with other states, promoting and strengthening the Arctic Council and resolving disputes via UNCLOS, ensuring Iceland's

status as a littoral state within the Arctic and “*promoting understanding of the fact that the Arctic region extends both to the North Pole area and the part of the North Atlantic Ocean...*”, “*preventing human-induced climate change and its effects in order to improve the wellbeing of Arctic residents and their communities*”, “*protecting broadly defined security interests...through civilian means and working against any kind of militarization of the Arctic*” (A Parliamentary Resolution on Iceland’s Arctic Policy, 2011; Heininen, 2012, p. 33).

Norway’s updated version of its strategy document is called “Norway’s Arctic Strategy Between Geopolitics and Social Development” (2017) and includes the following main elements: international cooperation, business development, leadership in the field of knowledge and environmental protection. Norway prioritizes the promotion of peaceful and sustainable development under an international cooperative structure. Additionally, in business development, it also takes into consideration such as ocean-based industries, energy, seabed mining, marine biotechnology maritime transport and tourism. From the first to the last strategy of Norway regarding the Arctic, it is clear that its policy perception gives definite importance to the Arctic’s resource development. For instance, it designates Norwegian companies to manage the extraction of oil and natural gas (Berg, 2014, p. 38). To stress that phase, it defines itself as “*the best steward of resources in the High North*” and expresses High North as a new petroleum territory (Norwegian Ministry of Foreign Affairs, 2006, p. 13; 2009, p. 18).

In April 2020, a new Barents Sea management plan is expected to be signed by the Norwegian Government. The regarding document is vital for decision-makers to delineate the ice edge before voting since the oil drilling activities are closely linked to where the ice begins.

For several years there is a discordance among scientists and politicians to define the ice edge. Whereas the Norwegian Polar Institute defines the ice edge as the existence of sea ice is 0.5 percent, the oil industry wants it to be 30 percent (Tommerbakke, 2020). The discrepancy between the two explanations covers nearly half the size of mainland Norway (Tommerbakke, 2020). Thus, in April, decision of the Norwegian Government is significant to clarify how far north will be moved for petroleum exploration (Tommerbakke, 2020).

Geographically, the Russian Federation possesses the biggest part of the Arctic. Russia’s Arctic strategy document was approved by Vladimir Putin in 2013. It is

entitled “The Development Strategy of the Arctic Zone of the Russian Federation and National Security until 2020” and is composed of two stages of implementing strategies until 2015 and until 2020. It aims to state its sovereignty and national interests in the region. Accordingly, priority areas in the region for the relevant state are: *“integrated socio-economic development, the development of science and technology, the establishment of infrastructures regarding information and telecommunication, environmental security, international cooperation and provision of military security, protection, and protection of the state border”* (Russia’s Arctic Strategy, 2013, p. 3). The Russian Federation emphasizes its economic interest-enhancing resource exponents- in the first element above and also gives importance to the development of infrastructure of the Northern Sea Route (Russia’s Arctic Strategy 2013, p. 10).

Russia’s persistence on economic development of the region is crowned by huge investments. On January 30, 2020, a new legislation regarding tax breaks to encourage oil and gas drilling in the Arctic was announced. According to the document, Russian Federation under the new prime minister Mikhail Mishustin aims to provide considerable incentives for national companies to invest in Arctic hydrocarbons (Staalesen, 2020a). Through the regarding incentives, the government expects to open doors for new huge oil and gas projects in the region (Staalesen, 2020a). As Aleksandr Kozlov -Minister of the Far East and Arctic- declares, totally €210 Billion could be invested for enhancing economic development in the region (Staalesen, 2020a).

In March, Vladimir Putin signs master plan of the Russian Government authored by the Minister of the Far East and Arctic. Russian master plan underlines key priorities regarding the Arctic as strengthening national sovereignty and territorial integrity, promoting peace and stability and increasing life standards of the local peoples (Staalesen, 2020b). In parallel with the document, new tax releases for investors were approved by the country’s State Duma (Staalesen, 2020b). By doing so, the Government aims to put a premium on huge development of hydrocarbons which provide vital acquisitions for its economic growth.

The Russian Government tries to increase its activities in the Svalbard as well. As a part of Spitsbergen Treaty Russia wants to benefit from the opportunities of the regarding archipelago under the provision of “equal liberty of access and entry” as declared once the treaty signed in 1920. On the 100th anniversary of

the treaty, Sergey Lavrov -Foreign Minister of the Russian Government- sent a message to Norwegian Minister on Foreign Affairs asking for lifting restrictions on Russian activities in the region (The Ministry of Foreign Affairs of the Russian Federation, 2020). Accordingly, Russia aims to implement long-term plans in Svalbard by having close partnership with Norway (The Ministry of Foreign Affairs of the Russian Federation, 2020).

“Sweden Strategy for the Arctic Region” defining the interests of Sweden was published in 2011. Including Sweden’s historical, security policy, economics, climate and environmental, research and cultural ties, the document gives importance to the climate and the environment, economic development and the human dimension after focusing on Arctic cooperation. While giving the Arctic Council, Nordic cooperation, Barents cooperation as cooperative examples within an Arctic cooperation framework, economic development, extraction of natural resources and utilizing renewable resources in a sustainable way were also mentioned (Sweden Strategy for the Arctic Region, 2011). Norwegian and Russian extraction of oil and gas in the Barents region is of great importance for Swedish companies in the same sector.

In 2013, President Obama released “the National Strategy for the Arctic Region” for the United States. Before this release, the national security interests of the United States were defined as “*missile defense and early warning, deployment of sea and air systems for strategic sealift, strategic deterrence, maritime presence, and maritime security options; and ensuring freedom of the seas*” as stated in the “Arctic Region Policy” released in 2009 (The National Strategy for the Arctic Region, 2013, p. 3). In this document, priority areas are stated as being: security, international governance, maritime boundary issues, enhancing international scientific cooperation, navigation, economic issues, environmental protection and conservation of natural resources. Furthermore, the updated 2013 version of the document aimed for a more stable Arctic, “*where nations act responsibly in a spirit of trust and cooperation, and where economic and energy resources are developed in a sustainable manner that also respects the fragile environment and the interests and cultures of indigenous peoples*” (the National Strategy for the Arctic Region, 2013, 4).

The United States wants to increase its presence in Greenland as well as a prominent part of the Arctic, since the island is full of opportunities to harbouring rare minerals that are necessary for high-tech products like smartphones, satellites,

and electric cars (Johnson, 2020). The island is also significant for both its untapped natural resources and close location to the opening new sea routes (McDonald, 2019). Aware of these opportunities, President Trump gives a surprising speech to purchase Greenland in August 2019 (McDonald, 2019). Additionally, Trump proposed a budget \$587.000 to open a full-time U.S. Consulate in the regarding island (Johnson, 2020). By doing so, the United States aims not only to strengthen its capabilities in the island but also to utilize the geopolitical importance of the region.

All strategies of the Arctic states above explicitly indicate their growing interests in the region. For every state, the Arctic is characterized in different terms since targets of all structured strategies are to have a leading role in the region. In this context, when all strategies are analyzed, it can be seen that every state attempts to place itself right in the centre of the region. Thus, many priority areas exist, which depend on policy perception of the relevant states. In other words, while some states have the same priority areas, others share different insights. Even so, if we take “common interests” keyword into consideration, then we will be able to know how cooperation in some areas is possible and in others not. Here, if we make a holistic evaluation, priority areas of all the Arctic states could comprise of the major following elements: national security, economic development, maritime transportation, environment, governance, indigenous peoples, scientific cooperation and cooperation in the Arctic.

Under national security, some states give high priority to implementing military activities as they perceive the Arctic as a “hot spot”. Thus, they -especially the coastal states- aim to prevent any acts against their sovereignty. In order to provide this, they choose some kind of “hard power” elements in the region as there are several boundary disputes regarding sovereignty among the coastal states. However, for non-coastal states -Sweden, Finland and Iceland- this priority area makes no sense.

Economic development perception of all the Arctic states surely could be defined as the same. For all littoral or non-littoral Arctic states, economic development strongly attracts their attention. Natural resources (oil and natural gas exploitation, mining) and all other kinds of economic activities (such as fishing and tourism) direct states to create a comprehensive strategy to benefit from via constructing huge industrial plants.

By the same token, maritime transportation could be linked to the “economic development” as all existing trade routes -the Northern Sea Route and the Northwest Passage- suggest a prosperous future in the Arctic. The Arctic states have been aware of this prosperity for decades that is why some have even tried to have jurisdictional claims regarding the aforementioned trade routes. For instance, Canada and the United States have been in a struggle over the Northwest Passage for about a half century and Norway and Russia over the other route. These claims, while sometimes pursued under the jurisdiction of UNCLOS, often go on to form the basis of bilateral agreements. Whatever happens, the importance of these trade routes are vital for the economies of the Arctic states. Thus, navigation and shipping via Arctic waters could also be included into economic development.

Another dimension of strategies implemented on the Arctic is the “environment”. For the most part, this dimension concerns many Arctic states as it is linked to other dimensions such as climate change, energy resource exploitation, and even maritime transportation. In this framework, states pay attention to any activities related to the environment dimension, such as oil spills, pollution, and greenhouse gases. Thus, environmental protection is another priority of some Arctic states.

While placing “governance” Lassi Heininen draws on two flanks. Whereas the first one is regarding the procedures of resource management, and setting rules for development, and consolidating northern governance, the second one is related to safety and rescue (Heininen, 2012, p. 75). This dimension has a high priority for many of the Arctic states.

“Indigenous peoples” element is considered so important that the Arctic Council gives a broad place to them as they reside in large parts of the Arctic. They play their role well through international cooperative attitudes of the region. Even the non-Arctic states benefit from this element in order to implement some of their policy interests in the region.

“Scientific cooperation” strategy covers elements of research, education, technology, and industrial investments which may be included into international cooperation. The Arctic states substantially stress how important scientific cooperation is through implementing some common scientific activities in the region.

The final element which could be assessed as a priority area for the Arctic states is “international cooperation”. Many states have declared that international

The tables below have been formulated in order to indicate what issues the Arctic states take into consideration. The main variables of the tables are particularly different as they attempt to demonstrate both states' priority areas and their involvement in the Paris Climate Agreement and the International Whaling Commission (IWC). It also investigates the nuclear capacity of each Arctic state as a hard-power instrument which could manifest a power-oriented pillar of the regime formation. Accordingly, I aim to show the convergence of states on particular issues.

	Canada	Denmark	Finland	Iceland	Norway	Russia	Sweden	USA
Sovereignty and National Security	Yes	Yes	No	No	Yes	Yes	No	Yes
Nuclear Weapons Capacity/Nuclear Generation	Yes/Yes	Yes/No	Yes/Yes	Yes/No	Yes/No	No/Yes	Yes/Yes	No/Yes

Key

No, if the variable is not among the priority areas of the relevant state

Nuclear generation>>>>>>>>>>>>>>5 Yes, 3 No

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characterized by national security, nuclear deterrence and rivalry between two superpowers. The concept of sovereignty was also taken by states to include control over natural resources (Greaves and Lackenbauer, 2016). It was fairly adapted by the relevant states to extend their continental shelves and exert their sovereign presence in the Arctic (Brosnan et al, 2011, p. 180). The involvement of the relevant states to UNCLOS and the Convention on the Limits of the Continental Shelf (CLCS) could be explained with these attempts. Thus, all littoral states took this element as a core strategy when implementing their policy instructions.

The two superpowers explicitly had militarized the Arctic until the early 1990s which caused nearly a centennial conflict over the region. For decades, the rivalry between the United States and the Soviets also meant the division of the Arctic into two strategic bases; Thule Air Base, which was vital for the United States, and the Kola Peninsula for the Soviets, which became symbols of the bipolar system (Jacobsen and Strandsbjerg, 2017, p. 19).

The ending of the Cold War transformed the security concept into a more comprehensive structure. Security concerns of the majority of the Arctic states reduced unlike the United States and Russia. For example, Russia's government adopted to reopen Russian military bases in the Arctic in 2014 in reaction to NATO's efforts to be involved in the region (Zubacheva, 2014). Thus, if the United States and Russia are left to one side, surely it could be stated that the Arctic's strategic and military importance has faded throughout the 1990s. Notably, in the light of climate change, natural resources –hydrocarbon reserves and minerals- exploitation, new shipping routes and jurisdictional claims takes the place of military presence in the region (Osterud and Honneland, 2014, p. 159). Despite the Russian flag being planted on the seabed of the North Pole in 2007, which exacerbated some states' geostrategical ambitions, the Ilulissat Declaration, which can be perceived as a response to desecuritization of the region, was signed just a few months later by all the coastal states as a means of pursuing cooperative steps (Jacobsen and Strandsbjerg, 2017, p. 15). Publication of the US Geological Survey's report (USGS) in 2008 on hydrocarbon reserves and mineral resources in the region has fairly accelerated cooperation among states and caused geostrategical insights to fade into history.

In this context, national security and sovereignty may concern only the coastal states. The relevant issues have become less important day by day owing to the

exploration of energy resources which draws states closer to each other. Therefore, although the coastal states give priority to national security and sovereignty, for non-littoral states -Sweden, Finland and Iceland- the first element makes no sense. To clarify this numerically, the score is five well-matched (5 Yes) countries with the variables versus three mismatched ones (3 No). Consequently, there is no consensus among all the Arctic states in terms of national security and sovereignty issues.

If the capacity of nuclear weapons among the aforesaid states are taken as being of high importance in general, it is again complicated for the Arctic states to have a real consensus on this issue. While traditionally two major powers of the Arctic have a large stock of nuclear weapons, others are far behind. The United States and the Russian Federation are among the world's nine nuclear powers, sharing 92% of total warheads (SIPRI, 2017). This share makes them unique in the world. The Soviet Union carried out 69 nuclear weapon development tests between 1957-1968 above the Novaya Zemlya archipelago while the US carried out the same tests in Amitchika Island (See at www.johnstonsarchive.net/). According to Jayantha Dhanapala, the competing claims of these two powers could lead to conflict or use of nuclear weapons (Dhanapala, 2008). With this threat, increasing militarization could cause security concerns for the other Arctic states. Numerically, while two states have common interests in the capacity of nuclear weapons, six other states do not. As a consequence, the total score is 2 No versus 6 Yes. Thus, this instrument is not a part of our "common interests" keyword.

Evaluating nuclear power generation of the Arctic states could also help us to decide whether they are all in agreement or not. Four are among the top ten of the world's biggest nuclear power generating countries which meet their needs, especially electricity, from nuclear power according to the Nuclear Energy Institute (NEI, 2017). The fifth one, Finland, is another state with nuclear power generation. This dimension is closely related to environmental pollution and indigenous peoples' lives. Increasing nuclear power generation creates risks for the environment such as radioactive pollutants in the air and food chains which could harm indigenous peoples' health. In summary, while 5 states are interested in nuclear power generation, 3 are not. Thus, there is no convergence on utilizing nuclear power generation as well.

Table 3. Variables for Knowledge-Based Pillar of Regime Structure

	Canada	Denmark	Finland	Iceland	Norway	Russia	Sweden	USA
The Paris Climate Agreement	Yes	No	Yes	Yes	Yes	OA	Yes	Yes
International Whaling Commission	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Research Question: What have the Arctic states converged on?

Key

Yes, if the variable is among the priority areas of the relevant state

No, if the variable is not among the priority areas of the relevant state

OA, the country is out of assessment

Score

The Paris Climate Agreement>>>>>>>>6 Yes, 1 No, 1 OA

International Whaling Commission>>>>>7 Yes, 1 No

To continue with one of two cognitivist perspective examples in the Arctic states, the Paris Climate Agreement entered into force towards the end of 2016. Its primary aim is to combat climate change in harmony and states which ratified the agreement are expected to keep global temperature rise below 2 degrees celsius and reduce further increase to 1.5 celsius (United Nations Framework Convention on Climate Change). The agreement also helps states to deal with the impacts of climate change. Nearly all of the Arctic states have declared their commitment apart from the Russian Federation which has not ratified the agreement yet. Additionally, as an Arctic part of Denmark, Greenland is not a part of the agreement, although Denmark has already ratified it. Finally, to point the United States, President Trump has declared the intention of the United States to withdraw from the agreement in 2019 (Friedman, 2019).

Although almost all the Arctic states have demonstrated their interest within Arctic strategies to take position against climate change, the absence of Greenland, the Russian Federation and the United States clarifies how seriously states take this instrument. If they take heed of climate change, then they should declare their commitment to the existing agreement. Yet, if we search for consensus on

combatting climate change in the Arctic, then we may see “three monkeys” there. Therefore, whereas six states are a part of the agreement, the United States intends to withdraw, Greenland and the Russian Federation are not parties. Then our score could be; 6 Yes, 1 No, and 1 OA.

Finally, another example of knowledge-oriented theoretical approach could be given as the “International Whaling Commission (IWC)” regime structure. In 1946 the “International Convention for the Regulation of Whaling (ICRW)” was signed whose purpose was stated to be conserving whale stock and making the whaling industry sustainable as coordinated as possible. The commission is open to any country committed to the 1946 Convention and it currently has 88 members (<https://iwc.int/history-and-purpose>). For the Arctic states the whaling industry is significant as all -except Canada- are members of the IWC. Beginning with the 15 major whaling nations, all members of the Commission agree on the elimination of disproportionate harvesting of whales but, by and by, this aim has begun to be questioned by environmentalists who declare whaling as gratuitous to feeding mankind (Little, 2014, p. 301). In conjunction with a knowledge-based regime example, the IWC has seven Arctic member states. Canada, after outlawing commercial whaling in 1972, declared its withdrawal from the Commission ten years later as there is no direct relation to whaling industry or activities of commission.

As known, there are three ways for whaling; commercial, indigenous and scientific (Fitzmaurice, 2015, p. 99). Even there has been a moratorium regarding commercial whaling since 1982, Norway and Iceland still opt for commercial whaling whereas the Russian Federation, the US and Denmark prefer indigenous whaling among the Arctic states (Fitzmaurice, 2015, p. 99). Since the moratorium has been implemented, Canada also has preferred to withdraw from the IWC due to its potential effect on indigenous subsistence (Jefferies, 2016).

Holistically looking into the structure of the International Whaling Commission, it is fair to underline that the only Arctic state is Canada for not being a part of the relevant commission. Thus, within the IWC structure as a knowledge-based regime sample, there is no convergence on whaling. Consequently, adapting this output to the Table 3, the score of the table here is 7 Yes, 1 No.

Seal hunting as another complicated example which is not mentioned above could be given to address knowledge-based regime sample. The fact that, there

are different points of view regarding seal hunting in the Arctic. While the United States prefers to prevent seal hunting; Canada, Greenland, Norway, and Russia evaluate it through economic thinking via applying different legal regulations (Sellheim, 2015, p. 115). On the other hand, the EU constrictedly lets seal hunting under the regulations of fisheries management regimes without the commercial purpose (Sellheim, 2015, p. 115). Thus, disharmony is fairly available among the Arctic states regarding sealing as well. Whereas some of them have applied for commercial seal hunting, the others have been dignified so far that means another handicap for convergence on common interests.

Table 4. Variables for Interest-Based Pillar of Regime Structure

	Can.	Den.	Fin.	Iceland	Norway	Russia	Sweden	USA
Economic Development (Resource Exploitation and Maritime Routes)	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Research Question: What have the Arctic states converged on?

Key

Yes, if the variable is among the priority areas of the relevant state

No, if the variable is not among the priority areas of the relevant state

Score

Economic development>>>>>>>>>>8 Yes

Conclusion: All Arctic (A8) states have converged on energy resource exploitation and utilization of maritime routes under the ‘economic development’ priority.

Consequently, national security, sovereignty and the nuclear weapons capacity of the Arctic states could be included into power-oriented or realist approaches of international regimes. This division will be followed with two approaches; the Paris Climate Agreement and the International Whaling Commission as knowledge-oriented or cognitivist approach, and economic development as interest-oriented or neoliberal approach.

The only element which may be taken as “common interests” for all the Arctic states is the “economic development”. All of the Arctic states notably focused on this dimension regarding hydrocarbon reserves and maritime routes which serve some facilities such as fishing, shipping and tourism. If the world’s energy-dependent countries or traditional trade routes are taken into consideration, this dimension may confirm the definition of the Arctic as a “hot spot”.

In the Arctic, oil and gas reserves were first discovered by Russia in the Tazovskoye Field in 1962 and the United States in Prudhoe Bay Field in 1967. Additionally, 61 large oil and natural gas fields -in Russia, Alaska, Canada’s Northwest Territories, and Norway- were discovered within the Arctic Circle (Budzik, 2009, p. 4). At the same time, the U.S. Geological Survey (USGS) -a turning point for neo-liberal approaches- started explorations regarding hydrocarbons in the Arctic region. According to the USGS publication in 2008, 13% of the world’s undiscovered oil and 30% of its undiscovered natural gas reserves are beneath under the Arctic (USGS, 2008). The document in question estimated that approximately 25% of the world’s undiscovered oil and gas reserves lies within the Arctic. Within these reserves, Russian-claimed subsoil has the lion’s share, with an approximate 586 billion barrels of oil, although this has not been corroborated. Compared to Saudi Arabia’s current proven reserves amount of 260 billion barrels, this possibility will surely exacerbated states to engage in the region (Borgerson, p. 2008). This appraisal regarding hydrocarbons has substantially transformed the Arctic.

It is significant to note that the Arctic Council has paid attention to energy resources within its documents as well. In Tromso Ministerial Meeting (2009), energy was manifested as a distinct topic within the Tromso Declaration as the final report of the meeting. Within the relevant document, the Council finds it essential to exploit energy resources environmentally in order to contribute to sustainable development of the region. (Tromso Declaration, 2009).

Two new sea routes connecting Asia and Europe -the Northern Sea Route (NSR) and the Northwest Passage (NWP)- are another dimension of economic development. Historically, these routes were only used for scientific and touristic reasons due to the ice melting providing longer shipping seasons. These two routes allowed distance and time savings for states’ cargo ships thus, creating a voluminous facility for international trade (Young, 1992, p. 159). For instance, the distance from Yokohama to Hamburg via the traditional Suez Canal is 11.585

nautical miles, whereas the same trip via the Northern Sea Route is 7.356 nautical miles (Furuichi and Otsuka, 2012). To indicate transit volume, while in 2009, 5 cargo ships transited the NSR, in 2013 this increased to 71 in total according to the Centre for High North Logistics (CHNL) Information Office (See at http://www.arctic-lho.com/nsr_transits). As a consequence, unlike alternatives such as the Panama Canal and the Suez Canal, these routes are simply shorter and quicker.

Even though the administration of the NSR is under the Russian control and both the NSR and the NWP cause temporary disputes –for example between Norway and Russia for the NSR and Canada and the United States for the NWP- accessibility of ice-covered routes with nuclear icebreaker escorts has been attracting states' attention for decades. In the light of absolute gains of neoliberal view, all the Arctic states –even non-Arctic states like China whose economy is substantially dependent on sea trade- which have a capability for benefiting from international trade circle surely will choose cooperative instruments in the region.

The USGS report has triggered sovereignty claims over the Arctic region to the forefront. Under UNCLOS and CLCS, the possibility of extending continental shelves from 200 nautical miles to 350 nautical miles has been fostering the coastal states to apply to extend their continental shelves but this option has lost its effectiveness as the decision of the relevant instruments are not binding, and over 90% of the estimated reserves are within the undisputed exclusive economic zone's of the Arctic states (Exner-Pirot and Murray, 2017, p. 58).

The cost of extracting resources in a harsh geography also is another reason for closer cooperation among states. Therefore, instead of pursuing sovereignty claims, all the Arctic states focus on benefiting from all prominent reserves under a cooperative umbrella. For example, four of the coastal states ratified UNCLOS and the fifth declared that it will comply with customary law of the sea. In order to make regional cooperation real, they take the Arctic Council as a primary institution. Thus, economic development policy is an area on which every Arctic state has consensus. Consequently, by counting all states' decision, the total score in the last table is 8W.

To conclude this chapter, even though there have been some conflicts among the Arctic states –such as maritime boundaries disputes regarding sovereignty, Russia's flag planting in 2007, the Georgia crisis, the Crimea annexation which caused some sanctions to be imposed on Russia by western countries and Russia's claims

vis a vis NATO allies over the Arctic- cooperation has survived so far and notably fundamental changes brought by the ending of the Cold War have consolidated it. Russia's integration into the global economic system through membership of G8, G20, the International Monetary Fund (IMF), the World Bank Group (WBG) and the World Trade Organization (WTO), the European Union's policy implementations as a major power with Russia and Russia's decreased military power between 1988-2002 has shifted Russian-Western relations towards a more cooperative direction in the Arctic. (Byers, 2017, p. 4).

Figure 2. The Arctic Council Regime Structure through Three Theoretical Approaches



Here, the Arctic Council is the only instrument to hold all the Arctic states together despite their differing policy insights. Members of the Council prefer absolute gains vis a vis relative gains when examining the advantages existing in the region. Although there are some environmental-ecological concerns and disputes on national sovereignty among members on the regional agenda, the possibility of hydrocarbon resources exploitation and accessibility of new sea routes as common interests has been making all the states' mouth water. Thus, besides power-oriented or knowledge-oriented approaches regarding regime formation, interest-oriented perspective of the Arctic Council -as a regime structure- is the guiding motivator for its members to strengthen cooperation in the region.

III

CONFRONTATION AND COOPERATION

The rapid melting of the Arctic ice cap is rising quickly and fairly changes the world's agenda. No matter whether called the "great Arctic gold rush" (Borgerson, 2008), "a new military frontier" (Honderich, 1987, p. 3) or "the age of the Arctic" (Young, 1986), the aforementioned region has been brought into the world's spotlight. The region is being in the timelight of the world through dimensions such as climate change, resource development and geopolitical realities (Huebert, 2008). Underscoring its importance, the Arctic is a prototype of the composite, multifaceted global problems of the 21st century (Blunden, 2009, p. 137).

Possessing nearly one-sixth of the world's landmass, the Arctic's prominence is embedded into both its geopolitics and natural resources, notably oil, natural gas and prominent mines. Due to the consequences of climate change, while on the one hand the region is faced with environmental and legal issues, on the other hand, it witnesses the social issues regarding indigenous peoples. Although the melting ice cap facilitates the exploitation of natural resources, at the same time, it could also harm the livelihoods of local residents (Matz-Lück, 2009). If scientists' estimations acknowledging that the ice cap will dramatically shrink or totally disappear by 2050 are thought, the Arctic could hold some advantages, such as enabling natural resource extraction and navigating through new polar trade routes (Gadihoke, 2013). In his study, Barry S. Zellen describes a holistic approach of the consequences of climate change—both pessimistic and optimistic— that, while pessimists focus on the human and environmental dimensions, optimists concentrate on the possibility of more accessible sea routes and natural resource exploitation (Zellen, 2009, pp. 156-157). Alongside this, some pessimistic scholars see the region linking inter-state conflicts to power politics (Arnold and Roussel, 2009). According to Ryszard M. Czarny, apart from its opportunities, climate change creates several challenges regarding the natural environment, including both to the lives of indigenous peoples and fauna (Czarny, 2015, p. 3). Describing the Arctic as "the most graphic example of climate change impacting geopolitics", Dimitri Trenin, after exploring the opening up of the region for new commercial routes and energy exploitation, questioned whether these facilities will

bolster global cooperation or cause competition among the Arctic rim and non-rim states (Trenin, 2014).

All the previous comments pertaining to the Arctic are directly related to the utmost climatic conditions. Although the complexity of climate change will be described later, several of its effects will be briefly examined in order to cement the context-setting of the chapter:

- Temperature rise by the end of century will probably be between 1.8C and 4C,
- Sea levels will probably rise up to 28-43cm,
- Summer sea ice in the Arctic is likely to disappear in the second half of the century,
- The number of heat waves and intensity of tropical storms will likely increase (Dhanapala, 2008).

According to the first detailed multi-disciplinary assessment regarding the consequences of climate change in the Arctic -the Arctic Climate Impact Assessment (ACIA) which was initiated by the Arctic Council in 2004- temperatures in the region rise at almost twice the rate of the rest of the world. Accordingly, winters are getting warmer and shorter than they were before and unexpected changes are likely to occur in the region in the coming years (ACIA, 2004). Shortly after this assessment, in 2006 scientists at the United States National Snow and Ice Data Center surprisingly claimed that the Arctic will be totally ice-free by 2060 (Howard, 2009, p. 27).

In light of the changes mentioned above, in common parlance, global interest regarding the Arctic wanes when its unmaneuverable conditions are considered but on the other hand it waxes whenever climate change causing ice-melting thought. In the light of this belief, scholars commit to some theoretical approaches regarding the Arctic international politics including realist, cognitivist and neoliberal perspectives. Nevertheless, before chewing over the theoretical background of Arctic politics, the political and socio-economical processes of the region must be chronologically defined in order to reinforce the hypothetical framework of this study. After examining this subject, it will be explicitly feasible to grasp that while events until the end of the Cold War –using the three-term scheme inspired by Willy Ostreng- could be included into a realist paradigm. Additionally, some leading improvements in the region after the Cold War, including the foundation of the Arctic Council, may be connected to a constructivist view. Finally, notably

after the publication of the United States Geological Survey (USGS), in which undiscovered oil and natural gas reserves in the Arctic are mentioned, the affairs of stake-holders in the region had to be taken into neoliberal view. Hereafter, in this chapter, three phases of the Arctic international politics will be described.

3.1. Geopolitical Aspect until the 1990s

In their study in 1992, T. Huitfeldt and his colleagues claim that the Arctic deserves more interest for two reasons: firstly, it holds a substantive role for the strategic nuclear rivalry between the United States and the Union of Soviet Socialist Republics (USSR). Secondly, by courtesy of technological improvements enabling natural resources exploitation, the region is transforming into a major economic area for human activity (Huitfeldt et al, 1992, p. 11).

In general, the Arctic had been an unfrequented and isolated region until the 1990's, thus its harsh and inconvenient climatic conditions obstructed human activity in the region. Nevertheless, in particular between the two world wars in the 20th century, the region was mostly preferred for military activities. During the inter-war period, both the United States and Canada advanced defence projects in the region by virtue of the Soviet threat (Holmes, 2008, p. 327). Even so, until the World War II, troops had no capabilities to live in and invade the region. Here, the only factor in securing northern borders is the nature (Ostreng, 1999, pp. 21-22).

In June of 1943, approximately 43,000 soldiers and civilians of the United States were sent to the region in order to construct more infrastructure projects -including airfields, weather stations and military bases- for the northern staging routes (Jones-Imhotep, 2004, pp. 13-14). German troops were also in the region as surface-raiders and U-boats passed through the North Sea and the Greenland-Iceland gap from their bases in Norway thus forcing allies to occupy Iceland, the Faroes and Greenland (Lindsey, 1977, pp. 1-24). British warships led allied convoys using the Arctic waters against German submarines, ships and aircrafts based in Norway (Fairhall, 2010, p. 48). Another axis state, Japan, occupied the Aleutian Islands in order to divide the United States Pacific Fleet and decrease its threat to Japan's Pacific hegemony (Zellen, 2009, p. 70).

Competition among parties caused the completion of the Alaska-Canada (the AL-CAN) highway providing a connection from Alaska to "the lower 48" which was

consequently used as a supply route for helping the Aleutians (Standlee, 2006, pp. 20-21). During this early phase of World War II, the appearance of German submarines was a threat for allied countries in the circumpolar north. The response of the allied countries, the Americans (US), Canadians and Scandinavians against German submarine activity was to construct air bases in Greenland and northern Canada. One of these bases, Thule Air Force Base, was constructed in Greenland between 1951-1954, at a distance of 910 miles from the North Pole (Roucek, 1983, p. 465).

As known, there are only 57 miles -the shortest route across the North Pole- between the United States and the Soviet Union. Moreover, another strategically significant factor in the Arctic is the placement of the Greenland-Iceland-United Kingdom (GIUK) Gap, a guard of North Atlantic Treaty Organization (NATO) vis-à-vis the Soviet's vessels outlet to the high seas from the Kola Peninsula (Young, 1986, p. 161). In conclusion, the geostrategic location in question and modifications in military technology towards the end of World War II transformed the Arctic into an area of high-tech weapons system deployment (Ostreng, 1999, p. 22). This also means that the strategic importance of the region has gradually begun to increase after the war.

Just after the end of the catastrophic war, the airspace of the northern region was utilized by commercial and civilian flights. Herewith, the first civilian flight was carried out between Alaska and the United Kingdom (UK) in 1954. Shortly afterwards, owing to the increasing range of aircraft, the Arctic was turned into a new military strategic concept (Huitfeldt et al, 1992, p. 21). Aware of this importance, the U.S. expanded this concept to include the idea that it was vital to prevent a possible attack on its northern region through the North Polar Region, which meant constructing early warning systems. The United States perceived the Arctic Ocean as an ideal area for ballistic missile submarine patrols which were important for its naval forces (Perry and Andersen, 2012, p. 4). Following this aim, the joint Canadian-US Arctic meteorological stations on the Canadians northern islands were constructed (Roucek, 1983, p. 465).

Both the United States and the Soviet Union paid attention to acquiring early warning systems in order to prevent any air attack by the other, thence this attempt was followed by constructing substantive warning and air defense systems around the Arctic Ocean. On the Kola Peninsula, Franz Josef Land, Novaya

Zemlya and along the north Siberian coast air defense systems, radar stations and anti-aircraft missiles and fighter planes were constructed by the USSR (Huitfeldt, 1974, p. 138). On the contrary, with the aim of supporting Thule Air Base, the United States set up new constructions on Newfoundland, Labrador and Baffin Island. Additionally, the most expensive construction of the US at 1.5 billion dollars was the three-dimensional radar detection stations enabling the earliest possible warning of attack coming from outside; the Distant Early Warning (D.E.W.) Line, the Mid-Canada Line and Pinetree system. However, since the USSR successfully placing a satellite on orbit around the earth, the deterrence element of the US policy faded into history (Roucek, 1983, pp. 465-466).

In the 1950s and 1960s, both the US and the USSR utilized submarines to test new weapons, sonar equipment and depth capability (Dhanapala, 2008). In 1952 it was discovered that the Soviets had six times more submarines than they were possessed by the Germans in 1939 (Huitfeldt et al, 1992, p. 31). On the contrary, the world's first nuclear-powered submarine *Nautilus* –the first vessel to traverse under the geographic North Pole- was launched by the US, which meant that it was no longer impossible to operate for days in severe conditions within the Arctic (Encyclopedia Britannica, 2013). During this process, smaller submarines were the more tactical tools which could be operated for research purposes on or under surface of the seas or attack convoys (Ostreng, 1999, p. 24). Shortly after the arrival of submarine-based ballistic missiles, the region transformed into an area of Strategic Submarine Ballistic Nuclear (SSBN) deployment. Both parties began to increase their submarine capabilities through research programs supported via technological improvements (Vartanov et al, 1999, p. 58).

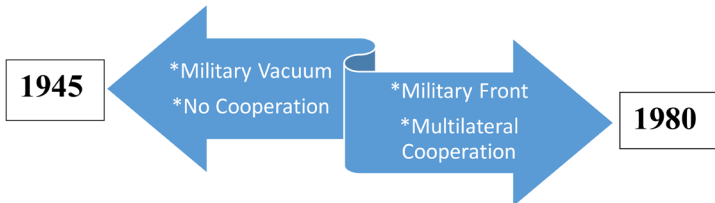
From the early 1960s until the end of the 1970s, considerable cases from international politics –Cuban Crisis, Limited Test Ban Treaty, Nuclear Non-Proliferation Treaty, Strategic Arms Limitation Treaty, Anti-ballistic Missile Treaty, Oil Crisis and by and large the Détente Period- allowed both parties to get closer and know each other via diplomatic channels. Provided that confidence building measures are taken between two blocks, both sides can agree upon “collaborative-competition” (Breslauer, 1990). Accordingly, it could surely be claimed that arms limitation attempts attained the desired aims. However, although limited, threat perceptions of both were carried forward.

Consequently, during the 1980's, submarine-launched ballistic missiles (SLBMs) gained more importance for both the US and the USSR on the grounds that land-based intercontinental ballistic missiles (ICBMs) became limited at preventing incoming strikes. Thence, nuclear-submarine ballistic missile capabilities (SSBNs –Strategic Submarine Ballistic Nuclear) and SLBMs advanced to be compatible for deployment in the Arctic (Young, 1992, p. 191). In the same period, Canadian-American collaboration was growing stronger so that projects, including the North Warning System and the North American Aerospace Defense Command (NORAD), were expanded vis-à-vis the USSR threat (Young, 1992, p. 200). The United States also had to be able to use the Norwegian airfields in order to carry its aircrafts once the carriers entered the Norwegian Sea (Huitfeldt et al, 1992, p. 42).

What is certain here is that among the Arctic states, the former USSR was the only state to spend considerable sums of money to reinforce its military presence in the Arctic. Defined by NATO as “a key Soviet military strong point”, Murmansk was perhaps one of the largest military bases in the world. Located in the most densely populated areas, Murmansk and its encompassing landmass, the Kola Peninsula in general, sheltered considerable military forces capable of fighting at sea, in the air and on land (Roucek, 1983, p. 469). The Kola Peninsula was home to the Soviet's largest naval base -the Northern Fleet- in which 69 surface-combat ships and 47 support ships were located and had approximately 117.000 manpower (U.S. News and World Report, 1980, pp. 37-38). Additionally, the Soviet's air-defence force units were near in the Arkhangelsk region, Chukotka, and on the islands in the Arctic such as Novaya Zemlya, Franz Josef Land, the New Siberian Islands and the Wrangel Island (Sergunin and Konyshev, 2017, p. 182).

When the above military activities are evaluated, until the collapse of the Soviet regime, both parties –the US and the USSR- advanced their military capabilities over time due to their strategic interest in the Arctic. Even so, cooperative steps were taken from time to time. Focusing on three definite terms inspired by Willy Ostreng, these can be divided into the years 1945, 1970 and 1980. Ostreng claimed that the history of the Arctic discloses that marginal militarization has been reconciled with marginal cooperation and heavy militarization with developed motives for collaboration (Ostreng, 1999, p. 51). To use his classification in figure 3:

Figure 3. Correspondence between Militarization and Cooperation in the Arctic



Source: *Adapted From (Ostreng, 1999: 51)*

With a holistic approach, the aforementioned developments regarding the Arctic from the 1930s until the end of the Cold War could be assessed in terms of both “cold and hot politics”. Evaluating the conjuncture of the world in a specific time demonstrates that militarization of the Arctic has waxed and waned over time. When the bipolar system was strong, the militarization policy of the block was waxing. On the contrary, during a loose bipolar system, including the détente period when the effects of geo-diplomacy were seen in the Arctic, militarist mobility in the region waned. Towards the disintegration of the Soviet Union, perception of both the United States and successor Russia and the other riparian states -newcomers of the region- transformed into a more complex concept. Priorities and insights of the relevant states pertaining to the Arctic began to be interrelated with a wave of globalization in international relations. Hence, apart from geopolitical insights, stakeholders in the region have become more involved with environmental pollution, biodiversity, indigenous peoples, scientific cooperation and, as a whole, protecting the Arctic’s fauna and flora, which could be counted in cognitivist approaches. Next, the second phase of this study will be elaborated upon.

3.2. Geoeologic Term: From the 1990s until 2008

As known, opportunities for cooperative steps between two blocks of the bipolar system and the environmental movement began to increase just after the Détente Period in the early 1970s (Keskitalo, 2004, p. 35). Shortly afterwards, in the second half of the 1980s, both among the Soviet elites and scholars, environmental issues regarding the Arctic began to surface (Vartanov et al, 1999, p. 63). One of the most prominent examples of cooperative steps was taken by Mikhail Gorbachev in 1987 in Murmansk. While it will be clarified in the following chapter,

as the only prominent cooperative step across the entire Arctic region in the 1980s, the Murmansk Speech is also significant for knowledge-based approach of regime theory being implemented in international politics of the region. It also meant a shift in the Soviets' Arctic strategy. Evaluating economic, security and environmental issues in the region, Gorbachev points to decreasing militarization and strengthening cooperation among the Arctic states instead of military confrontation (Gorbachev, 1987, pp. 23-31).

As argued by Kristian Atland, non-military security issues signified by Gorbachev provided declining of securitization in the region. In other words, achieving desecuritization in military sector is owing to its position to non-military instruments such as societal, economic and environmental (Atland, 2008, p. 290). The speech in question could also mean a shift in the integrated security concept characteristic of the Cold War era (Ostreng, 1991, p. 274) or a challenge to the status quo in the region (Vartanov et al, 1999, p. 63). Ostreng indicates that after the fruitful speech the Arctic states have experienced a different progress of which has the potential of both military strategic conflict and non-military cooperation (Ostreng, 1989, p. 123). To sum up, the speech opened the "Arctic door" to the utmost for cooperative steps, including multilateral agreements among the Arctic states.

The Murmansk Speech accentuated resource exploitation, indigenous peoples, scientific cooperation, environmental protection and maritime transportation as they all could be thought of as a more civilian, non-military approach to the Arctic international politics. Moreover, the aforementioned issues are closely related to military security and arms control which consist of three key proposals: a nuclear weapons-free zone in Northern Europe, inter-blocks meeting on limiting military activities both on land, in air or under the sea especially in the Baltic, North, Norwegian and Greenland Seas and improvements of confidence-building measures in the same areas (Atland, 2008, pp. 294-300). Another viewpoint is that the Murmansk programme was a starting phase of a long and complex duration to implement a kind of logical "modus vivendi" in the North (Rodionov, 1989, p. 212).

The Murmansk Speech could be taken as a catalyzer for declining militarization and as a creator of cooperation and collaboration among stakeholders in the Arctic –particularly on environmental issues. Taking climate change consequences, which affect the Arctic environment more than other parts of the world, and

human-oriented pollution together, the Arctic states through Murmansk's instrumentality started to face the truth. As an example of the latter, nuclear waste dumping by the former Russia and nuclear tests being carried out in the Arctic mobilized awareness and responsibility of eco-friendly states such as Finland to commence the "Rovaniemi Process".

Nuclear testing activities in the Arctic began in the 1950s during the post-war period. Nuclear tests were often implemented by the USSR, especially in Novaya Zemlya archipelago as continuation of military activities in the region (Fairhall, 2010, p. 103). This region was unique for the Soviets who experimented the strongest nuclear weapons there. For instance, until signing the Partial Nuclear Test Ban Treaty in 1963, the Soviet Union exploded 91 atmospheric nuclear explosions in the northern regions, 79 of which were on Novaya Zemlya. This is the reason why this archipelago is still a restricted area, except for military personnel (Vartanov et al, 1999, p. 59). Additionally, the USSR announced in 1990 that all underground nuclear weapons tests starting in 1993 would be implemented on the same island, Novaya Zemlya. On the contrary, the United States' nuclear test site in Nevada was essentially allocated to atmospheric tests (Huitfeldt et al, 1992, p. 219). Another factor of environmental concern regarding nuclear weapons testing is the dumping of nuclear waste by Russia, especially in the Barents and Kara Seas. Both these parts of the Arctic were brought onto the international agenda by Greenpeace International in 1991 (Johnson, 1998, pp. 216-217).

The attempts above illustrate that apart from hard power instruments or geopolitical view of international politics during the Cold War, particularly after the 1990s, soft power instruments were respected. Put differently, climate change, lives of local residents, biodiversity, environmental pollution, extinction of animal species such as the polar bear -as a symbol of the Arctic- are under the ice states' spotlight. Herewith, especially for environmental pollution and climate change's catastrophic effects, some cooperative steps have begun to be taken by the Arctic states so as to minimize damage. One of these attempts, which could be seen as a core of pan-Arctic environmental cooperation, is the International Arctic Science Committee (IASC), initiated in 1990. Through this effort, independent scientific organizations in 14 countries (including the Arctic eight -A8) settled on developing and implementing research programmes with implications for the Arctic. It successfully emphasizes a multi-dimensional approach including the natural,

cultural, ethnic and social sciences, and gives priority to environmental research and monitoring (Ostreng, 1999, p. 39).

Another venture regarding cognitive approach of Arctic international politics founded in 1991, a year after the IASC, is called the High North Alliance which aims to protecting marine mammals. The Alliance consists of a leading committee of six members: three from Norway and the rest from the Faroe Islands, Greenland and Iceland. Being active in environmental protection is the main objective of the Alliance in question (Czarny, 2015, pp. 196-197).

Ending security concerns of the Arctic states -especially the six Arctic states apart from the US and Russia- gave them a priority to actualize some policy options for environmental issues. One of these six Arctic states, Finland, had the chance to be a pioneer of implementing the Arctic Environmental Protection Strategy (AEPS) after the "Rovaniemi Process" began in 1989, by following one of Gorbachev's proposals in Murmansk (Keskitalo, 2004, p. 44). Implemented in a ministerial conference of the A8, the AEPS consists of objectives such as protecting the Arctic ecosystem, securing sustainable development of resources, accepting traditional values of indigenous peoples, dealing with pollution through the setting up of four international working groups called "The Arctic Monitoring and Assessment Programme (AMAP)", "Protection of the Marine Environment (PAME)", "Emergency Prevention, Preparedness and Response (EPPR)" and the "Conservation of Arctic Flora and Fauna (CAFF)" (Ostreng, 1999, p. 39).

The AEPS could be defined as the first stage of region-wide cooperation in the Arctic. Within the AEPS framework, six environmental problems were defined as high priority; persistent organic contaminants, radioactivity, heavy metals, noise, acidification and oil pollution. Via the AEPS, all the eight Arctic states ratified to commit to international law as placed in UNCLOS (Molenaar et al, 2014, p. 9).

Straight after the AEPS, the "Northern Forum" cooperative attempt was implemented to increase dialogue among stakeholders in the circumpolar north and to identify areas of cooperation determined to be in pan-Arctic and trans-regional interest. Willy Ostreng clarifies this process as "the policies of regionalization and mobilization" (Ostreng, 1999, p. 40).

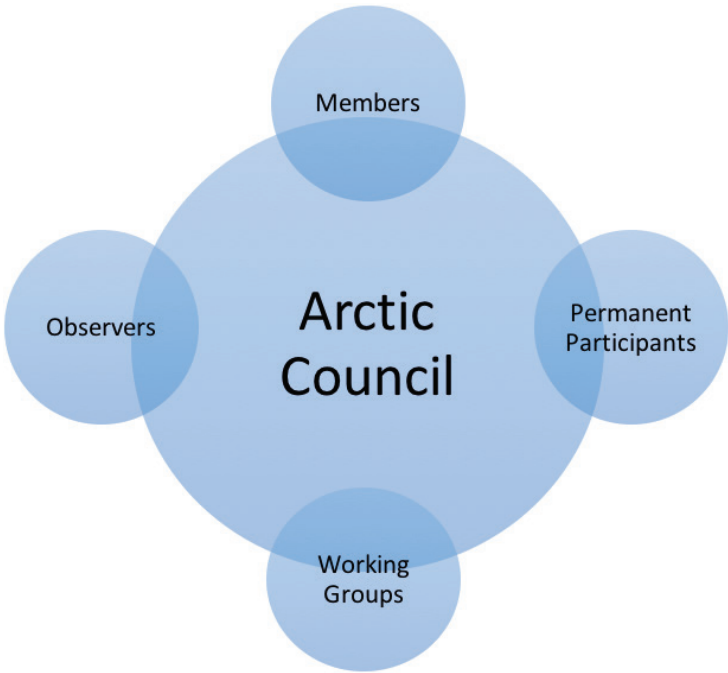
Foundation of the Barents Euro-Arctic Region (BEAR) in 1993 is another significant phase of cooperation in the Arctic (Stokke and Tunander, 1994). BEAR is

a twofold cooperation, of which one side is intergovernmental, the Barents Euro-Arctic Council, and the other is interregional, the Barents Regional Council (BRC). While the Barents Euro-Arctic Council has seven members (Denmark, Finland, Iceland, Norway, Russia, Sweden and the European Commission), the Barents Regional Council consists of fourteen countries such as Finland, Norway, Russia and Sweden. Defining the initiatives above, in general the Barents Cooperation strongly focusses on sustainable development which gives it a special role to handle environmental issues in the region.

Taking a leading role in developing the Arctic as an international region, Canada used the AEPS as a step to creating the Arctic Council. Thus, the foundation process of the Arctic Council is a “Canadian initiative” through its broad attention to indigenous peoples in the circumpolar north (Keskitalo: 2004, p. 65).

The Arctic Council was founded in 1996 from all the Arctic Eight -Canada, Denmark (via Greenland), Finland, Iceland, Norway, Russia, Sweden and the United States (via Alaska)- through the Ottawa Declaration as an intergovernmental forum especially focusing on environmental protection and sustainable development. Removing military activities from its activities, the Arctic Council -which will be necessarily elaborated upon in a separate chapter- consists of six working groups (four of them regarding environmental protection were taken from the AEPS), six indigenous permanent participant organizations and observers. The Council defines itself as the primary intergovernmental forum promoting cooperation, coordination, and interaction among its members on usual Arctic problems, especially on issues of sustainable development and environmental protection (See at <https://arctic-council.org/en/>).

Figure 4. Organization Chart of the Arctic Council



The Arctic Council has started to lay bare some significant cases which the Arctic faces. While it will be clarified later, to briefly explain, its considerable outputs can be indicated as the Arctic Climate Impact Assessment (ACIA), the Arctic Marine Shipping Assessment (AMSA), the Arctic Biodiversity Assessment (ABA), Search and Rescue (SAR) Agreement -which is the first legally binding agreement adopted, the Agreement on Cooperation on Marine Oil Pollution Preparedness and Response (MOPPR) and finally the Agreement on Enhancing International Arctic Scientific Cooperation. Though the Council is not a treaty-based organization, its character is progressively transforming from a policy shaping body to a policy making one via providing these significant elements (Molenaar et al, 2014, p. 11).

From its foundation until the present, the Arctic Council has indisputably carried out its job well. Therewithal this process implies the cooperative steps -especially regarding environmental issues- emerging in the Arctic. This assumption

bolsters the fact that during this time cognitivist approach of international regimes has occupied international politics in the region. Put differently, knowledge-based pillar of international regimes could be taken as a basic motivator in Arctic international relations. Nevertheless, towards the end of the 2000s, it had to be in harmony with the other pillar, the interest-based approach, through Arctic states' policies on economic development. An alteration in ministerial meetings clearly exemplifies this argument. For instance, climate change concern was first referenced by ministers in the first Iqaluit Declaration in 1998 and four years later in the Inari Declaration (2002), the same subject was processed in a separate chapter. In this chapter, significant attention was allocated to potential economic consequences for infrastructure. Afterwards, in the Tromsø Declaration (2009) energy issue was firstly mentioned as a separate topic within the concluding declaration of the ministerial meeting. Thus, it is clear to grasp that the Council has begun to focus on economic issues as well since the member states prioritize economic development. Taking all the ministerial meetings as a whole, over time the priority of climate change has clearly shifted towards economic development. For example, in the 2015 Iqaluit Declaration, climate change concerns of the Arctic Council were followed by economic development considerations (Tesar et al, 2016, pp. 3-6).

3.3. Geoeconomic Insights

Although some jurisdictional claims or disputes over sovereignty create a pause in cooperation and collaboration among the Arctic states, the enthusiasm of states being in cahoots with each other directs them to give up relative gains. Instead, it makes sense for every state in the region to ignore relative gains if they have a chance to take the advantage of absolute gains. Therefore, it clearly must be touched upon in Arctic international politics that the realist approach or power-based view is no longer valid. Furthermore, the supremacy of cognitivist approaches from the end of the Cold War is not valid any more. Provided that the aforementioned approach was unquestionably dominant until 2008, after the publication of the United States Geological Survey (USGS) which outlined the Arctic's undiscovered oil and gas reserves, its dominant role was clearly replaced by interest-based perspective. Subsequent to the discovery of the Arctic's prominent energy resources, which by means of the quick ice melting are becoming more accessible, all the Arctic states have started to attach more importance to cooperative and collaborative steps in the region. Consequently, conflicting issues

-including military activities- relinquished their place to cooperation. To emphasize this claim, neoliberal perspective examples of states will be elaborated upon. However, the last example of conflict by Russia in 2007 -flag-planting underneath the North Pole- which aroused power-based views among scholars writing on Arctic international relations should be given as proving that realist approaches will no longer prevail in the region.

In August 2007, the planting of a titanium flag by Russia at the bottom of the Arctic Ocean underneath the North Pole seriously provoked the other Arctic coastal states, especially Canada and the US. Although Russia's mission was stated to be a scientific expedition, the attempt in question via two mini submarines, provoked the other riparian states as they thought this was an act to claim sovereignty by Russia (Dhanapala, 2008).

Descending to 4.000 meters under the ice of the Arctic, Russia's aim was not to claim sovereignty in fact, though the leader of the expedition, Arthur Chilingarov, stated "The Arctic is Russian" after the aforementioned attempt (Byers, 2009, p. 88). Hearing this statement, the Canadian response was the most reactive in that Canadian Foreign Minister at the time, Peter Mackay, declared "*Look, this isn't the fifteenth century. You can't go around the world and just plant flags and say 'We're claiming this territory.' Our claims over our Arctic are very well established*" (The Guardian, 2 August 2007). As a response, while Denmark has also launched an expedition to the Arctic, Norway has not been in the act at all as it has previously admitted that its continental shelf does not reach the North Pole (Holmes, 2008, p. 324). This case has led scholars to persist on acceptance of the fact that there is no "terra nullius" and planting flags has no legal relevance under international law (Matz-Lück, 2009, p. 243). Consequently, neither Russia nor the other Arctic states mentioned any sovereignty claims while planting flags but implications in this case triggered some conflicting scenarios again in the region. Fortunately, this initiative didn't last long. Just one year later in Ilulissat, all the coastal states agreed to abide by international legal procedures, particularly by UNCLOS.

Clearly the flag-planting case of Russia hasn't triggered conflicting claims over the region yet. In fact, it was partly perceived as a defensive Russia willing to delineate its share of the Arctic's resources, not an offensive one threatening its neighbors as it was during the Cold War (Zellen, 2009, p. 112). Additionally, all dimensions of cooperation among states have enthusiastically been effectuated for

decades. It is possible to observe this even in military activities through bilateral or multilateral agreements. The most obvious example could be given as cooperation between Russia and Norway. Placing all cooperative phases with Russia in its “High North Strategy”, Norway initiated the first Norwegian-Russian joint naval exercises in 1994 which aimed to reinforce both parties’ presence in the Arctic. This was also an important first display of both Norwegian and Russian warships conducting joint shooting practices termed POMOR (Pettersen, 2010 and Exner-Pirot, 2012a, 202). Furthermore, cooperative examples of the Barents Rescue Exercises between Russia, Norway, Finland and Denmark and the Canada-Denmark signing of the Memorandum of Understanding on Arctic Defence, Security and Operational Cooperation or in general close relationships among NATO countries of the Arctic may be taken as increasing cooperation in the region, even in military activities (Exner-Pirot, 2012a, pp. 202-203).

As Dmitri Trenin claims, though driven by competition no new cold war has emerged whereas some scholars insisted on perceiving the struggle in the region as a “new cold war” (Trenin, 2014). Put differently, the geopolitical aspect of the Arctic during the 1990s has transformed from confrontation to cooperation, thus conflicting issues are nearly impossible. Instead of persisting on disagreement, states find it more logical to deal with why and how cooperation in the region emerges. Accordingly, neorealist attitudes of international politics in the Arctic have stayed in the shadow of neoliberal institutionalist perspective (Knecht and Keil, 2013, p. 184). To strengthen this assertion, it is vital to emphasize the importance of the Ilulissat Declaration.

Right after the publication of the USGS in 2008, as a response to a conflict-ridden Arctic future including competition over natural resources, through Denmark’s initiative the “Arctic Five (A5)” (Canada, Denmark, Norway, Russia and the United States) declared that they all would adhere to international law of the sea giving a different viewpoint of cooperation. The Declaration states that all coastal states cooperate with other stakeholders in the region and they will reinforce the expected cooperation thanks to mutual trust (Ilulissat Declaration, 2008).

The coastal states (A5) committed to both solving any conflict via international legal procedures and also to settling sovereignty issues through cooperation mentioned in the Declaration. Additionally, they rejected all proposals for new legal instruments such as the Arctic Treaty apart from the existing international law

(Strandsbjerg, 2012, p. 823). The importance of the A5's meeting in Ilulissat was that all the events emerging in the region were not a scramble for resources but conversely a regular progress under the leading position of the law of the sea that means they will pursue their continental shelf claims taking the existing law of the sea into account (Koivurova, 2011, p. 219). By this way, the five coastal states agreed upon peaceful settlement of disputes in the region and confirmed the existing legal international framework (Exner-Pirot, 2012a, p. 196). Stressing on the Ilulissat Declaration, the Russian Foreign Minister Sergey Lavrov declared that the declaration exemplifies the willingness of all participants to solve problems in the light of international law (McLaughlin, 2008).

It is significant to mention the meeting in Ilulissat and the publication of the USGS occurred in the same year. In fact, an assessment by the US Geological Survey in 2000 claimed that the Arctic may probably possess one fourth of the world's undiscovered oil and gas reserves but in 2008 the appraisal regarding energy resources in the region was even more significant and staggering. According to the USGS publication entitled "the Circum-Arctic Resource Appraisal (CARA)", which made use of geology-based probabilistic methodology, approximately 90 billion barrels of undiscovered oil reserves, 1.669 cubic feet of natural gas and 44 billion barrels of natural gas liquids may fall within the Arctic region (USGS, 2008). This is equivalent to about 13% of the world's total undiscovered oil and 30% of its natural gas (Howard, 2009, p. 63). British Petroleum's estimate of Arctic hydrocarbon reserves at about 25% is also remarkable (Stigset, 2009). Finally, when assessing the International Energy Agency (IEA) claim that dependence on fossil fuels will grow by 2030 (See at www.iea.org), potential of Arctic energy resources will surely trigger some interventionist policies by states -not confrontational but cooperative- over the region.

Figure 5. Oil and Gas in the Arctic



Source: *Geoscience News and Information*, Available at: (<https://geology.com/articles/arctic-oil-and-gas/>)

This appraisal of considerable sums of energy reserves likely to lay in the Arctic symbolizes a turning point of Arctic international politics. First of all, increasing demand for energy resources coming from energy-addicted countries -both Arctic and non-Arctic states- makes the region a 'hot spot'. Secondly, even though the occurrence of some provocative activities in the region –such as the flag-planting case and conflicting rhetoric of some political leaders- have revived claims that “resource wars” are likely to occur in the region, fortunately, this worst-case scenario is fallacious as Howard also asserts (Howard, 2009, p. 63). Instead, possibility of energy resources exploitation in the region -considering this will become easier owing to ice-melting- will in all probability bring states closer to each other. Furthermore, approximately 84% of potential new offshore reserves according to

the USGS means the increasing possibility of cooperation among the Arctic states if costs and risks of extraction are considered.

Unlike a “resource wars” scenario, cooperation among the Arctic states on resource exploitation will probably emerge and in time will also improve. In fact, there have been already examples of cooperative steps among giant energy companies. For instance, Russia has decided to collaborate with companies of the United States and European countries in order to cope with the technological challenges of resource extraction in the region. Consequently, Rosneft Oil Company from Russia and ExxonMobil from the US have started joint Arctic exploration projects in the Arctic (Trenin, 2014). Additionally, it is possible to refer to the same collaboration between Russia and Norway as they have been strategic partners since 2002, after signing many declarations on hydrocarbon development. With reference to this process, Norwegian companies Statoil and Norsk Hydro have special experience to share with Russia on oil drilling in the region which is critical for Russia (Gunitskiy, 2008, p. 265). Russia has tried to speed up oil and gas extraction in the Barents Sea and the Russian Shelf because it has been estimated that oil deposits in West Siberian will be sold by the end of the century (Huitfeldt et al, 1992, p. 15).

As a reminder, one of Russia's key priorities in the region is to turn the Arctic into Russia's strategic resources base and a region of peace and international cooperation (Sergunin and Konyshov, 2017, p. 174). Partnership of Norway and Russia exemplifies that cooperative approaches are taken in order to overcome infrastructural scarcity. Therefore, such initiatives could be understood via mutual interests regarding economic development (Stephenson, 2012, p. 324). As a consequence, bilateral or multilateral agreements and cooperation providing technological advancements is vital for resource extraction.

As previously mentioned, making the region more accessible through climate change causes global interest to increase in the region through three factors; new shipping routes, extraction of hydrocarbon reserves and continental shelf claims. In light of these three factors, global interest in the Arctic was fueled by two important cases after the 2000's - the Russian flag-planting case in 2007 and the publication of the US Geological Survey in 2008 (Jacobsen and Strandsbjerg, 2017, p. 20). However, one pillar of cooperation -opening new shipping routes- among states regarding economic development has not been mentioned. Next, another dimension providing Arctic cooperation pertaining to economic development will be elaborated upon.

If the ice-melting rate continues at its current rate, some parts of the Arctic will be ice-free for nearly half a year in the coming years. If so, navigation between the Atlantic

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Adnan Dal

and the Pacific Oceans will be feasible, meaning both time and cost savings for intercontinental shipping companies. More accessible polar routes -the Northern Sea Route (NSR) and the Northwest Passage (NWP)- will be considerably shorter compared to the existing routes of the Suez Canal, the Panama Canal and the Strait of Malacca. While the actual distance from Rotterdam to Yokohama via the Suez Canal is 11.200 nautical miles (nm), the same journey is approximately 7.300 nm via the Northern Sea Route which is comparatively more accessible than the Northwest Passage. Whereas the first voyage lasts 33 days, the latter lasts 20 days (Sputniknews, 2011).

Figure 6. The Northern Sea Route



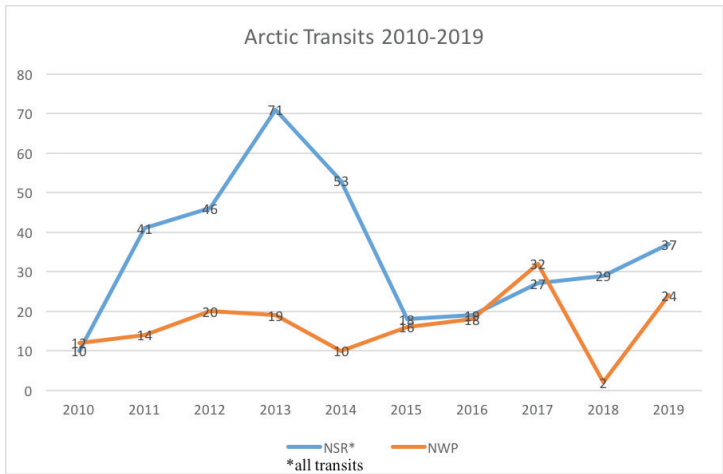
Source: Available at (<https://sputniknews.com/infographics/20111201169212198/>) Accessed 14.04.2018

Cost and time savings of these possible routes makes states' mouths water -some of which have huge trade capacities, such as China, South Korea, Singapore and Japan- thus these developments explain why these states have become involved in Arctic issues recently.

Being aware of this, Russia has been trying to improve infrastructure along the Northern Sea Route to which its administration belongs for decades. In fact, since the 1950s, in the former Soviet Union the relevant route has been used thanks to the Soviets and Norway taking the lead in organizing international research on the NSR. Thanks to Gorbachev's Speech in Murmansk, in 1993 the two states plus Japan initiated the International Northern Sea Route Programme (INSROP) to address issues such as ice and navigation, environmental challenges and increased utilization of the NSR including commercial, military, legal and political aspects (Scrivener, 1996, p. 11). From the 1990's until now, Russia has taken the advantage to use the NSR through its local administration receiving fees for its ice-breakers assistance.

Another alternative route, the Northwest Passage, was fully navigable in 2007 for the first time in many years (Fairhall, 2010, p. 6) while sometimes causing conflict between the US and Canada -the SS Manhattan (1969) and USS Polar Sea (1985) cases (Zellen, 2009: 139). The Northwest Passage has also been an alternative polar route in recent years. Figure 7 set transits in the Arctic via both routes between 2010-2019:

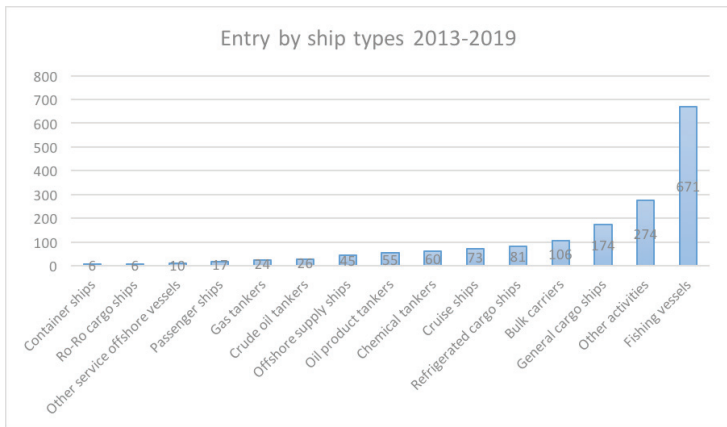
Figure 7. Arctic Transits 2010-2019



Source: Adapted from (CHNL Information Office, 2020; Headland et al, 2019, pp. 6-12)

Shipping in the Arctic has been increasing recently. According to the Protection of the Arctic Marine Environment (PAME)'s report on shipping activities in the region whereas 1298 ships entered the Arctic area -defined by the Polar Code- in 2013, the volume has been 1628, increased nearly 25% over six years, in 2019 (Arctic Shipping Status Report by PAME, 2020). According to the relevant report, nearly 41% of all ships were fishing vessels (Arctic Shipping Status Report by PAME, 2020). In terms of ship type, statistics are given below:

Figure 8. Arctic Shipping 2013-2019



Source: (Arctic Shipping Status Report by PAME, 2020) Available at: (<https://storymaps.arcgis.com/stories/592bfe70251741b48b0a9786b75ff5d0>). Accessed 02.04.2020

The possibility of both natural resources and new shipping routes allows the Arctic and non-Arctic states to become closer via cooperative and collaborative policies in the region. Here, the Arctic Council has a unique position in holding all the states together in terms of Arctic international relations. Consequently, policy insights of states have transformed for decades from a geopolitical view to a neoliberal one. As a regime example, the Arctic Council is the only institution to serve cooperation-building via its neoliberal dimension. Below, this argument will be distinctly reinforced through examining evolving theoretical framework of studies regarding the Arctic and policy insights of the Arctic states.

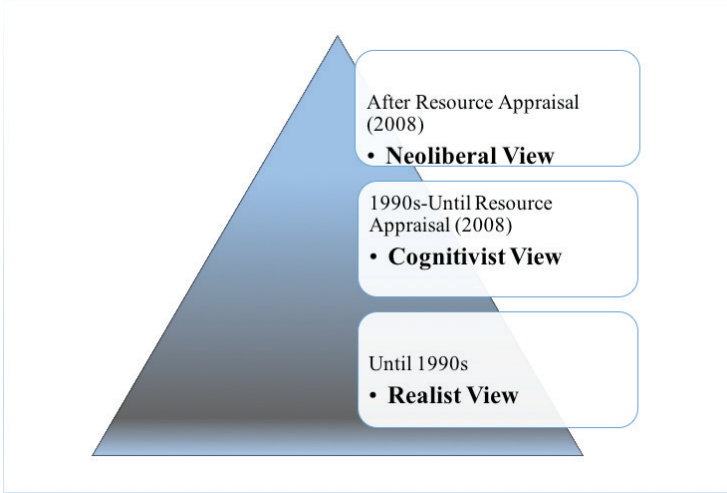
3.4. Shifting Perceptions

N. K. Kharlampyeva divided all discussions mentioning the Arctic region in the early 21st century into four explanatory instruments. She points to the Arctic as a territory of peace and cooperation, a transit route between Europe, Asia and North America, one of prominent places for its hydrocarbon reserves, and one of Earth's ecosystems (Kharlampieva, 2013, p. 95).

If a holistic approach regarding the Arctic is thought it could surely be seen that during the Cold War most of studies regarding the region were influenced by a realist perspective which pictured competition among the two block leaders -the US and the USSR- and stated the strategic importance of the region (Osterud and Honneland, 2014, p. 166). Harsh power relations and military rivalry in the bipolar system triggered states to keep away from becoming close to each other and consequently, from cooperation and collaboration. In short, during the whole Cold War, a consistent assessment could be made that pan-Arctic cooperation stayed in the shade of political and military confrontation (Griffiths, 2009, p. 7). Fortunately, through the Détente Period, rapprochement of parties has resulted in cooperation, especially in the early 1990s. This appraisal could be available even for sovereign rights which may be compatible with cooperation. Put differently, sovereign rights can sometimes facilitate cooperation while ensuring clear jurisdiction for shipping regulations and natural resource exploitation (Byers, 2010).

After the 1990s, through peace-building attempts and cooperative perspectives, scholars writing on the region have begun to examine climate change consequences as the region has been more influenced than the rest of the world. Accordingly, lots of regime examples were constructed in the region in order to protect the Arctic's environment which was being affected by climate change. Even Russia has begun to be a part of this wave. Russia's involvement in the Barents Cooperation -together with Finland, Norway and Sweden, the Barents-Euro Arctic Council (BEAC), and impressively the Arctic Council (AC) was in fact due to concern on environmental issues (Perry and Andersen, 2012, p. 66). During this period, the inspiring wave of international studies penned on the Arctic was explicitly through cognitivist view of regime theories. Below, a figure is given to clarify this alteration.

Figure 9. Shifting Arctic Policy



Finally, as a continuation of knowledge-based pillar of regime theories, particularly after the observation of the serious impacts of climate change causing the quick ice-melting, the direction of Arctic-related studies has turned into a neoliberal policy perspective. Principally after the publication of the US Geological Survey entitled “Circum-Arctic Research Appraisal” in 2008 and the opening of new shipping routes for a few months for the first time in decades, scholars and stakeholders have been encouraged to ponder over economic development -including both for natural resource exploitation and new maritime routes.

Once hydrocarbons in the region considered, cooperation via bilateral and multilateral agreements is significant (Huitfeldt et al, 1992, p. 15). Moreover, in terms of navigating through existing polar routes for the Arctic states, having cooperation is also significant since the region is lack of considerable infrastructure. That is the way the Arctic states may opt for gaining from the new emerging world through cooperation and collaboration, even if they have minor boundary disputes and competing claims (Zellen, 2009, p. 110). With regard to the hydrocarbons, since they lie within the established borders of the Arctic states, it is not likely to cause disputes among the Arctic states over natural resources (Howard, 2009, p. 70). As a consequence, “resource wars” scenario is not likely to come true among the states.

In light of the quest for cooperation abovementioned, all the Arctic states (A8) have updated their policy perceptions which may be understood through targets to obtain “absolute gains”. Therefore, the Arctic Council has taken its position as a leading regime in the region via its role in gathering all the members together with their neoliberal political views. This outline will be scrutinized below through the theoretical framework of this study.

IV

“OIL AND GAS” PILLARS OF ECONOMIC DEVELOPMENT

By and large the term “economic development” is taken as an increase in gross domestic product (GDP) in production and service industries. Put differently, it is described as a decrease in poverty, iniquitous income distribution and unemployment or more broadly it could be taken as providing freedom for people’s lives (Larsen, 2010, p. 87). Relating this to the circumpolar north, resource exploitation and maritime transport are two crucial components of economic development improving living conditions and quality of life as mentioned above, which all circumpolar states of the Arctic have consensus on by including it within their national strategies.

Thomas R. Berger used the term “a northern frontier” in place of “a northern homeland” for the Arctic since the above mentioned region has been looked upon as a potential place for resource extraction (Berger, 1977). This view has even fostered “resource wars” discourses among politicians and consequently, these worst-case scenarios were fairly supported by the flag-planting case. Fortunately, the relevant scenarios are unlikely to occur as most of the region’s reserves lie within the established borders (Howard, 2009, p. 70). From this perspective, both the fact that over 90% of the offshore resources in the region fall within the undisputed areas and it is really difficult and expensive to reach these resources due to a harsh environment and lack of infrastructure (Exner-Pirot and Murray, 2017, p. 58), cooperation on resource extraction has outweighed “resource wars” discourses for decades. For instance, S. G. Borgerson mentioned a possible military conflict especially after the flag-planting case (Borgerson, 2008). Nevertheless, in 2013 he argued that common interests regarding the Arctic enabled the Arctic states to think about cooperative initiatives (Borgerson, 2013). Despite Russia’s annexation of the Crimea, its interventions in Eastern Ukraine and Syria and its alleged interference in the US presidential election in 2016 and resulting sanctions from the US, bilateral and multilateral relations, such as agreements signed under the auspices of the Arctic Council- search and rescue (2011), oil pollution

preparedness and response (2013)- between the two parties are increasing in the region (Conley and Melino, 2017, p. 30).

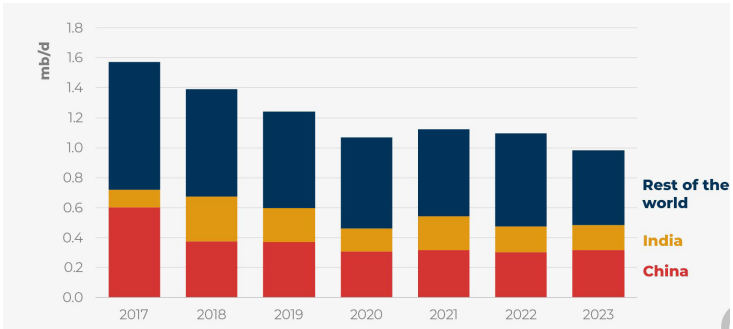
If a quick glance at the whole landscape of the Arctic is given, it may clearly be deduced that the USGS assessment of natural resources in 2008 increased the geoeconomic importance of the Arctic. Additionally, in 2009 the Arctic Marine Shipping Assessment (AMSA) prediction of an ice-free Arctic as soon as 2015 allowed states to focus on the Arctic's economic potential (Gauthier, 2017, p. 352). Consequently, all improvements regarding the Arctic have been parallel to the "economic development" priority of the Arctic states for both natural resources, such as oil and gas, and navigable polar routes. In this context, the oil and gas dimension of the Arctic will be evaluated below, before turning to maritime aspects of the region in the next chapter.

4.1. Global Energy Statistics

The Arctic could be taken as "an open economic frontier" through its vast hydrocarbon reserves which the energy companies should pay attention to extract them and make clear cost-benefit calculations due to variables such as supply and demand levels and global energy prices if the prediction of the International Energy Agency (IEA) comes true that the global oil and gas demand could grow by more than 35% between 2010 and 2035 (Eurasia Group Report).

Here, the fact that the largest portion of this growth would be shared by China, India and the Middle East (IEA, 2013, p. 55). Although it will be elucidated later, China's role is crucial in global energy consumption as it became the largest oil-importing country in 2013 and its total global energy consumption is expected to amount to 33% between 2010-2035 and its demand is expected to rise by 60% (Overland et al, 2015, pp. 36-37). Although there are some fluctuations among energy-hungry newcomers, according to the IEA, oil demand by years is shown below:

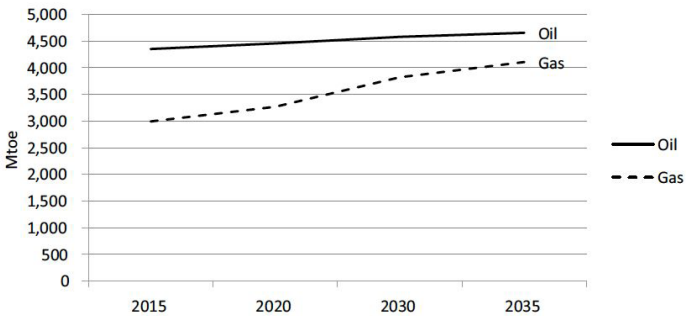
Figure 10. World Oil Demand Growth



Source: (See at <https://www.iea.org/oil2018/>. Accessed 10.08.2018).

In 2017, Chinese energy consumption rose twice as fast as in 2016, by 2.9%. Moreover, while there was a decrease in Chinese energy consumption in 2018, on the contrary in India, the growth rate increased. In 2017, a general increase occurred in most Asian countries such as Indonesia, Malaysia, South Korea, and for the first time since 2013, Japan. The same growth could also be seen in Europe (Enerdata). Parallel to consumption, oil and gas demand is steadily increasing. An assumption regarding the increase is given below:

Figure 11. Global Oil and Gas Demand Growth Over Projection Period (in Mtoe)

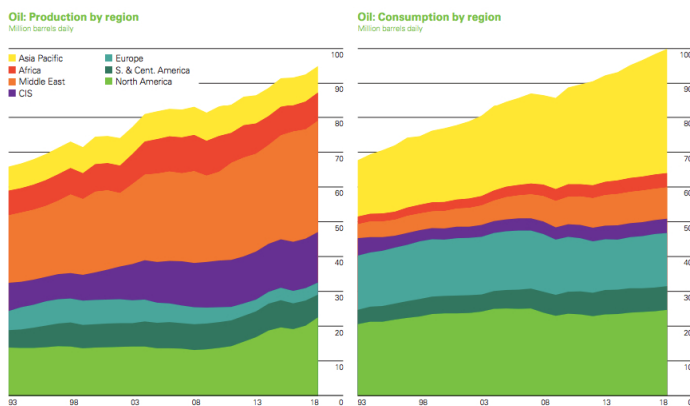


Source: (Overland et al, 2015, p. 37)

“OIL AND GAS” PILLARS OF ECONOMIC DEVELOPMENT

Even though sources of renewable energy are becoming more popular as countries keep their commitments on preventing carbon dioxide (CO₂) emissions, in the long run, the monopoly of hydrocarbon resources of energy consumption will surely pursue its prominent share.

Figure 12. BP Oil Production and Consumption by Region



Global oil production increased by 2.2 million b/d in 2018. Growth was heavily concentrated in the US (2.2 million b/d), Canada (410,000 b/d) and Saudi Arabia (390,000 b/d) while oil production declined sharply in Venezuela (-580,000 b/d) and Iran (-310,000 b/d). OPEC production declined by 330,000 b/d while non-OPEC production increased by 2.6 million b/d. Oil consumption in 2018 grew by an above average 1.4 million b/d. China (680,000 b/d) and the US (600,000 b/d) accounted for the majority of this year's growth.

Source: (BP Statistical Review of World Energy, June 2019)

According to BP's appraisal above, Asia Pacific, Europe and North America consume more energy than their production levels. These three regions are also well-known for including the world's top five major economies -the United States, China, Japan, Germany and the United Kingdom. Unless they give priority to renewables, the more these economies grow, the more non-renewable resources they will consume -especially oil and gas. As a point of departure for the relevant non-renewable resources, the Arctic hosts an oil and gas bonanza. Thus, the resource potential of the region means therewithal to “unpack the black box of Arctic interests” (Keil, 2013, p. 180), especially for the circumpolar states of the region. Thus, it is worth examining the oil and gas potential of the Arctic next so as to determine how the region is significant for major energy consumers.

4.2. The Arctic's Resource Potential

For approximately 50 years, nearly 10% of the world's conventional hydrocarbons have been discovered in the onshore Arctic, whose significance is steadily increasing (Gautier et al, 2009). On the one hand, political instability after 2010 in areas, particularly in West Asia and North Africa, which contain hydrocarbon energy producers has caused energy-hungry newcomers to seek for more secure and stable regions so that they meet their energy needs (Dadwal, 2014, p. 813). On the other hand, because conventional production has declined, industry must focus more on hydrocarbon energy resources of the Arctic even if it requires advanced technologies to exploit these resources in harsh climatic conditions (Eurasia Group Report).

Besides its safe location, the quantity of hydrocarbon resources also makes the region intriguing (Koivurova, 2015, p. 191). Thus, the fact that by virtue of global climate change quicker ice-melting makes the Arctic easier to access, the Arctic would be a next supplier of energy resources for energy dependent countries such as China, India and Japan. Here, what is new for the Arctic is that it holds a resource base for the new players of energy rivalry.

In the Arctic, activities for oil and gas exploration and exploitation roughly started in the 1920s and quickly expanded in the second half of the century. Onshore commercial ventures have occurred at Norman Wells, Northwest Territories, and Canada for 80 years. The attempts in question continued to spread to the Mackenzie Delta of Canada, Northern Russia and Northern Alaska. Activities for offshore exploration in all the Arctic countries with petroleum provinces have begun since the 1970s (Weidemann, 2014, p. 32).

According to the USGS World Petroleum Assessment in 2000, the Arctic may contain approximately 13% of global undiscovered oil resources -about 618 billion barrels (BB) (Gautier et al., 2009, p. 1178). The next assessment was carried out in 2008 by the USGS when more geological data were available and the rapid melting of glaciers increased its estimation to nearly 13% of the world's total undiscovered oil (90 billion barrels) and 30% of undiscovered natural gas (1.669 trillion cubic feet) reserves. 44 billion barrels of natural gas liquids were also estimated to be embedded in the region. By 2007, more than 400 oil and gas fields, which include 40 billion barrels of oil (BBO), 1136 trillion cubic feet (TCF) of natural gas and 8 billions barrels of natural gas liquids were developed in the north of the Arctic Circle, especially in the West Siberian Basin and on the

"OIL AND GAS" PILLARS OF ECONOMIC DEVELOPMENT

North Slope of Alaska (Gautier et al., 2009, p. 1176). A summary of the USGS report -Circum-Arctic Resource Appraisal- is listed below:

Table 5. Summary of CARA's Appraisal

Territory	Oil (MMBO)	Total Gas (BCFG)	NGL (MMBNGL)	BOE (MMBOE)
Amerasia Basin	9.723.58	56.891.21	541.69	19.747.14
Arctic Alaska	29.960.94	221.397.60	5.904.97	72.765.52
Barents Platform	2.055.51	26.218.67	278.71	6.704.00
East Barents Basin	7.406.49	317.557.97	1.422.28	61.755.10
East Greenland Rift Basins	8.902.13	86.180.06	8.121.57	31.387.04
East Siberia Sea Basin	19.73	618.83	10.91	133.78
Eurasia Basin	1.342.15	19.475.43	520.26	5.108.31
Hope Basin	2.47	648.17	11.37	121.87
Laptev Sea Shelf	3.115.57	32.562.84	867.16	9.409.87
Lena-Anabar Basin	1.912.89	2.106.75	56.41	2.320.43
Lena-Vilyui Basin	376.86	1.335.20	35.66	635.06
Lomonosov-Makarov	1.106.78	7.156.25	191.55	2.491.04
North Chukchi-Wrangel Foreland Basin	85.99	6.065.76	106.57	1.203.52
North Greenland Sheared Margin	1.349.80	10.207.24	273.09	3.324.09
North Kara Basins and Platforms	1.807.26	14.973.58	390.22	4.693.07
Northwest Canada Interior Basins	23.34	305.34	15.24	89.47
Northwest Laptev Sea Shelf	172.24	4.488.12	119.63	1.039.90
Norwegian Margin	1.437.29	32.281.01	504.73	7.322.19
Sverdrup Basin	851.11	8.596.36	191.20	2.475.04
Timan-Pechora Basin	1.667.21	9.062.59	202.80	3.380.44
Vilkitskii Basin	98.03	5.741.87	101.63	1.156.63
Yenisey-Khatanga Basin	5.583.74	99.964.26	2.675.15	24.919.61
West Greenland-East Canada	7.274.40	51.818.16	1.152.59	17.063.35
West Siberian Basin	3.659.88	651.498.56	20.328.69	132.571.66
Zyryanka Basin	47.82	1.505.99	40.14	338.95
TOTAL	89.983.21	1.668.657.84	44.064.24	412.157.09

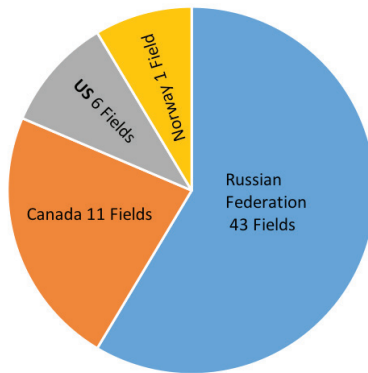
Notes: MMBO: million barrels of oil, BCFG: billion cubic feet of natural gas, MMBNGL: million barrels of natural gas liquids, BOE: billions of oil equivalent, MMBOE: million barrels of oil equivalent.

Source: Adapted from (<https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>) Accessed 11.08.2018

4.2.1. Resource Potential of Russia

There are sixty-one prominent oil and natural gas fields discovered within the Arctic Circle (Budzik, 2009, p. 4). This may be demonstrated in Figure 13.

Figure 13. Discovered Large Oil and Gas Fields in the Arctic

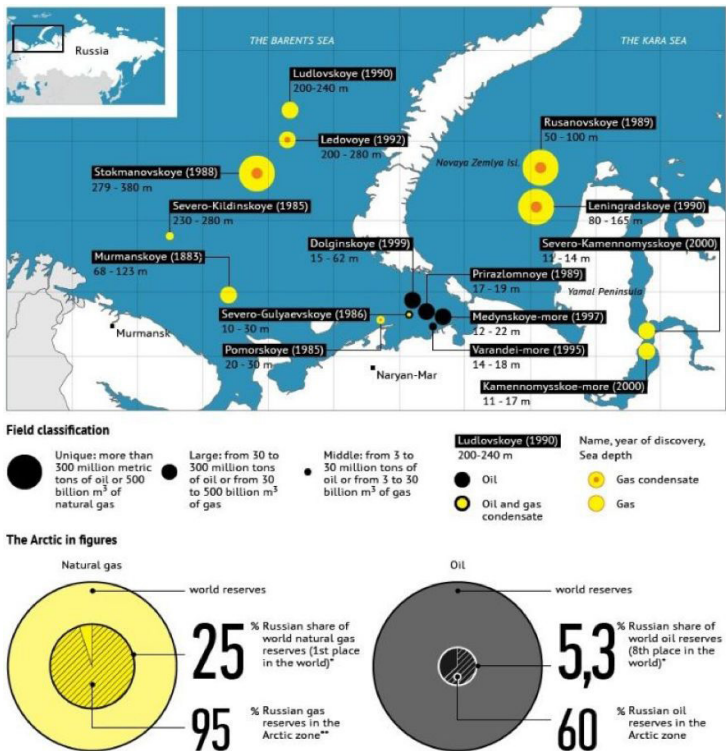


Source: Adapted from (Budzik, 2009, p. 4)

If the figure explored, it can be seen that Russia has the biggest share of total fields. In Russia, the first offshore Arctic gas and oil fields were discovered in the Barents and Severo-Gulyaevskoe field, respectively (Eurasia Group Report). Afterwards development began in Sakhalin, Pechora Sea and Yamal Peninsula. Additionally, the Barents Sea, Pechora Sea, Kara Sea, East Siberia near Yamal Shelf and the Far East is waiting to be explored (Zolotukhin et al, 2015, p. 147). Russia has such a vital interest in the Arctic as it generates nearly 20% of its gross domestic product (GDP) and 22% of its total exports (Sputniknews, 2009). Geographically being the largest state in the Arctic and a global player in energy market Russia has been the most advantageous actor in the Arctic (Rowe, 2009, p. 1). According to the State Duma of the Russian Federation, nearly 95% of its natural gas reserves and 60% of its oil reserves are in the Arctic (available in the figure below). Another prediction comes from the Russian energy giant company Gazprom, in that the Russian continental shelf would probably hold 790 billion barrels of oil (Robertson, 2014, pp. 30-31). Due to this estimation, Russia's first offshore drilling platform -called Prirazlomnaya- was built in 2013 and under

Gazprom’s management, the first commercial production of oil in the Arctic was conducted (McPherson, 2015: 29; Moe, 2013a, p. 170). Additionally, one of the world’s largest gas fields, Shтокmanovskoye which was discovered in the Russian side of the Barents Sea, is expected to have 95 trillion cubic feet (TCF) of natural gas and 300 million barrels of recoverable condensate (The National Petroleum Council (NPC) Report, 2015, p. 37). In total, the Barents Sea is expected to contain 33% of Russia’s proven oil reserves (BP, 2010). Russian oil and gas fields in the Arctic are demonstrated below:

Figure 14. Russian Oil and Gas Fields in the Arctic (2011)



Source: (See at <https://sputniknews.com/infographics/20111007167371478-Russian-oil-and-gas-fields-in-the-Arctic/>) Accessed 14.08.2018

4.2.2. Petroleum Exploration in the US (via Alaska)

The USGS also estimates that the United States has the second largest Arctic oil and gas potential with nearly 20% of the whole, equivalent to 83.31 billion barrels of oil equivalent (BBOE). While dependency of the US on natural gas is low as it produces huge amounts of gas domestically, the situation is different for oil. In 2010, approximately 49% of consumed petroleum in the US (U.S. Energy Information Administration, 2011) was imported that means the United States has to produce more than it consumes. Here, Alaska could play an important role in reducing its dependency on oil imports. Alaska -the second biggest oil producing state after Texas thanks to Prudhoe Bay- is estimated to hold the biggest oil deposit through its Arctic coast (Budzik, 2009, p. 5). In 1968 at North Slope, Prudhoe Bay, the largest single oil field was discovered in the onshore Alaskan Arctic. This discovery encouraged the United States to pursue more exploratory offshore drillings in the Beaufort and the Chukchi Seas and to transport the produced oil via the Trans-Alaska Pipeline System (TAPS) which became operational in 1977 (Osthagen, 2013, p. 9). TAPS enabled oil export from the North Slope but it was not possible to export gas due to a lack of gas export infrastructure (The National Petroleum Council (NPC) Report, 2015). Even so, the US has constructed lots of LNG ports to become one of the major LNG producers in the global market since 2008, means that it has been trying to sustain and enhance its oil and natural gas producing position for decades (Pugliaresi, 2013, p. 163). A figure illustrating Alaska's resource potential is given below:

Figure 15. Summary of Alaska's Resource Potential

Alaska Study Areas				Resource Potential*		
				Oil + NGLs (BBO)	Natural Gas (TCF)	Total Resource (BBOE)
North Alaska	Onshore	Undiscovered	Western North Slope	0.2	9.1	1.7
			NPRA	1.6	50.5	10.1
			Central North Slope	4.3	35.8	10.2
			ANWR 1002	9	7.2	10.2
			North Slope Unconventionals	1.2	60.1	11.3
		North Slope Discovered		1.4	99.7	18.1
	Offshore	Undiscovered	North Slope State Waters	2	7.1	3.2
			Chukchi Sea OCS	15.4	76.8	28.2
			Beaufort Sea OCS	8.2	27.6	12.8
			Hope Basin OCS	0.2	3.8	0.8
			North Alaska Offshore Discovered		1.5	28.1
		South and Central Alaska Onshore Undiscovered Conventional				
		Central Alaska (Yukon Flats)	0.4	5.5	1.3	
	Southern Alaska (Cook Inlet)	0.7	19	3.9		
Alaska			46.1	430.2	117.8	

*Oil and NGLs shown in billion barrels of oil (BBO). Natural Gas in trillion cubic feet (TCF), and Total Resource in billion barrels of oil equivalent (BBOE). South and Central Alaska OCS volumes excluded.

Note: As per discussion in Methodology and Assumptions section, Alaska volumes are provided in more detail with some values obtained from U.S. sources other than the USGS 2008 Circum-Arctic Resource Appraisal (CARA). As such, total Alaska numbers in this section are slightly different than those quoted in the global discussion.

Source: (See at <http://www.npcarcticpotentialreport.org/>) Accessed 14.08.2018

The US Energy Information Administration (EIA) stated that the United States surpassed Saudi Arabia and Russia as the world's largest crude oil producer in 2018 (EIA Short-Term Energy Outlook, 2018) and this makes the Arctic more attractive owing to its hydrocarbon reserves as a new resource base for the US.

4.2.3. Oil and Gas Discoveries in Canada

When considering the economic potential of the high north in its 2009 national strategy pertaining to the Arctic, Canada paid more attention to the Arctic to develop its “massive oil and gas reserves” (Government of Canada, 2009, p. 5).

It is a fact that oil was discovered in the 18th century in the Canadian Arctic. However, exploratory drilling was only commenced in the 1920s by Imperial Oil. These developments were followed by exploration of the Northwest Territories, the Mackenzie Delta, the Arctic Islands and the Sverdrup Basin in the 1960s, and finally, offshore into the Beaufort Sea in 1972 (Eurasia Group Report). Canada's estimated Arctic oil and natural gas amount is nearly 5% of total according to the USGS, which equates to the lowest amount among the A5. Canada's main oil

and natural gas producing area, the Western Canadian Sedimentary Basin, lies outside the Arctic region. Additionally, the Amerasia Basin -the second biggest undiscovered oil share in the Arctic- is shared by Canada and the United States which is estimated to hold 10 billion barrels of oil equivalent (BBOE) (Budzik, 2009). Although it has the lowest share of oil and gas reserves among littoral states, it is vital for Canada to enhance oil and gas exploratory drilling in the Arctic.

4.2.4. Exploration Activities in Norway

Focusing on the strategic importance of the Arctic, Norway has the third biggest Arctic oil and gas potential -after Russia and the US- which equates to 11% of the total share. Similar to Russia, 80% of Norway's resource potential is estimated to be gas (The National Petroleum Council (NPC) Report, 2015). Norway's petroleum share of its GDP is approximately 21%. As around 43% of its petroleum resources have already been exploited, Norway is seeking new potential petroleum resources via mapping and granting licences, especially in the Barents and Norwegian Seas (Keil, 2013, p. 175). On the other hand, despite depleting fields, the largest undiscovered gas resources are believed to be located in the Barents Sea, nearly 37% of total (Ministry of Petroleum and Energy, 2011, pp. 30-32), which interprets why Norway formed a settlement with Russia on the Barents Sea.

Exploratory drilling began in the Norwegian Barents Sea in the 1980s. Just four years later, a Norwegian company Statoil, discovered the world's northernmost offshore gas field called Snohvit and since this time it has drilled 94 exploration wells in this region (Eurasia Group Report). Additionally, the oil field Goliat, which is 50 kilometres southeast of Snohvit, was discovered in 2000 and oil production in the relevant field began in 2016. Both Goliat and Snohvit fields are on the Norwegian side of the Barents Sea, the most dynamic area in the Arctic in terms of offshore development (Moe, 2013a, p. 169). Additionally, Norway has been so far the only country to extending its continental shelf that means it has the right to expand exploratory petroleum activities over an area of nearly 235.000 km². Moreover, owing to the settlement on the Barents Sea, exploratory activities have begun in this area. For instance, only in 2013, 13 hydrocarbon discoveries were made in Norwegian Arctic waters and licences given energy companies are increasing in number (Keil, 2015, p. 88).

4.2.5. Greenland as a New Player in Exploration

The lowest share of oil and natural gas production belongs to Denmark whose production is about 1% of the world total. In fact, leases were offered in 1975 to companies, such as Mobil, Amoko, Chevron, and Total to give access to petroleum resources by the Kingdom of Denmark representing Greenland. Nevertheless, as nearly all the drilling wells were so dry, activities began to be abandoned (Osthagen, 2013, p. 12).

However, the USGS giving special importance for Greenland in that it may hold 10% of total Arctic oil and gas reserves, makes it the fourth largest among the coastal states. Although this share may indicate low importance among the Arctic states, Greenland may take into consideration to exploit its considerable resources in order to gain its independency since in recent years it has been planning to take full autonomy from Denmark. Therefore, it is crucial to increase explorative activities to provide an economic basis for Greenland which clarifies its positive attitude towards energy companies such as Cairn Energy (Keil, 2013, p. 178). Thanks to this positivity, Cairn Energy revealed hopeful outputs for potential offshore oil drilling west of Greenland (Cairn Energy PLC, 2011). Moreover, in Northeastern Greenland, which is expected to have more than 30 billion barrels of oil equivalent (BBOE), leases for exploratory drilling were granted to companies such as Statoil, ENI and Chevron at the end of December 2013 (The National Petroleum Council (NPC) Report, 2015). This positive role was followed by Tollow Oil purchasing a 40% exploration share in Baffin Bay.

Though no prominent commercial discoveries of hydrocarbons have been made so far in Greenland (Eurasia Group Report), the island is crucial for harbouring rare minerals and mines especially vital for high-tech products such as smartphones, satellites and electric cars. (Johnson, 2020). This advantage of Greenland makes the island alluring for global powers like the US and China. Engagement of both countries in Greenland via energy companies unsurprisingly points that issue. For instance, the US view point regarding the island has been evolving from geostrategic to geoeconomic. That assessment explicitly points why Trump notifies his decision to purchase the island or to open a diplomatic mission in the island.

The USGS continues research on the oil and gas reserves of the Arctic, consequently in 2012 two studies were released. The first study regarding the Amerasia Basin petroleum province revealed that 3 billion barrels of oil (BBO) equivalent

were discovered but not extracted, and 9 BBO and 57 trillion cubic feet (TCF) of natural gas were undiscovered but classified as technically recoverable resources (Houseknecht et al., 2012a). Another study regarding Alaska petroleum province estimated that about 30 billion barrels undiscoverable but technically recoverable resources of oil and 219 TCF of natural gas existed (Houseknecht et al., 2012b).

The share of the Arctic states in the world's total oil and natural gas production is also significant in indicating how important these energy resources are for them and as a whole for the rest of the world. To demonstrate this, both the crude oil and natural gas production amounts of the A8 are given below:

Table 6. Crude Oil and Natural Gas Production of the A8 by 2017-2018

Country	Crude Oil (in barrels per day)	Natural Gas (in cubic meters)
Canada	4.264.000 (2018 est)	159.100.000.000 (2017 est)
Denmark (Greenland)	0 (2018 est)	0 (2017 est)
Finland	0 (2018 est)	1.000.000 (2017 est)
Iceland	0 (2018 est)	0 (2017 est)
Norway	1.517.000 (2018 est)	123.900.000.000 (2017 est)
Russian Federation	10.759.000 (2018 est)	665.600.000.000 (2017 est)
Sweden	0 (2018 est)	0 (2017 est)
United States	10.962.000 (2018 est)	772.800.000.000 (2017 est)

Source: (See at <https://www.cia.gov/library/publications/resources/the-world-factbook/fields/261rank.html>) Accessed 19.02.2020.

A glance at the total share of crude oil and natural gas production reveals that approximately 30% of world total crude oil and 45% of natural gas production comes from four of the Arctic states: the United States, the Russian Federation, Canada, and Norway.

Table 7. Crude Oil Producers 2018

Country	Million Barrels per day	%of world total
Brazil	3.43	3
Canada	5.38	5
China	4.81	5
Iran	4.46	4
Iraq	4.62	5
Kuwait	2.91	3
Russian Federation	11.40	11
Saudi Arabia	12.42	12
United Arab Emirates	3.79	4
United States	17.94	18
Total Top 10	71.15	71
World	100.89	

Source: (US Energy Information Administration 2018)

(See at <https://www.eia.gov/tools/faqs/faq.php?id=709&t=6>) Accessed 14.03.2020

According to the table above, three of the Arctic states are among top 10 of the world oil producers. As indicated, the United States produces nearly one fifth of the world total oil. The United States is also the leading country of natural gas producers. In table 8, it could be deduced that the United States is followed by the Russian Federation as the second natural gas producer of the world. Additionally, it is significant to point that four of the top 10 of the world gas producers are among the Arctic states as the United States, the Russian Federation, Canada and Norway, respectively.

Table 8. Natural Gas Producers 2018

Country	Billion cubic meters	%of world total
Algeria	92.3	2.4
Australia	130.1	3.4
Canada	184.7	4.8
China	161.5	4.2
Iran	239.5	6.2
Norway	120.6	3.1
Qatar	175.5	4.5
Russian Federation	669.5	17.3
Saudi Arabia	112.1	2.9
United States	831.8	21.5
Total top 10	2717,6	70.3
World	3.867.9	100.0

Source: (BP Statistical Review of World Energy, 2018) (See at: <https://www.bp.com/content/dam/bp/business-sites/en/global/corporate/pdfs/energy-economics/statistical-review/bp-stats-review-2019-full-report.pdf>) Accessed 14.03.2020

If the resource potential of the Arctic among the A5 is taken in a holistic approach, some estimated inferences regarding offshore-onshore comparison could be made. Accordingly, 74% of total resources are offshore while 26% come from onshore sources. Moreover, while 19% of the resource potential of the region is discovered, the other 81% of this potential is undiscovered, which equates to 25% of the world's undiscovered conventional resource potential (The National Petroleum Council (NPC) Report, 2015).

Production of some prominent energy resources, such as oil and gas, are particularly vital in half of the Arctic states -Canada, Norway, Russia and the United States- as there is no domestic production of oil and gas in the rest -Finland, Iceland, Sweden and Denmark (Greenland) -and clearly these latter states are fully dependent on imports even though some exploratory drilling activities in Iceland and Greenland are being pursued (Larsen, 2010, p. 102).

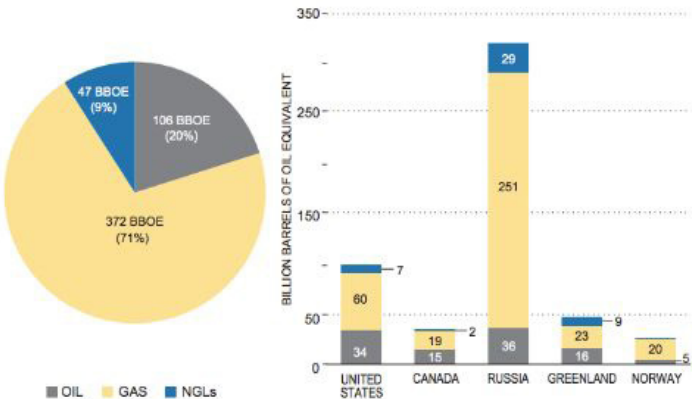
Finally, the A5’s resource potential by petroleum type and by countries is significant in determining the role of energy resources in the national strategies of the relevant states.

Table 9. Global Arctic Conventional Resource Potential (by Country)

Country	Billions of Barrels of Oil Equivalent (BBOE)	Percentage (%)
Canada	35	7
Greenland	48	9
Norway	26	5
Russia	315	60
United States	100	19

Source: Adapted from the National Petroleum Council
(See at <http://www.npcarcticpotentialreport.org/>) Accessed 13.08.2018

Figure 16. Global Arctic Conventional Resource Potential by Petroleum Type with Distribution by Country



Source: (See at <http://www.npcarcticpotentialreport.org/>) Accessed 13.08.2018

4.3. Activities of Energy Giants in the Arctic

Energy companies have been drilling in the Arctic since all the Arctic states began to give priority to cooperation and coordination rather than continuing with

conflict scenarios. In this context, long-running disputes may change our views of “resource wars” or “hot conflict” discourses. Extending the continental shelf under the Convention on the Limits of the Continental Shelf (CLCS) has triggered controversy regarding borders for decades but what is significant is that all the Arctic states settled on business-to-business (B2B) cooperation. This cooperation has enabled states to focus on common interests, especially in terms of the natural resource potential of the region. As a consequence, they opted for resolving ongoing disputes via bilateral and multilateral agreements. In this context, the optimal example may be given as the cooperation between Russia and Norway on the Barents Sea.

For decades, both parties have shared common interests in exploring and preserving the Barents sea. First of all, a wave of cooperation started with constructing joint fishery management regimes since the 1970s as the region has one of the most prominent fish stocks. Afterwards, environmental issues were on the agenda in the 1980s and since the 1990s, energy issue has triggered both sides to concentrate on economic development as mutual interests (Bourmistrov et al, 2015, pp. 77-82). Even the flag-planting case did not disturb the cooperative atmosphere as ongoing economic cooperation over resource extraction in the High North is occurring (Trenin, 2014).

Even though the delimitation of the Barents Sea caused instant fluctuations in cooperative waves, both parties finally reached a solution in 2010 which concluded with an agreement entitled “The Treaty on Maritime Delimitation and Cooperation in the Barents Sea and the Arctic Ocean”. This agreement had a unique role in resolving a long-running dispute in that it provided the opportunity for the joint development of natural resources in the delimited area (Bourmistrov et al, 2015, pp. 77-82). The treaty in question, signed in Murmansk, divided the disputed areas into two halves of 87,500 square km each (Overland and Krivorotov, 2015, p. 99). Accordingly, oil and gas deposits in the region as a whole may be explored and developed only jointly by the two parties (Socor, 2010).

Here, it is clear that oil and gas resources can be taken as a crucial factor creating cooperation between them (Moe et al, 2011). Thus, it could be indirectly deduced that both parties are eager to ignore hard security considerations for the sake of extracting energy resources as common interests since they have been explicitly seeking cooperative steps for decades. A prominent indicator of these

diligent attempts and the extension of the agreement of 2010 is the agreement signed by both Norway and Russia on October 25, 2018 to map potential oil and gas fields in the region. Through this agreement, it is planned to manage geological exploration in the formerly-disputed areas (See at arctic.ru/news/, 2018) Accessed 11.11.2018.

The same initiative steps may be seen between the United States and Russia. Under the umbrella of the Arctic Council, both parties signed legally binding agreements regarding search and rescue (2011)", oil pollution preparedness (2013)" and enhancing scientific cooperation (2017)" (See at <https://arctic-council.org/en/>). Furthermore, both parties became closer under the Coast Guard forums which focused on maritime security, joint operations, emergency responses, fisheries enforcement and information exchange. As a continuation of this venture, a joint statement signed by all the Arctic states embracing many measures regarding maritime response and Arctic operations in the Arctic Coast Guard Forum that may be taken as one of the promising coordinative steps in the Arctic (Plouffe and Exner-Pirot, 2017: 20). Additionally, their desired commitment to the Polar Code which came into force in 2017 is also significant to indicate cooperative instruments between parties (Conley and Melino, 2017, p. 22).

Another conflict resolution attempt came from Denmark and Canada in May 2018 in order to make progress on the sovereignty of Hans Island, the Lincoln Sea maritime boundary and continental shelf limit of the Labrador Sea (Ministry of Foreign Affairs of Denmark, 2018). Both parties' decision to establish a joint task force to solve the regarding disputes expresses how eager both sides are to resolve the ongoing disputes and reinforce cooperation in the region.

All collaborative activities among the circumpolar states make the activities of energy companies more meaningful as they symbolize requests for cooperation by the relevant states. Moreover, coordination of these energy giants signifies the desire of the Arctic states to focus on oil and gas extraction as a tool of economic development. When considering the climatic conditions and low infrastructure of the Arctic, the optimum choice seems to be having joint explorations with the relevant energy companies. Some of the prominent ventures of these companies are given below.

To being with the North American Arctic, in 2007, Imperial Oil and Exxon made bid of nearly 600 million dollars in return for gaining 205.32 hectares

exploration area on the Canadian side of the Beaufort Sea (Jones, 2007; Moe, 2013a, p. 173). In the same year, Devon Energy, which managed drilling in the Beaufort Sea for decades, announced that nearly 240 million barrels of recoverable oil had been discovered.

In 2008, Shell and ConocoPhillips bid approximately 2.7 billion dollars for rights to drill in the Chukchi Sea (Loy, 2008). British Petroleum also entered the market by giving bids for oil and gas exploration leases in the Beaufort seabed along with other companies -MGM Energy and ConocoPhillips Canada Resources and Phillips Petroleum Canada (Lajeunesse, 2013, p. 110). Additionally, Shell Oil bid 2.1 billion dollars for lease tracts in the Chukchi Sea but had to leave the Arctic until 2015 (Leschine, 2016, p. 40). ExxonMobil also closed a gasline deal with the Alaska Gasline Development Corporation (AGDC) in 2018 to sell gas to the North Slope and fulfill 807-mile gas pipeline and LNG export project (Alaska Journal of Commerce, 2018).

In the Barents Sea, Norwegian and Russian companies have been active in exploring and developing hydrocarbon reserves for decades. During the 1990s, the Russian gas giant Gazprom along with Statoil and Norsk Hydro, which are Norwegian oil and gas companies, carried out numerous explorations and development of oil and natural gas deposits in the Eastern Barents and Pechora Seas. These attempts were followed by a signed memorandum by Gazprom, Rosneft and Statoil agreeing to joint operations in the Shtokman and Snohvit fields and to broader cooperation being pursued in the following year (Bourmistrov et al, 2015, p. 79). In 2012, as exploitation of resources requires huge amount of investments and advanced technology, Russia's state-owned company Rosneft adopted to cooperate with Western companies such as Exxon (US), Eni (Italy) and Statoil (Norway) by bidding 40 US billion dollars for shelf exploration (Dadwal, 2014, p. 815; Moe, 2013a, p. 171).

It is also important to address one of the major projects in the Russian part of the Barents Sea, the Shtokman Gas Project. Discovered in 1988 and attempts at development began in 2003, the Shtokman gas field was estimated to contain 3.9 trillion cubic meters of gas. Shtokman was one of the largest oil and gas deposits in terms of its resource potential. By dint of this great opportunity, Shtokman AG company was formed in 2008 and shared by Gazprom (51%), Total (25%) and Statoil (24%) but in consequence of cost problems and general disagreements

on technical problems, this project lost its effectiveness. Accordingly, the project had to be postponed. While evaluating the project, what is significant is that all parties realized the possibility of the development and production of oil and gas resources in a collaborative manner in a remote location with a harsh climate (Bourmistrov et al, 2015, p. 80; Moe, 2013a, p. 170).

In 2012, Rosneft and Statoil signed a bilateral agreement to implement offshore operations in the Barents Sea and the Sea of Okhotsk and in the following months, both companies agreed on joint bidding for licenses in the Norwegian part of the Barents Sea and one year later, a Lukoil-Rosneft joint venture was granted licences for the exploration of the Norwegian continental shelf (Bourmistrov et al, 2015, p. 81). Rosneft also launched another joint venture with ExxonMobil to carry explorations in the Arctic (Trenin, 2014). In 2016, they reached a major discovery called the Universitetskaya 1, in the northern part of the Kara Sea (Montgomery, 2016, p.45).

As sanctions on the Russian Federation were launched by Western countries after the annexation of the Crimea, Russia started to look for other partners. In doing so, Rosneft signed an agreement with the China National Petroleum Corporation (CNPC) in order to develop oil in the Barents Sea in 2013. Additionally, just two months later, Rosneft-INPEX partnership commenced exploration of Arctic oil fields (Dadwal, 2014, p. 815). Additionally, the Gazprom-Shell memorandum is another example of a joint venture to explore the hydrocarbon resources of the Arctic in which they agreed on dividing a disputed site in the East Siberian Sea (Filimonova, 2013, p. 291).

Another joint venture among the Russian, French and Chinese companies of Novatek (project owner), Total (20%), CNPC (20%) and the Silk Road Fund (9.9%) called the Yamal LNG Project aims to produce, liquefy and transport natural gas from the South-Tambey field, which was discovered in 1974 and is estimated to have 1.3 trillion cubic meters of natural gas reserves (Ufimtseva and Prior, 2017, p. 369). Although this is not an offshore project, the construction of an LNG factory and provision of transport resources for the Asia Pacific and European markets via the Northern Sea Route are expected to produce nearly 16.5 million tons of LNG per year (Moe, 2013a, p. 172).

The first LNG production was managed in 2017 and on August 9, 2018 the first LNG cargo was shipped (See at <http://yamallng.ru/en/> Accessed 17.08.2018).

Moreover, the first loading of an icebreaking LNG carrier, jointly ordered by MOL and China Cosco Shipping, was conducted on 27-28 March, 2018 at Sabetta port of Yamal LNG plant (MOL, 2018). The importance of the project in question was crowned by Japan entering the Arctic energy sector by making a deal with Novatek in September, 2018 to create cooperation on the Yamal and Gydan peninsulas and develop a transportation link to carry LNG via the Northern Sea Route to possible markets such as Asia-Pacific (High North News, 2018)

Novatek also signed an agreement with Saudi Aramco earlier in 2018 for its second and largest LNG plant called ArcticLNG-2 on the Gydan peninsula, planned to be launched in 2023. Sharing 60% of the project with a 10% portion with Total, Novatek aims to collaborate with Saudi Aramco on natural gas projects – while Saudi Aramco plans to have a 30% share of the project- in order to survive against Western sanctions especially launched after the annexation of the Crimea (Humpert, 2018b).

Figure 17. Yamal LNG Project



Source: (See at <http://yamallng.ru/en/>). Accessed 17.08.2018

Finally, in Greenland, Cairn Energy is the only active company which has been drilling since 2010 to discover oil fields in Baffin Bay but there has been no success as of yet (Moe, 2013a, p. 173).

After giving the petroleum activities of the A5, it is of vital importance to underline how many exploration wells were drilled north of the Arctic Circle until 2014 as shown in the table below:

Table 10. Total Number of Exploration Wells Drilled North of the Arctic Circle by 2014

Country	Number of Wells
Canada	531
Greenland	8
Norway	157
Russia	3.300
United States	546

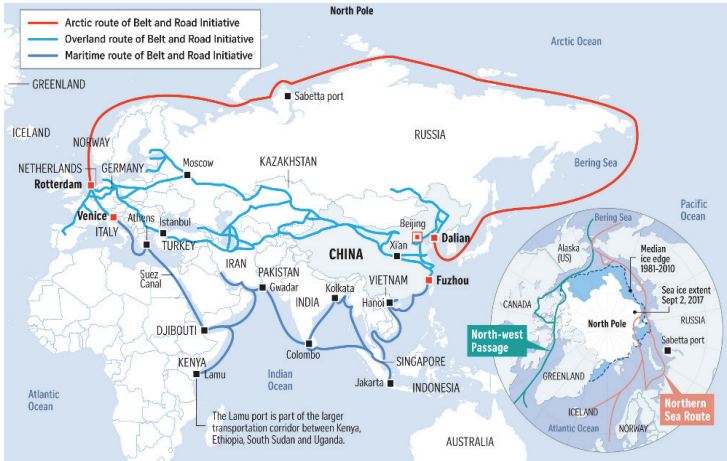
Source: *Adapted from the National Petroleum Council*

(See at <http://www.npcarcticpotentialreport.org/>) Accessed 14.08.2018

4.4. Chinese Involvement in the Arctic

The People's Republic of China engaged in the Arctic Council through its observer status in 2013, although it has no sovereignty rights in the region. It has been trying to preserve its Arctic interests via its long-running Arctic research. In this context, China published its white paper regarding the Arctic in January 2018 which contains its view on the Arctic being no longer limited to scientific research (White Paper, 2018). On the contrary, it plans to be involved in the region with commercial activities. Identifying itself as a "near-Arctic state", China aims to connect Europe with China via its "Polar Silk Road". China's involvement in the opening of Arctic routes -both the Northern Sea Route and the Northwest Passage- by issuing navigation guides since 2014 explains how eager China is to manage its Arctic interests in the Arctic (Grieger, 2018).

Figure 18. China's Polar Extension to Silk Road



Source: (Noi, 2018).

4.4.1. China's Energy Dependency

In terms of its energy consumption, the world's largest since 2009, China's energy consumption (2.9%) doubled in 2017 compared to the previous year according to Enerdata's Global Energy Statistical Yearbook 2018. Excepting other resources, the estimation of its oil consumption is approximately 19% while gas is 6% of the world's total (Enerdata, 2018). It ranks as the world's largest oil importer and the third largest natural gas importer. Moreover, in 1993 it became a net oil importer and has been a net natural gas importer since 2007 (Hsiung, 2016, p. 245). China is mostly dependent on oil and its oil consumption is steadily growing as shown in Table 11:

Table 11. China Oil Consumption and Production 1980-2018 (barrels per day)

Year	Oil Production	Oil Consumption
1980	2.114.000	1.940.000
1982	2.045.000	1.837.000
1984	2.296.000	1.911.000
1986	2.588.000	2.057.000
1988	2.722.000	2.315.000
1990	2.768.000	2.327.000
1992	2.852.000	2.694.000
1994	2.957.288	3.193.000
1996	3.211.339	3.797.000
1998	3.302.178	4.118.000
2000	3.388.527	4.688.535
2002	3.549.862	5.211.508
2004	3.722.752	6.802.690
2006	3.980.215	7.493.351
2008	4.166.932	8.041.343
2010	4.575.155	9.339.164
2012	4.773.203	10.549.592
2014	5.045.263	11.637.281
2016	4.905.071	12.791.553
2018*	3.781.022	13.524.977

Source: (Worldometer, 2020) (See at <https://www.worldometers.info/oil/china-oil/>). Accessed 12.03.2020

*2018 data collected from (<https://www.ceicdata.com/en/indicator/china/crude-oil-production>). Accessed 12.03.2020

According to the statistics above, in 2016 China's net oil imports could be given as 7.561.948 barrels per day (Worldometers, 2020). Whereas it is the 4th oil producing (4.905.071 barrels per day) country in the world, in terms of oil consumption it is the 2th (12.791.553 barrels per day), and it imports 59% of its oil consumption (Worldometers, 2020). Accordingly, it is clear to deduce that China's dependence on oil is growing. Table 12 gives net oil imports of the country as:

Table 12. China Net Oil Imports 2001-2019 (in barrels per day)

Year	Oil Imports
2001	1.207.000
2002	2.414.000
2004	3.226.000
2005	3.181.000
2007	4.210.000
2008	4.393.000
2011	5.080.000
2012	5.422.000
2013	5.664.000
2016	7.599.000
2018	6.710.000
2019	6.710.000

Source: (*Indexmundi, 2020*). See at <https://www.indexmundi.com/g/g.aspx?v=137&c=ch&l=en>. Accessed 12.03.2020.

As seen above, China's dependency of oil is neatly increasing. Thus, it could be deduced that there is no option for China without seeking for more suppliers. On the other hand, as the largest gas consuming country in Asia, China's natural gas production and consumption is increasing as well, as indicated in the table below:

Table 13. China Natural Gas Consumption and Production 2001-2019 (in cubic meters)

Year	Production	Consumption
2001	30.300.000.000	27,400.000.000
2003	35.020.000.000	33,440.000.000
2005	52.880.000.000	47,910.000.000
2007	69.270.000.000	70,510.000.000
2009	82.940.000.000	87,080.000.000
2011	107.700.000.000	147,100.000.000
2013	117.100.000.000	150,000.000.000
2014	121.500.000.000	180,400.000.000
2016	150.000.000.000	224,000.000.000
2018	145.900.000.000	238,600.000.000
2019	145.900.000.000	238,600.000.000

Source: (Indexmundi, 2020). See at <https://www.indexmundi.com/g/g.aspx?v=137&c=ch&l=en>. Accessed 12.03.2020.

Accordingly, since 2007, natural gas consumption of China has surpassed its production. Thus, since 2007 China has begun to import natural gas that means its gas dependency has increased so far.

Table 14. China Net Natural Gas Imports 2001-2019 (in cubic meters)

Year	Gas Imports
2001	0
2002	0
2004	0
2005	0
2007	3.871.000.000
2009	7.462.000.000
2011	30.000.000.000
2012	42.500.000.000
2013	53.000.000.000
2014	59.700.000.000
2016	75.100.000.000
2018	97.630.000.000
2019	97.630.000.000

Source: (Indexmundi, 2020). See at <https://www.indexmundi.com/g/g.aspx?v=139&c=ch&l=en>. Accessed 12.03.2020

Under these circumstances, when considering unstable and insecure energy suppliers from the Middle East and Africa, China's key priority is to diversify its' energy supplies which directs it to benefit from the Arctic as a new source of energy. As China imports oil from all over the world, such as the Middle East, Africa, Russia, Central Asia and Latin America, and natural gas including LNG from Turkmenistan, Central Asia, Asia-Pacific and the Middle East, the resource potential of the Arctic -especially of oil and gas- has been encouraging China to seek partnerships thanks to its close proximity to Russia in order to diversify its energy supply.

The Arctic's importance for China is unquestionable. First of all, the Arctic may be a new source of energy for China. Secondly, the region holds new market potential for Chinese companies to widen their investments. Via its energy market and investment, China has the potential to utilize other opportunities of Arctic business. Finally, China's integration into the relevant region may reinforce its global power (Wu, 2013, pp. 192-193).

Taking its steadily increasing energy consumption into consideration, China's interest in becoming involved in the Arctic is surely to meet its energy demand while implementing economic development stages of its policies. In this respect, Chinese energy companies' activities are crucial to put in a holistic evaluation of Chinese engagement in the Arctic.

4.4.2. Chinese Investments in the Arctic

China's key role for the Arctic is through its significant investments as the infrastructure capacity of the Arctic needs supporting. China has invested 25 billion US dollars with two Russian companies in order to construct an oil pipeline from Northern Russia to China. The agreement between Russian gas producer Novatek and Chinese company Cosco in 2018, to carry LNG by establishing shipping companies for LNG carriers from the planned LNG-2 Plant is planned to be launched in 2023 and should be taken as another major Russian-Chinese joint venture in the Arctic (Nilsen, 2018). Additionally, in 2013 it invested another 60 US billion dollars to develop offshore fields while granted a license from Iceland for oil exploration in the Arctic within the same year (McPherson, 2015, p. 26). A Chinese company, China National Offshore Oil Corporation (CNOOC), was granted a license for oil and gas exploration in the Dreki region, located between Iceland and Norway, in partnership with Norwegian firm Petoro (Malcolm, 2014;

Kossa, 2016). Alongside a partnership between CNOOC and the Icelandic energy company Eykon for oil exploration in 2013, China has managed to create cooperation with Finland with the aim of advancing economic and technological cooperation (Ufimtseva and Prior, 2017, p. 370).

It is a fact that Chinese energy companies' entrance to the Arctic is neither old nor new. A subsidiary of Chinese CNOOC company called China Oilfield Services Limited (COSL) bought the Norwegian company "Awilco Offshore" for about 2.5 US billion dollars in 2008 (Dyer, 2008). Seven years later, a deal was signed by COSL, Rosneft and Statoil to drill two exploration wells in the Sea of Okhotsk (Staalesen, 2016).

China has also been investing in the Canadian Arctic via a local firm under the CNOOC's umbrella and exploring for natural gas in Northern Yukon (Holyroyd, 2012). Another Chinese company, CNPC, signed an agreement with Rosneft to explore three offshore fields in the Barents and Pechora Seas. CNPC also took part in the Yamal LNG Project by being granted a 20% share (Hsiung, 2016, pp. 249-250). On signing this deal, CNPC accepted help for external financing for the abovementioned project from Chinese companies. Consequently, the China Development Bank Corporation, Industrial and Commercial Bank of China, Bank of China and China Construction Bank will provide financial support for the project (FGE, 2013). In July 2014, Russian and Chinese companies agreed on an additional project entitled the "Siberian LNG Project" on the Yamal Peninsula (The Moscow Times, 2014).

Economic development aims of the Arctic states is not limited to only oil and gas resources. In connection with them, new navigable routes also trigger their interests in the Arctic. When the ice melts, extraction of resources will surely be easier. But the more important factor is that, via these accessible routes, transportation of the relevant resources from the east to the west will carry lower costs thanks to distance and time advantages in comparison to traditional routes. Thus, the Northern Sea Route along Russia-Norway borders and the Northwest Passage across the US and Canada may be of great importance in the world's trade circle in the near future. In this regard, new accessible polar routes will be elucidated in the next chapter.

V

OPENING ROUTES: THE NORTHWEST PASSAGE, THE NORTHERN SEA ROUTE¹

As a component of economic development for the Arctic states, this chapter will point to new navigable maritime routes, the Northern Sea Route (NSR) and the Northwest Passage (NWP). The chapter will be based upon new accessible routes while taking the claim by S. Borgerson into consideration that the Arctic Ocean will be navigable for marine transportation thanks to its prominent hydrocarbon reserves (Borgerson, 2008, p. 63).

Inasmuch as the world is becoming warmer day by day, as a matter of fact the Arctic region which contains some of the world's richest and most powerful nations is one of the regions most being affected by global warming. Thus, the Arctic has become more compacted in terms of economical, social and political activities under these circumstances. These activities and the economic wealth of the region -extracting hydrocarbons and transporting them via possible the NSR and NWP routes- has fueled robust reactions from all Arctic and non-Arctic nations interested in global trade or dependent on energy resources. The fact that development of natural resources connects the Arctic to global markets (Brigham, 2013, p. 115). Increasing explorations of energy resources in the region promotes marine traffic that explains why the Northern Sea Route has witnessed a considerable shipping traffic in summer months (Brigham, 2013).

For the last four centuries, Western Europe and North America has been leading a prominent share of the world's economic power. Nevertheless, since the first years of the new millennium, this situation has changed as new economic powers, such as China, India and Brazil, steadily increase their rate of economic growth. Under these circumstances, it is predicted that the abovementioned economic giants will represent a new center of gravity in a global economic system in the short run (Jorgensen-Dahl, 2013, p. 309). Thus, newcomers, such as China and

1 The third possible polar route "Transpolar Sea Route (TSR)" is not worth to take as a separate subject since accessibility estimation pertaining to the TSR is not likely to occur in the short-term.

India, intend to propagate their policies to seek for new possible energy suppliers as their economic growth is dependent on energy resources.

With this in mind, the Arctic is of vital importance, by virtue of its energy reserves for the abovementioned states. The growing appetite and increasing demand of China for raw materials and hydrocarbon resources is beyond question. Secondly, the Arctic region is important thanks to its new potential commercial routes, which are especially crucial for Asian countries such as China and India as a huge amount of their gross domestic product (GDP) is dependent on trade routes. Moreover, if compared to one of the traditional sea routes, the North American west coast, the Russian east coast, Japan, northern Korea and China are brought closer to the European Economic Area through the Arctic routes that makes the Arctic a new shortcut as “industrial Mediterranean among the world’s most advanced and productive regions” (Ostreng, 2013b, p. 48).

In general, trade routes have been vital for the economic growth so far. Here, to indicate the significance of the marine trade, the fact that it represents the cheapest and most efficient mode of transport, which is closely linked to the economic growth. Globally around 90% of world trade is carried out by the shipping industry (ICS, Shipping Facts). This circulation is essential for states whose trade is dependent on shipping such as China, the European Union (EU), Japan and the United States. For instance, 90% of the EU’s foreign trade and 40% of its internal trade is seaborne (UNCTAD, Available at: https://unctad.org/en/docs/rmt2011_en.pdf Accessed 18.11.2018). In light of these estimations, new commercial routes have triggered economic hubs to play a crucial role in economic development process of the Arctic. Before delineating these processes, the effects of climate change on the Arctic should be examined in order to make an appraisal for the new accessible routes.

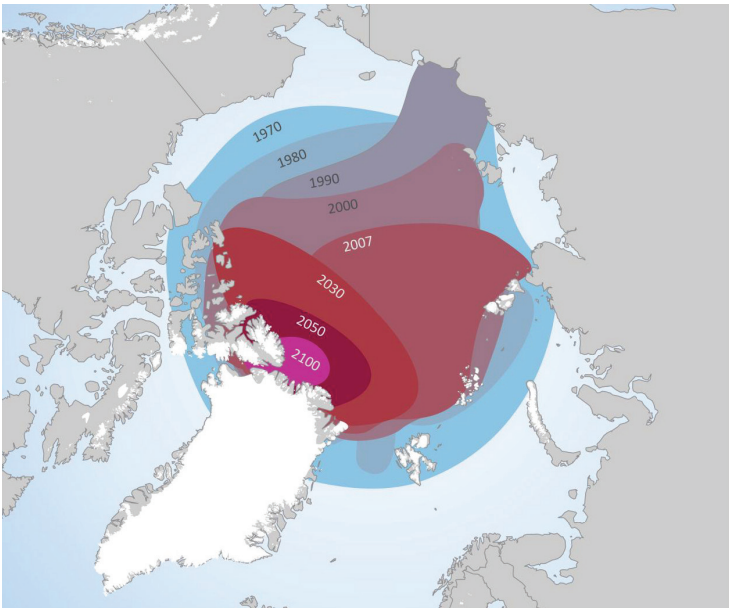
5.1. Sea Ice Reduction

Since 1978, sea ice decrease has been over 10% and annually, this reduction equates to 45.000 square kilometers, larger than the size of Denmark. During the period of 1976-1990, the decreasing extent of the sea ice was nearly 1 million sq km, more than the area of Denmark, Norway and Sweden together (Ostreng, 2013b, p. 58). The Canadian Ice Service observed nearly 15% of ice reduction in summer months in the Canadian Arctic during the 1979-2001 period (Griffiths, 2003, p. 260). In a similar fashion, an estimation in 2004 revealed that in the Nordic Seas, sea ice extent had reduced by nearly 33% over the past 135 years (Jakobsson, 2005, p. 290).

A joint report in 2004 prepared by the Arctic Council and the International Arctic Science Committee (IASC) -the Arctic Climate Impact Assessment – is so shocking that it indicates how global warming damages the region. According to the relevant report, sea ice cover in summer had declined by 15%-20% over the past 30 years and the available ice was 10%-15% thinner, up to 40% in some areas (ACIA, 2004). Even in winter, the Western part of the Northern Sea Route will have less first-year sea ice according to this report (ACIA, 2005, p. 930).

Another report carried out by the working group (PAME) of the Arctic Council -the Arctic Marine Shipping Assessment AMSA- states that the Arctic Ocean will probably be ice-free for a short term in summer as early as 2015 that means there will be no multi-year ice and sea ice will no longer resist the quick melting (AMSA, 2009). Figure 19 below points predictions for sea ice of the Arctic for the years 2030-2100:

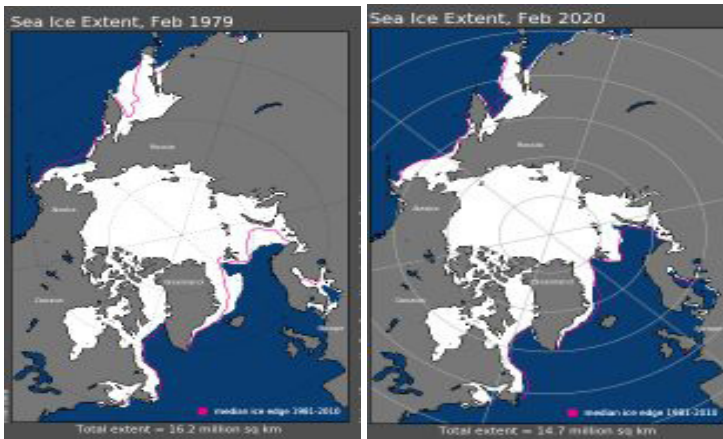
Figure 19. Arctic Sea Ice Minimum Extent Observations 1970-2007 and Forecasts 2030-2100



Source: (Humpert and Raspotnik, 2012a, p. 286)

The Arctic has been pitting against the harsh consequences of climate change for decades. Thus, a dramatic change in sea ice has been seen lately. According to the US National Snow & Ice Data Center (NSIDC) between the years 2007-2012, the ice sheet shrunk from 4.28 million square km to 4.10 million square km (See at <http://nsidc.org/>). Thickness of sea ice over the last 30 years reduced by 42%, from 3.1 to 1.8 meters and a further ice reduction is expected to reach 30% by 2050 (Ostreng, 2013a, p. 32). Additionally, October 2018 was recorded as the third lowest October in terms of sea ice extent since 1979 according to the NSIDC (See at <https://nsidc.org/>). In August 2018 Greenland faced with its thickest sea ice starting to break up for the first time ever (Watts, 2018). This change reveals how global warming severely affects the region. Below decreasing sea ice extent of February for the years 1979 and 2020 is set:

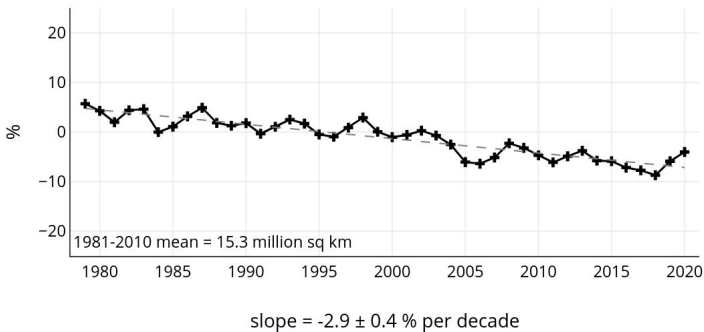
Figure 20. Sea Ice Extent February 1979-2020



Source: NSIDC. See at: (https://nsidc.org/data/seaice_index/bist). Accessed 11.03.2020

Figure 20 indicates that whereas total sea ice extent was 16.2 million sq km in 1979, this year (2020) it decreases to 14.7 million sq km. Thus, within 40 years there has been a dramatic sea ice extent loss -1.5 million sq km- in the region.

Figure 21. Northern Hemisphere Extent Anomalies February 1980-2020



Source: NSIDC. See at: (https://nsidc.org/data/seai_index). Accessed 11.03.2020

As can be seen, the relevant change is “not new and has been a slow but steady process over centuries” (Keil and Knecht, 2017, p. 3). In this setting, fast-receding ice in the region –especially in summer– extends the seasonal period of navigation within the Arctic. The extension in question will likely increase exploration and exploitation of natural resources thanks to the growing global energy demand. Thus, transporting the relevant natural resources to European and Asian markets via shipping will surely increase the geoeconomic importance of the NSR and NWP routes as providing shorter shipping and transit ways between the Atlantic and Pacific (Steinicke and Sascha Albrecht, 2012, p. 4). With this in mind, it will be possible to see the transformation of the region from “an inaccessible frozen desert into a seasonally navigable ocean” (Humpert and Raspotnik, 2012a, p. 281). Thanks to this change, “*the development of northern shipping routes is not a question of if, but when*” (Huebert, et al, 2012, p. 1). In a nutshell, owing to climate change, the region has already turned into an area of economic opportunity, including shipping, resource exploitation and tourism (Raspotnik and Rudloff, 2012, p. 6).

The Arctic no longer preserves the traditional view of being “frozen” and “unreachable”, instead, it represents an area containing innovative progress and great opportunities (Vasiliev, 2013, p. 53). Through technological advances and climate change, the region opens its waters –through the NWP and NSR– to commercial shipping. This progress has been supported for years by the assessment

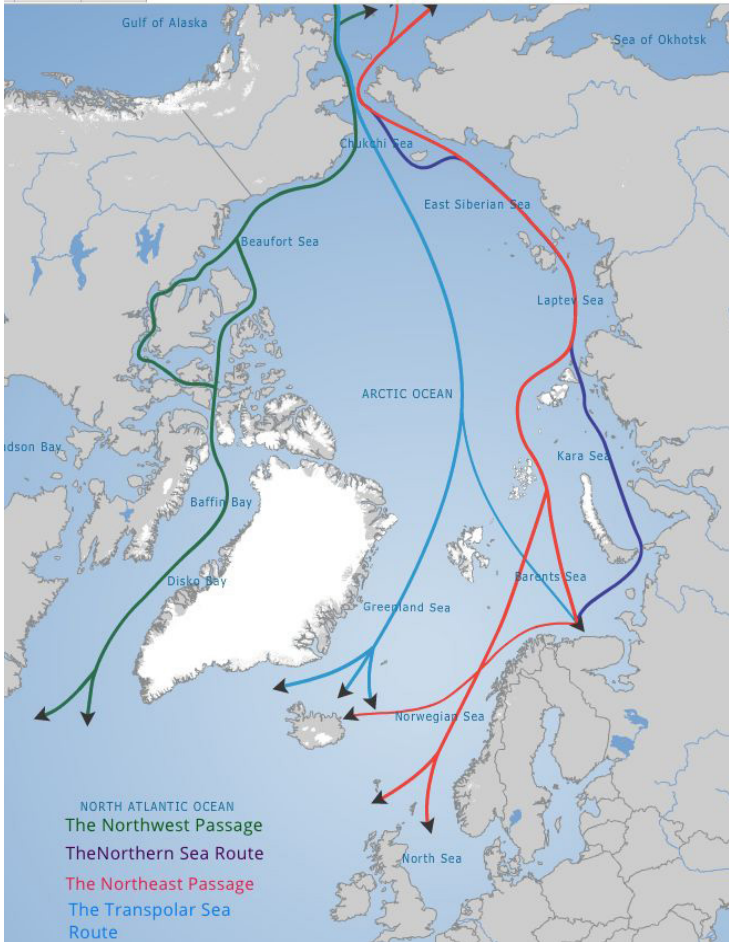
that the Arctic waters could become another substantial line of transportation (Young, 1986, p. 171).

As indicated below, the Northern Sea Route (NSR) is located along the northern coast of Eurasia, whereas the Northwest Passage (NWP) links Europe to Asia via the Canadian Arctic Archipelago and Alaska. In other words, while the Northwest Passage -to a large extent- lies in internal waters claimed by Canada, the Northern Sea Route substantially lies outside Russian territorial waters (Lasserre, 2011, p. 795). If compared in terms of usage, the NSR (Russian offshore) is more active than the Northwest Passage (Canadian shore) (Buckley, 2013, p. 168) and this characteristic of the NSR will probably continue for years (AMSA, 2009). In this respect, two reasons explain why the NSR is more active than the NWP; firstly, in terms of sea ice extent and natural restraints, the NSR is more developed (Emmerson, 2011). Secondly, through Russian eagerness to develop shipping activities along the NSR by investing in infrastructure and attempts to legalize its status -especially domestically- and to provide institutional arrangements for shipping (Solski, 2013). Whereas the former route (NSR) is accessible for navigation for nearly 6 months a year, the latter (NWP) for nearly 4 months, both with the assistance of icebreakers (Ostreng, 2006, p. 73).

As a matter of fact, climate change has recently provided commercial shipping through the new Arctic routes. In this context, it is essential to note that availability of commercial shipping in the Arctic is crucial for the extraction and exploitation of hydrocarbon resources. In light of this, it could be mentioned that triggered by resource exploitation, commercial shipping has surely become a current issue in the Arctic (Lasserre, 2011, p. 796).

Since traffic volume of the commercial shipping in the Arctic is increasing, future tensions pertaining to the legal status of the routes may exist in the future (Byers, 2013, p. 131). Once such shipping commences, it will be of primary importance for the Arctic coastal states -Canada and Russia- to dynamize these routes by recognizing them as internal waters, not international. Thus, Canadian and Russian claims over the routes in question should be understood as an attempt to legalize the routes as their internal waters (Pharand, 2007, p. 4). Nevertheless, so far both states have preferred to utilize the routes in a cooperative manner. Here, current condition of the routes including shipping volume will be given below. Then, Russian and Canadian claims regarding the relevant routes will be elucidated.

Figure 22. Arctic Shipping Routes



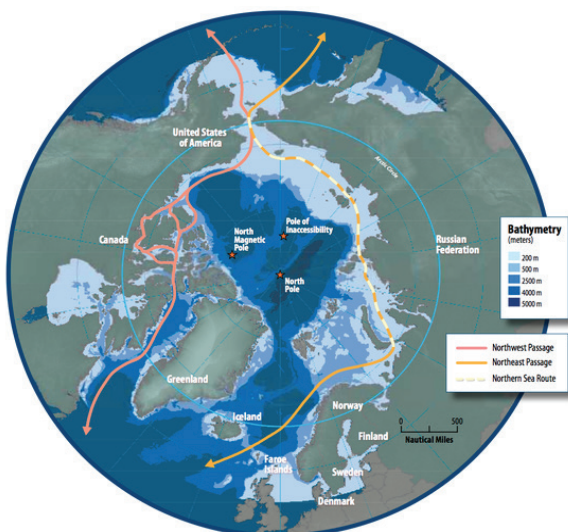
Source: Adapted from the Arctic Portal (2012). (See at <http://portal.inter-map.com/#mapID=26&groupID=&z=1.0&up=1566585.4&left=0.0>). Accessed 21.11.2018

5.2. The Northern Sea Route

The Northeast Passage (NEP) or as a substantial part of it, the Northern Sea Route (NSR) -conceptualized by Russia- goes through the Siberian Arctic coast and passes along the Russian Arctic Straits, Novaya Zemlya, Severnaya Zemlya, the New Siberian Islands and Wrangel Island (Lasserre, 2011, p. 795). The NEP links the Atlantic and Pacific Oceans along the whole length of the northern coast of Eurasia including the Barents Sea, whereas the Northern Sea Route was decided to be constituted as a separate part of the NEP and managed under the legal administration established by the Soviet Union in 1932 (Ostreng, 2012, p. 249; Ostreng, 2013a, p. 13).

Unlike the NSR, the historic term NEP is roughly defined and there are no definite borders or end points (Moe, 2017, p. 258). In contrast, the NSR's location is definite, consisting of the Kara Sea, the Laptev Sea, the East Siberian Sea and the Chukchi Sea, connected by 58 straits within the Novaya Zemlya, the Severnaya Zemlya and the New Siberian Islands and was formally adopted by Russian authorities (Ostreng, 2012, p. 249). As the NSR constitutes the greater part of the NEP, both terms are used interchangeably within many papers (Farre et al, 2014, p. 299). In this book, the term “the Northern Sea Route” is preferred as it is more familiar in the literature.

Figure 23. The Northeast Passage (NEP) and The Northern Sea Route (NSR)



Source: Available at: (https://en.wikipedia.org/wiki/Arctic_shipping_routes). Accessed 20.11.2018

For the most part, the NSR is a “heartland” for Russia as this route has been providing many facilities for Russia for decades. Harboring mineral ores, oil and gas, the NSR is a “strategic resource base” for Russia. The Russian Arctic is the world’s leading producer of some elements, including palladium, platinum, apatite, cobalt and nickel. Here, oil and gas provide 52% of gross regional product of the Russian Arctic and 7.7% and 4% derive from mining and mineral extraction respectively (Konyshev and Sergonin, 2012). 91% of Russia’s natural gas production and nearly 80% of its natural gas reserves are in the Arctic (Glasby and Voytekhevsky, 2009). Therefore, the Arctic is undisputably a “gas hub” for Russia. Nearly 20% of Russia’s gross domestic product (GDP) and 22% of its exports originate from north of the Arctic Circle (Zysk, 2010). These numbers clarify the importance of the Arctic for Russia and why Russia is eager to develop the NSR. Dimitri Medvedev stated in a speech in 2008 regarding the NSR that the route could link the Europe to another transport routes by reducing navigation costs thus, it will have the potential to increase business relationships among Russian businesses and their partners (Medvedev, 2008). He also added that they should make the Arctic a Russian resource base for the 21st century (Medvedev, 2008).

The NSR was used only as a domestic sea route during the Soviet term but has generally been substantial in terms of economic and social aspects for the Russians (Dushkova et al, 2017, p. 276). During the 1980s, the Soviet Union enabled vessels to transport million tons of cargo along the NSR by investing a great deal of money to develop an Arctic icebreaker fleet (Brigham, 1988, p. 132). Especially after Gorbachev’s Murmansk Speech, development and internationalization of the NSR was planned by Russian authorities. With this object in mind, the attempt of primary importance to develop the NSR was the adoption of the *Regulations for Navigation on Seaways of the Northern Sea Route* in 1990 in order to provide navigation for all ships and protect the Arctic environment (Kastner, 2015, p. 47). After the Soviet Union opened the route for foreign vessels, a broad research program called “International Northern Sea Route Program (IN-SROP)” was initiated by Japan, Russia and Norway to seek possibilities for commercial navigation within the NSR between 1993-1998 (Brubaker, 2001, p. 263). Through this program the parties concluded that international use of the route was possible and environmental and technological challenges were not an obstacle for usage of the route (Sponheim, 1999, p. 15).

After the foundation of the Northern Sea Route Information Office by the Centre for High North Logistics and Rosatomflot in 2011 (Byers, 2017, p. 7), Russia updated some regulations regarding the NSR, including a set of rules in 2012 and 2013 (Farre et al, 2014, p. 308). In 2013, the Northern Sea Route Administration was established by the Russian government to issue permits, secure maritime safety, provide emergency-response operations and observe environmental conditions along the NSR (Soroka, 2016, p. 411). Rules adopted in 2013 are substantial for vessels, which include vessels' ice-capability, area and navigation period and ice conditions (Ministry of Transport, 2013). One year later, some edits pertaining to tariffs were brought in to underline affordable prices (FTSR, 2014).

Along with shipping activities, especially after the 2000s, Russian strategy over the NSR was not only to improve it for its economic development, but also to set up the route as a major intercontinental shipping route linking Asia, Europe and America through its "great power" ambition and relationship with other Arctic or non-Arctic powers. By doing so, it is fair to note that Russia prefers cooperation than confrontation while asserting its status as the greatest Arctic power (Roi, 2010).

5.2.1. Commercial Use of the Northern Sea Route

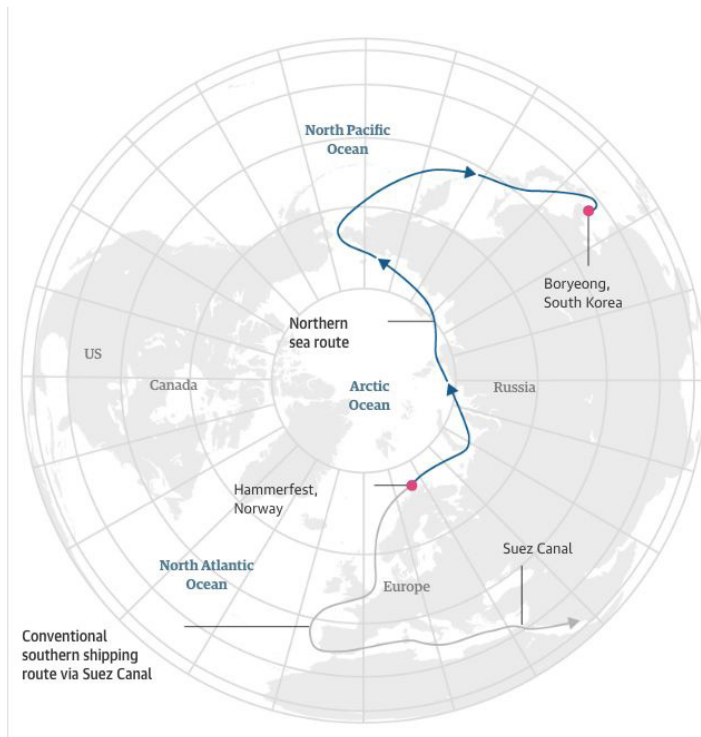
While used for security aims during the Cold War (Ostreng, 1999, p. 33), the NSR was officially opened in 1991 but it was 2010 once the NSR opened to international commercial shipping. Thus, commercial use of the NSR is new but not insignificant. Just one year later, Vladimir Putin assigned a special role to the NSR. In 2011 Vladimir Putin stated that they evaluate the Northern Sea Route as an international transit route providing less costs, safety and quality if compared to traditional routes. (Putin, 2011).

In light of this perspective, the NSR first gained its global reputation by enabling two German vessels -*the Beluga Fraternity and Beluga Foresight*- to sail from Asia to Europe via Siberian ports. This voyage saved 3,000 nautical miles in distance and saved 200 tons of fuel per ship (Beluga Shipping, 2009). Being the first modern passage of a container ship through NSR waters, this voyage was just a start; afterwards, a Chinese ship, *Yongsheng* by COSCO Group, managed its first commercial use of the NSR by carrying steel and heavy equipment from Dalian

to Rotterdam in 2013, and the ship arrived in Rotterdam in just 35 days; two weeks earlier than by the traditional route, the Suez Canal (McMillan, 2015).

In 2017 and 2018, operated by Russian company Sovcomflot, *Christophe de Margerie* became the fastest icebreaking LNG carrier while carrying liquified natural gas from Yamal LNG Plant to Asian markets via the NSR without icebreaker assistant (Berkham, 2017; Schuler, 2018). Additionally, a Danish vessel, *Venta Maersk*, managed its first navigation along the NSR as a container ship from Vladivostok to St. Petersburg on August 22, 2018 (Spalding, 2018). During the first eight months of 2018, the NSR enabled a record cargo volume, nearly 80% more than the previous year (Humpert, 2018a).

Figure 24. *Christophe de Margerie* from Norway to South Korea in 22 days (2017)



Source: (Barkham, 2017)

Transit numbers along the NSR from data provided by the NSR Administration are demonstrated below.

Table 15. Number of Vessels Passing through the NSR (2010-2019)

Year	Transits	Amount of Cargo
2010	10	111.000 tons
2011	41	820.000 tons
2012	46	1.26 million tons
2013	71	2.8 million tons
2014	31+22*	3.7 million tons
2015	18	5.15 million tons
2016	19	7.5 million tons
2017	27	10.7 million tons
2018	29	19.7 million tons
2019	37	31.5 million tons

**Only western part of the NSR*

Source: (CHNL Information Office, 2020) (See at <http://arctic-lia.com/>). Accessed 15.03.2020

A definite transit decrease can be seen just after the year 2014 due to two reasons; sanctions implemented by Western countries against the Russian annexation of Crimea and the Russian decision to dedicate icebreakers primarily to offshore oil exploration (Guy and Lasserre, 2016). Even so, while cargo volume in 2010 was 111.000 tons, it increased to 820.000 tons and 1.26 million tons in 2011 and 2012, respectively (Gunnarsson, 2013, p. 56). The year 2017 had 40% more than the previous year thanks to the Yamal LNG Project in terms of cargo volume whereas 2015 had a 35% increase from the previous year (Humpert, 2017). In the first eleven months of 2018, total cargo volume reached 15 million tons (Humpert, 2018c). As put in the Table 15, total cargo amount in 2018 was completed as 19.7 million tons. In September 2019 the shipments on the Arctic route amounted to nearly 23.37 million tons (Staalesen, 2019). In the end of the year, it was completed as 31.5 million tons as set in the table. Here, it is crucial to mention that only 6 vessels needed icebreaker support among 37 transits

in 2019 (CHNL Information Office, see at <http://arctic-lia.com/>). According to Vladimir Putin, it is aimed to reach 80 million tons by 2025 (Staalesen, 2018a).

The significance of the Northern Sea Route is based upon how it has a shorter route in comparison to the traditional route, the Suez Canal. In the case of Beluga Shipping transiting along the NSR, the reduction of the fuel was nearly 200 tonnes in total per vessel. Alongside fuel reduction, the NSR provided 3.000 nautical miles less than the Suez route, leading to an approximate 300.000 US dollar financial savings in total and with a new generation of Beluga-P class vessels, it is estimated that 600,000 US dollars could be saved (Beluga Group, 2009, p. 1-5). Another example of lower shipping costs via the NSR is that the *MV Nordic Barents* carried iron ore from Kirkenes (Norway) to Shanghai (China) and saved 180.000 US dollars worth of fuel (Chircop, 2011, p. 11).

While the NSR is ice free only from June to September, the possibility of more extended periods for shipping activities makes it more appealing. For instance, the Hamburg-Yokohama route via the NSR is 7.000 km shorter than using the Suez Canal, which would reduce the sailing time from 22 to 15 days (Conley and Melino, 2017, p. 4). The Rotterdam-Yokohama route by the NSR is 6.500 nautical miles long whereas by the Suez Canal, the same trip is 11,894 nautical miles meaning a reduction of approximately 33% (Czarny, 2015, p. 109). A comparison of the Suez Canal, Cape of Good Hope and NEP is set in Table 16 below.

Table 16. Sailing Distances between Asia and Europe

From	To Rotterdam, via (in nautical miles)			
	Cape of Good Hope	Suez Canal	NEP	Difference Between Suez and NEP (%)
Busan	14,084	10,744	7,667	29
Ho Chi Minh City	12,258	8,887	9,428	-6
Hong Kong	13,014	9,701	8,594	11
Shanghai	13,796	10,557	8,046	24
Yokohama	14,448	11,133	7,010	37

Source: Farre, (2014, p. 301)

To diversify ports using the NEP, Panama and Suez Canals:

Table 17. Distance between Major Ports-I
Origin-Destination Panama Suez and Malacca Northeast Passage

London-Yokohama	23,300	21,200	13,841
Marseilles-Yokohama	24,030	17,800	17,954
Marseilles-Singapore	29,484	12,420	23,672
Marseilles-Shanghai	26,038	16,460	19,718
Rotterdam-Singapore	28,994	15,950	19,641
Rotterdam-Shanghai	25,588	19,550	15,793
Rotterdam-Yokohama	23,470	21,170	13,360
Hamburg-Seattle	17,110	29,780	12,770
Rotterdam-Vancouver	16,350	28,400	13,200
Rotterdam-Los Angeles	14,490	29,750	15,552
Gioia Tauro (Italy)-Hong Kong	25,934	14,093	21,570
Gioia Tauro-Singapore	29,460	11,430	23,180
Barcelona-Hong Kong	25,044	14,693	20,380
New York-Shanghai	20,880	22,930	19,893
New York-Hong Kong	21,260	21,570	20,985
New York-Singapore	23,580	19,320	23,121
New Orleans-Singapore	22,410	21,360	25,770
Maracaibo Oil Terminal (Venezuela)- Hong Kong	18,329	22,790	23,380

Note: Grey, shortest distance

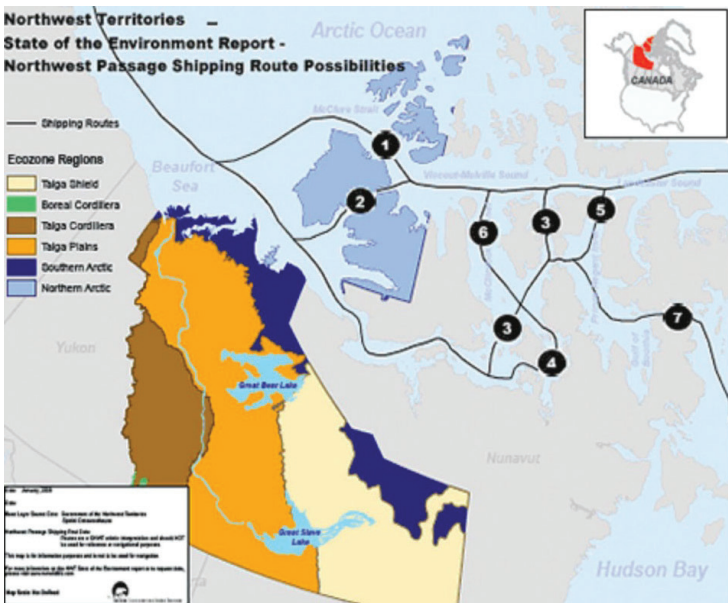
Source: (Guy and Lasserre, 2016)

5.3. The Northwest Passage

Notwithstanding that some scholars delineate this route as being limited to the Canadian archipelago, generally it is expressed as the sea stretching from Lancaster Sound to the Bering Strait (Lasserre, 2011, p. 795). In other words, the Northwest Passage is defined as the waters between the Davis Strait and Baffin Bay in the east and the Bering Strait in the west (Carnaghan and Goody, 2006, p. 2). Generally used as a shortcut between the Atlantic and Pacific Oceans, the route stretches nearly 3000 km along the mainland coast (Riska, 2011, p. 57). The Canadian Archipelago itself is one of the world's largest and harbors 73 major

islands - more than 50 square miles- and 18,114 smaller ones (Pharand, 2007, p. 15). Alternatively, the NWP consists of seven routes of which two are suitable for navigation at present (Pharand, 1973, p. 189). The most suitable route for international shipping is the one comprised of the Perry Channel until it takes a southerly line as indicated below:

Figure 25. Seven Alternative Routes along the NWP



Source: (Ostreng, 2013a: 23)

To a large extent, the Northwest Passage gained its reputation through providing a feasible way to transport oil and gas produced from Prudhoe Bay at the end of the 1960s. Owned by the *Humble Oil and Refining Company*, *SS Manhattan's* transportation of oil produced from Prudhoe Bay via the NWP indicated that it was possible to transport oil from Alaska to eastern markets (Liddle and Burrell, 1975, p. 185). On the other hand, it has only been due to climate change that commercial shipping activities could be carried out in recent years. With this in mind, the NWP was entirely ice free in the summer

of 2007 for the first time, thus, the route has been accessible in summer since 2007 (Roach, 2007).

According to D. Pharand, between 1906-2005, 69 foreign vessels, consisting of 20 small boats, 2 tankers, 18 icebreakers and 29 passenger ships passed through the Northwest Passage for reasons including adventure, ice testing, surveying, supply deployment and tourism (Pharand, 2007, pp. 31-38). Although in earlier times transit volume was quite small, there has been a definite increase, especially after 2008. Nevertheless, the NWP stays in the shadow of the increasing trend of transits via the NSR. Transits numbers through the NWP after the year 2005 until 2014 are shown below:

Table 18. Transit Traffic in the Northwest Passage (2005-2014)

Ship Type	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
Cargo ship				1			1	1*	1	1
Cargo ship, partial transit (destinational)				2	1	4	6	6		
Cruise Ship or touristic icebreaker, partial transit						2	2	4		
Cruise Ship or touristic icebreaker	2	2	3	2	3	4	2	2	4	2
Icebreaker	2	2	2	1	2	2	2	2	2	4
Pleasure boat			2	7	10	12	13	22	14	10
Research ship	3	1		1			1 (partial)	1	1	
Tug		1			2	1		2		
Total partial transit				2	1	6	9	10		
Total complete transit	7	6	7	12	17	19	18	30	22	17

* Both transit and destinational

Source: (Guy and Lasserre, 2016)

According to statistics from the Canadian Coast Guard, in 2019 full transit number of ships was 27, whereas in 2017 and 2018 they were 31 and 5 respectively (Sevunts, 2019). Additionally, 24 partial transits -from Baffin Bay to at least as far as Cambridge Bay-were made by vessels at the same year (Sevunts, 2019). According to another detailed study, transit numbers through the NWP have totally been counted as 314 so far. The transits among 2000-2019 are indicated below:

Table 19. Transits via the Northwest Passage 2000-2019

Year	Transit Numbers
2000	6
2001	4
2002	5
2003	5
2004	1
2005	4
2006	4
2007	5
2008	8
2009	13
2010	12
2011	14
2012	20
2013	19
2014	10
2015	16
2016	18
2017	32
2018	2
2019	24
TOTAL	243

Source: (Headland et al, 2019, pp. 6-12)

OPENING ROUTES: THE NORTHWEST PASSAGE, THE NORTHERN SEA ROUTE

With diminishing sea ice, estimations show that maritime activities will steadily grow. To a large extent these activities will provide an obvious example of destination traffic and cruise tourism (Lasserre and Pelletier, 2011). On the other hand, the route will be the basis of commercial transits if the existing consequences of climate change become worse. Even now, the route saves about 5,000 nautical miles once compared to the Panama Canal which has a distance of 12,600 nautical miles between Europe and Asia (Isted, 2009, p. 347).

Table 20. Distance between Major Ports-II

Origin-Destination	Panama	Suez and Malacca	Northwest Passage
London-Yokohama	23.300	21.200	14.080
Marseilles-Yokohama	24.030	17.800	16.720
Marseilles-Singapore	29.484	12.420	21.600
Marseilles-Shanghai	26.038	16.460	19.160
Rotterdam-Singapore	28.994	15.950	19.900
Rotterdam-Shanghai	25.588	19.550	16.100
Rotterdam-Yokohama	23.470	21.170	13.950
Hamburg-Seattle	17.110	29.780	13.410
Rotterdam-Vancouver	16.350	28.400	14.330
Rotterdam-Los Angeles	14.490	29.750	15.120
Gioia Tauro (Italy)-Hong Kong	25.934	14.093	20.230
Gioia Tauro-Singapore	29.460	11.430	21.700
Barcelona-Hong Kong	25.044	14.693	18.950
New York-Shanghai	20.880	22.930	17.030
New York-Hong Kong	21.260	21.570	18.140
New York-Singapore	23.580	19.320	19.540
New Orleans-Singapore	22.410	21.360	21.950
Maracaibo Oil Terminal (Venezuela)- Hong Kong	18.329	22.790	19.530

Note: Grey, shortest distance

Source: (Guy and Lasserre, 2016)

5.4. Challenges for the Routes

While the commercial shipping dimension of the routes is on the world's agenda, there have also been disputes regarding who controls the routes. As for the Northern Sea route while Russia claims that the NSR should be legalized as its "internal waters", the United States defines the straits within the routes as "international straits". On the other hand, to turn to the Northwest Passage, the same claims have also arisen both from Canada and the United States. Thus, it is necessary to clarify how the routes are expressed and to what extent parties construct their policy insights regarding the routes.

Apart from legal claims, it is also crucial to assess the efficiency of the new routes compared to traditional ones. To evaluate this issue, it is important to indicate which vessel types are suitable for passing through new routes.

5.4.1. Legal Claims

It is necessary to mention legal claims regarding both the NSR and NWP in order to understand whether these claims are obstacles for commercial use or not. To begin with the NSR, the Northern Sea Route has been historically controlled by Russians. For decades Russia has insisted that portions of the NSR, including Vil'kitskii, Shokal'skii, Dmitrii Laptev and the Sannikov Straits, constituted Russian internal waters. On the other hand, the United States contested this claim by classifying the NSR as an international strait. It was in the years 1963 and 1964 that the Soviet Union reacted by sending a memorandum against the US icebreakers trying to survey the Laptev and East Siberian Sea (Byers, 2013, p. 144). At that point, the Soviet Union found it necessary for foreign vessels transiting through the NSR to ask for permission before the voyage as it constitutes its internal waters. On the contrary, the United States assumes that it is not possible to ask for permission while navigating through international straits. So, the question that remains as "is the NSR an international strait or internal water?".

The United States' focus on international straits is oriented towards the right of transit passage for foreign ships while they are passing through the straits. In light of this argument, according to III part of the United Nations Convention on the Law of the Sea (UNCLOS), claiming for transit passage is possible if the relevant waters constitute international straits (Kastner, 2015, p. 43). Therefore, as the United States claims, is the NSR an international strait?

UNCLOS delineates international straits as those “*which are used for international navigation between one part of the high seas or an exclusive economic zone and another part of the high seas or an exclusive economic zone*” (UNCLOS, Part III-Article 37). Here, the problem regarding the NSR is not a geographic criteria, but a functional one (Brubaker, 2001, p. 267). So, has the NSR been used for “international navigation” so far as a functional criteria?

Both actual and potential use of the straits are available for functional criteria. As the outcome of the *Corfu Channel Case* of the International Court of Justice (ICJ) in 1949, which gave priority to “actual use” when defining international straits, nearly all states -except the United States- accept “actual use” for international straits (Brubaker, 2001, p. 267). Regarding this issue, M. Byers states “*Vil’kitskii, Shokal’skii, Dmitrii Laptev and Sannikov Straits are almost certainly Russian internal waters, given the absence of any nonconsensual transits by foreign surface vessels and the fact that only one country has expressly opposed the Russian position*” (Byers, 2013, pp. 148-149). Put differently, Brubaker also agrees with this claim, even if protests from other countries occur and some nonconsensual transits are fulfilled (Brubaker, 2004).

Consequently, even though straits in the NSR are not international -some are in Russian internal waters- in the sense used by UNCLOS, potential use and increasing shipping activities within the NSR may change the situation and force Russia to accept the right of passage within the NSR as an international strait (Kastner, 2015, p. 44).

The issue for the Northwest Passage is the same. Both parties -Canada and the United States- have different claims regarding the status of the route. First of all, the aforesaid dispute is not a sovereignty dispute as Canada has full sovereignty over its islands on the archipelago but the dispute is pertaining to the waters -whether they are internal waters or international straits- between these islands (Arnold and Roussel, 2009, p. 63).

In fact the dispute over the NWP stems from the passage of “SS Manhattan” -US owned- through the NWP in 1969 for which the United States did not ask for permission to pass through the route (Fairhall, 2010, p. 121). As a reaction, in 1970 Canada applied to extend its territorial waters from 3 to 12 nautical miles as a first legal claim regarding sovereignty of its Arctic waters and also adopted the Arctic Waters Pollution Prevention Act (AWPPA) which expressed Arctic waters

as 100 miles from the mainland into the Beaufort Sea (Pharand, 2007, pp. 10-11; Byers and Lalonde: 2009, p. 1150).

After some disputes lasting years, in 1988 both parties indicated how they were willing to adopt an agreement regarding the Arctic waters. The United States signed the agreement by emphasizing that all navigation by the U.S. icebreakers will be managed by the consent of the Government of Canada (Byers and Lalonde, 2009, p. 1150). Both parties reached an agreement without shifting their positions regarding the Arctic waters. In other words, they “agreed to disagree” on the issue of the status of the NWP (Kirkey, 1995).

Notwithstanding some fluctuations pertaining to the legal status of the NWP, there has not been a definite dispute between Canada and the United States since the abovementioned agreement was signed. Note that without Canada’s preventive measures regarding transits within the NWP, the passage would likely to be internationalized thanks to increasing foreign transits, then, it could be subject to the right of transit passage (Pharand, 2007, p. 59). The same situation also applies to the Northern Sea Route.

No matter which legal claims are made over the routes, the most significant factor is that all the states interested in the possible commercial use of the routes in question are liable to focus more on common interests and seek for opportunities to improve the passages. Thus, they are eager to cooperate on burden sharing and construct cooperation for the sake of increasing activities within opening maritime routes. Recently, they have opted for a “business to business” strategy by ignoring legal claims which have been pursued for years.

5.4.2. Shipping Type, Insurance, Geographical and Environmental Risks

Another challenge for using new accessible routes –especially for the NEP– is that the routes are not suitable for container shipping as container ships are supposed to arrive at their destination on time or, in other words, they are obliged to work in a just-in-time system, meaning the exact planning of loading, shipping and unloading in order to minimize costs (Humpert and Raspotnik, 2012b).

Inasmuch as the NEP is not stable in terms of ice extent and is seasonally changeable, bulk cargo ships, unlike container ships, can better deal with the variability

of the NEP and through being less held to the just-in-time system, they have the potential to carry out slower sailing thus creating cost savings from fuel. By doing so, fuel efficiency alongwith lower fuel costs and emissions could be provided (Humpert and Raspotnik, 2012b). As a consequence, container shipping is not likely to improve within the NEP in the next 10-20 years (Milne, 2013). Thanks to the resource potential of the Eurasian Arctic, bulk carriage of resources has been the most economically viable shipping activity in the NEP (Farre, et al., 2014, p. 302).

As Russia rules the NSR, it requires higher insurance premiums to pass through the route and owing to its shallow waters, it is quite difficult to navigate within the route for larger vessels. At present, the limited beam-width of Russian ice-breakers causes a heavy burden for vessels passing through the routes. Thus, owing to its geography and lack of infrastructure, it is more complicated to use the NSR compared to the traditional route, the Suez Canal. Moreover, in regards of infrastructure insufficiency in the NSR, repairing facilities and ports of distress for vessels, search and rescue facilities, satellite systems, radar surveillance and equipment for cargo handling need to be provided (Leypoldt, 2015, p. 95). When considering its fragile ecology, the Arctic has the potential to host major maritime accidents and oil spills which could seriously damage its ecosystems (Soroaka, 2016, p. 409). That is why members of the Arctic Council have been active to sign agreements regarding search and rescue and oil spills in the region.

Moreover, it is noteworthy to clarify that the NSR is not always an optimal route for Asia-Europe maritime transport. The fact that the route is optimal only for the directions from northern east to the west. Thus, the same optimal role may not be available for the trips from north to the south. In particular, the southern destinations of Asia, such as Australia, Singapore, Malaysia, Thailand and India, are not the optimal lines in terms of reduced distance therefore there is little advantage to navigating within the NSR to reach these ports (Leypoldt, 2015, p. 91). Put differently, cost savings through the NSR are only available for northern parts of Asia, such as Japan, Northern China and South Korea. Thus, when cost savings are evaluated, it should be noted that the efficiency of the new maritime routes is only available for northern ports of both directions.

5.5. Advantages of the Routes

Commercial use of both the NSR and NWP is the priority for states interested in increasing their trade capacity by benefiting from their advantages. Firstly, both routes are new secure routes for transatlantic trade or areas far away from terrorist activities. Secondly, in terms of cost savings, both routes offer great opportunities even though they are seasonal alternatives to traditional routes. Thirdly, the relevant routes are economic hubs for Russia, China, Norway and the European Union. For all the Arctic states, these routes are inarguably a significant part of economic development.

5.5.1. Security

Piracy and terrorism have been the main obstacles for traditional routes for decades. Instability in the Red Sea region, piracy activities off the Aden coast or both aspects of these threats in South-East Asia have the potential to prevent maritime trade through traditional routes in future years (Blunden, 2012, p. 119; Moe, 2017, p. 267). At this point it is clear how piracy affects maritime trade. For instance, piracy costs nearly 8 trillion US dollars to the maritime trade every year (Wijk, 2010, p. 39) and contributes to higher piracy insurance costs for ships travelling via traditional routes (Jakobson, 2010, p. 8).

In other words, the political and economic risk potential of the Middle-East or South-East Asian countries in particular could encourage states whose trade balance is seriously connected to maritime traffic to seek for new transportation routes, such as accessible polar routes in the Arctic. Therefore, the Arctic could be a new trustworthy anchorage of commercial maritime traffic.

5.5.2. Financial Savings

As mentioned above, cost savings through new accessible routes will make these routes more attractive when compared to the traditional ones. As for Beluga Shipping previously mentioned, total cost savings have been predicted as nearly 300.000 US dollars. If a cargo vessel journey from Yokohama to Hamburg imagined, total savings could be predicted as over 730.000 US dollars according to Table 21 illustrated below:

Table 21. General Cargo Vessel Yokohama-Hamburg (nil icebreaker fees)

Savings	NEP	NWP
Days Saved	11	9
Fuel cost savings for fuel price of \$ 465 per ton, \$	160.300	137.600
Total savings, \$	732.200	178.100
Total savings per dwt, \$	16	14

Source: (Wergeland, 2013, p. 350)

Table 22. Container vessel Shanghai-Hamburg (nil icebreaker fees)

Savings	NEP	NWP
Days Saved	3	1
Fuel cost savings for fuel price of \$ 465 per ton, \$	616.700	595.500
Total savings, \$	732.200	710.000
Total savings per container, \$	172	167

Source: (Wergeland, 2013, p. 350)

For both examples, fuel consumption savings are substantial. For a general cargo ship doing the Yokohama-Hamburg voyage, whereas the NEP saves nearly 42% of fuel, the NWP saves 36%. A container ship going between Shanghai and Hamburg via the NEP benefits from 40% fuel consumption reduction whereas through the NWP it benefits from a 39% decrease (Wergeland, 2013, p. 350). It seems these rates will probably increase if ice melt volume increases in future years. Thus, even now there is a clear financial advantage to using the new northern routes. However, the more ice melts, the larger cost savings will emerge.

5.5.3. Economic Development

Economic development aims of the Arctic and Asian states regarding the northern region surely have a close correlation with the new existing routes. Especially for those most concerned with the NSR, Russia and the other states including Norway, Germany, Canada, China, Japan and South Korea, infrastructure building policies are crucial to be implemented in the region. For these reasons, the relevant states have been spending a sizeable amount of money for decades.

Russia which describes the NSR as its “Suez Canal”, has been investing a significant amount of money to increase production capacity of both oil and natural gas exploitation in the region. Especially focusing to a large extent on natural gas production, which may be used as an economic bargaining chip, Russia plans to increase its investments in the region. Russian company Novatek’s Yamal LNG Plant is one such attempt where the third production line, producing 5.5 million tons of LNG per year, opened in November, 2018 just after the second one opened in July of the same year (Humpert, 2018d).

As the economic centre of gravity is moving northwards -in Europe from the west to the north-east, in Asia from the south-east to the north- (Verny, 2009), Russian investments have been supported by Chinese banks since the potential energy resources and maritime trade routes have become more important. Both states have indicated their eagerness to improve the northern route in 2014 and 2015 with a joint agreement to foster collaboration and regional cooperation, including the Arctic shipping (Soroka, 2016, p. 411).

The European Union attempts to become involved in the Arctic are also significant to note. If an economic giant like Germany’s trade balance is taken into consideration both inside and outside the EU, the importance of the Arctic, which harbors both energy resources and maritime routes, is inescapable. Trade between Germany and China is expected to double within five years as stated by the Prime Minister of China (Jiabao, 2011) since the increasing use of new commercial routes will trigger a business to business relationship among the relevant states.

As one of the other ambitious states planning to utilize maritime trade via the Arctic routes, Norway has the potential to transport oil and gas to European and Asian markets due to its great experience in technological capacity regarding resource exploitation. Moreover, states such as Denmark, Iceland, South Korea and Japan are also closely interested in increasing their trade capacity by benefiting from the Arctic routes.

In a nutshell, whether seasonal or not, both new accessible routes -the Northern Sea Route and the Northwest Passage- have been transforming the Arctic

into a “liveable trade hub”. All states plan to increase their trade capacity or meet their energy needs, more or less, by taking a piece of the Arctic pie. This desire will shift the destiny of the Arctic by reducing conflicts for the sake of cooperation allowing greater benefits to be gained. Thus, in the next chapter cooperative attempts under the aegis of the Arctic Council will be elaborated upon.

VI

COOPERATIVE ROLE OF THE ARCTIC COUNCIL

It is mentioned above that the Arctic is quickly transforming. The region has been witnessing development of natural resources and increasing maritime traffic which links the region to global markets (Brigham, 2013, p. 115). On the one hand, stakeholders need to tackle the harshness of climate change. On the other, they need to find solutions to utilizing both natural resources and maritime traffic. This chapter will attempt to provide outputs of the research through some suggestions. Firstly, state relations will be elaborated upon as to how they react to each other: in a cooperative or competitive manner. Secondly, states' willingness to develop the Arctic will be investigated. Finally, multilateral relations in the region, including the Asian engagement, will be examined to clarify how the region has shaped global relations.

6.1. Gathering on Common Interests

Unlike popular media interpretation describing the Arctic as a region of competition, peace and cooperation has been the optimal choice of stakeholders so far (Overland *et al*, 2015, p. 47). Both the Arctic and non-Arctic states have opted for being a part of transnational cooperation via institutional arrangements (Young, 2005, p. 9). At this point, it is a fact that states are prone to cooperation while considering soft security instruments such as environmental pollution resulting from resource extraction (Gratz, 2012, p. 3).

From the view point above, the Arctic is viewed as an area of international cooperation rather than militarized confrontation (Heininen, 2010). In other words, in contrast to a "race to resources" rhetoric, there is "orderly and peaceful development" even in terms of maritime boundary disputes. For instance, the Hans island dispute is no longer hot (Koivurova, 2011, p. 218; 2015, p. 195). As all Arctic coastal states are determined to construct a peaceful Arctic so as to advance their economic interests, the region will not probably be an area of competitive

military activities (Overland *et al.*, 2015, p. 48). This view was best stated in the 9th Arctic Council Ministerial Meeting by S.E. Donskoy who stated that confrontation or tension is not likely to occur in the Arctic region, on the contrary, joint responses to common issues and cooperative attempts for sharing opportunities in the region is likely. (Donskoy, 2015). At this point, for the sake of economic interests, stakeholders have become part of some prominent institutions which contribute to cooperation and collaboration.

According to R. O. Keohane, cooperation should be viewed as a reaction to conflict (Keohane, 1984, p. 54). Thus, considering the increasing opportunities in the region, such as prominent hydrocarbon reserves and increasing commercial traffic via new trade routes, potential conflicting issues such as maritime boundary disputes have enabled states to implement proactive policies in order to build cooperative mechanisms. In this context, foundation of the institutions and regional groupings is of vital importance for states as they facilitate cooperation (Orttung and Wenger, 2016, pp. 77-79).

According to neoliberal institutionalism, states draw advantages from international institutions so that they can reach their goals (Koremenos *et al.*, 2001). Here, what is needed for the construction of the relevant mechanisms is quite important. Simply put, it should be noted that trust is one of the prominent issues of these institutions (Daniels and Walker, 2001). Availability of trust is extremely important. It is the only thing which brings different parties to within the same circle.

In the Arctic, the Arctic Council (AC) has a unique role in convincing all parties by establishing trust for its members. Now that its structure has been strengthened through the increasing participation of foreign ministers of the member states since 2011, it has been successful in creating appeasement among the Russian Federation and the West in general (Exner-Pirot, 2012b, p. 227) and has played a significant role in directing Russian interaction with Norway on the Barents Sea delimitation process (Orttung and Wenger, 2016, p. 88).

The AC is appealing in terms of marshalling all states together by convincing them on a common ground. As all parties are eagerly interested in economic development of the region, the AC utilizes this common ground with multifaceted relations including business. Its trust-building role could clearly be seen on the Barents Sea delimitation agreement of which both parties had considerable economic interest (Orttung and Wenger, 2016, p. 75).

This function is simply parallel to the paradigm of the classical liberal school which claims that commercial relations can reduce conflict (Orttung and Wenger, 2016, p. 81). Additionally, sustainable development is one of the framing instruments of the AC and one of its working groups, the Sustainable Development Working Group (SDWG), evaluates it as crucial to improving the economic conditions of Arctic communities (SDWG, 2015). Furthermore, all the Arctic states are determined to pursue their willingness to enhancing economic development by emphasizing it as a common interest within their strategy documents. In this regard, the AC paves the way for their members to reach their goals by providing “peace, stability and constructive cooperation” as declared in Iqaluit (Iqaluit Declaration, 2015). On a global level, it can be claimed that cooperation based on economic behavior will occur in the region, similar to the one in the Mediterranean Sea (Pilyasov, 2010, pp. 54-75).

The fact is that cooperative steps were taken even during the Cold War process with regard to environmental governance. Examples until the end of this process include the US-USSR Marine Mammal Project (1973), the US-Canadian cooperation on marine pollution (1974), the Agreement on the Conservation of the Porcupine Caribou Herd (1987), the Danish-Canadian cooperation on marine environment (1983) and the agreement on the conservation of polar bears (Knecht, 2013, p. 173).

Nevertheless, the start of economic cooperation among the Arctic stakeholders has begun since the USGS’s appraisal of hydrocarbons in the region and the commercial use of new maritime routes which triggered them to invest in the region due to a lack of infrastructure. When economic concerns are taken into consideration, all parties became closer to each other and parts of institutional arrangements (Knecht, 2013, p. 176). This is best understood via the AC’s shifting priorities as, unlike conservational concerns, the Council prioritizes business (Dodds and Nuttall, 2016, p. 188). To illustrate, agreements on energy projects have covered a lot of ground, such as Japan-Russia-South Korea energy cooperation in the sub-Arctic, free trade agreements between Iceland-China and Norway-South Korea and signed memorandum of understanding (MOU) by the US and Russia in 2012 to enhance business in the region (Bennett, 2014, pp. 71-81).

Sino-Russian cooperation on the energy sector is especially crucial for oil and gas delivery to global markets. For example, Russian Rosneft and Chinese “China

National Petroleum Corporation” (CNPC) signed an agreement to develop deposits in the Barents and Pechora Seas (Filimonova, 2013, p. 289). Moreover, one of the most significant LNG projects has been implemented between two countries to produce and transport natural gas to Asian markets (Lim, 2018, p. 429). Another joint initiative to develop natural gas projects in the Alaska has been implemented by the American and Chinese energy companies (Feng and Saha, 2018).

At this point, it should be noted that the Arctic Council is being affected to a large extent by the Asian involvement which makes it more powerful and strengthens its institutional structure (Hasting, 2014, p. 223). Formal Asian engagement in the Arctic as observers in the Kiruna Ministerial Meeting provided the AC with a unique role in regional governance (Ingimundarson, 2014, pp. 191-194). For the key strategies of the AC, the relevant engagement is crucial in combatting existing challenges in the region (Store, 2011, p. 14).

Now that the melting ice provides both challenges and opportunities in the Arctic, especially after the appraisal of potential hydrocarbon reserves in the region and the possibility of transporting them via new emerging maritime routes, potential conflicts among the Arctic states has been diminishing. With this in mind, unlike triggering maritime boundary disputes, all of them (A8) have indicated their eagerness to gather on common interests -economic development- while considering their strategy documents regarding the region. In this context, as an institution providing peace and stability in the region, the AC paves the way for ensuring cooperation for their members, both on natural resource exploitation and commercial routes and thus, on economic development. Therefore, since the cooperative role of the AC on both pillars is significant it is tried to be explained below.

6.1.1. Maritime Cooperation

As both the Northern Sea Route (NSR) and the Northwest Passage (NWP) are potential polar maritime highways, maritime cooperation has been of vital importance for stakeholders for decades. Here the term “maritime cooperation” could be best inspired from the Norwegian slogan “high north, low tension” according to A. Osthagen (Osthagen, 2016, p. 84). Thus, maritime cooperation represents one of the significant signs to overshadow tensional reactions.

It was the Murmansk initiative which paved the way for the opening of the routes -especially the NSR- to the international arena and fostered international

cooperation. Examples of cooperative mechanisms especially on navigation has been increasing since then. For instance, in 1993 the first search and rescue exercise in Siberia was managed by Russia, the US and Canada which indicates an epicentrum for international cooperation in the region (Neta, 2005). Or the IN-SROP project implemented by Norway, Russia and Japan in 1993 was planned to tackle issues like ice, navigation and environmental challenges of which all were necessary to be thought for commercial shipping (Scrivener, 1996, p. 11). Below, search and rescue and oil spill response agreements signed by the AC members will be assessed as they are the first legally binding agreements signed under the aegis of the AC regarding maritime cooperation.

a) Search and Rescue and Oil Spill Response Agreements as Components of Maritime Cooperation

Apart from general search and rescue exercises carried out in the region, it was in 2008 that the Arctic states were required to adopt a binding agreement due to increasing activities in the Arctic Ocean which generated risks for the Arctic's environment (Ilulissat, 2008). Accordingly, the AC's working group, the Protection of the Arctic Marine Environment (PAME), took responsibility for providing recommendations of the planned agreement (AMSA, 2009).

The AC's decision to set up task forces between Russia and the US in order to develop maritime cooperation was supported by cooperative efforts taken by the coast guards of both parties in 2012 (Fauchald, 2011, pp. 84-85; Berbrick, 2015, p. 26). Consequently, aiming to reinforce search and rescue cooperation and coordination in the region, the Agreement on Aeronautical and Maritime Search and Rescue in the Arctic (SAR) was signed in 2011 and entered into force in 2013 as the first legally binding agreement of the AC (The AC, the SAR Agreement).

The SAR and its further strengthening was needed to combat risks caused by increasing maritime traffic due to economic opportunities. The significance of the SAR agreement is twofold. Practically, it is important for enabling further exploration and development of the Arctic, whereas it is politically significant in terms of being the first legally and truly pan-Arctic binding agreement as all outputs of the Council were limited to non-binding sources (Vasiliev, 2013, pp. 62-64). It is also important owing to its inspiring role for implementing joint exercises such as Russia-US (2014), Norway-Russia (2015-2016), Norway-Sweden-Finland-Russia

(2015) and foundation of the Arctic Coast Guard Forum (ACGF) in 2015 by all the Arctic states in order to enhance cooperation on search and rescue operations, shipping and scientific research (Byers, 2017, p. 12; Conley and Melino, 2017, p. 22). The ACGF demonstrates that the Arctic states prefer to cooperate on common interests again rather than differences (Pincus, 2015, p. 389). Consequently, it is fair to say that the SAR agreement clearly contributes to stability and security in the region through providing collaboration among coast guards and militaries of the A8 and prominently reduces tensions among them (Exner-Pirot, 2012a, p. 198).

The AMSA report also indicated that an agreement in order to prevent oil spill was necessary. Accordingly, the Emergency Prevention, Preparedness and Response (EPPR) working group of the AC shouldered the responsibility of shaping an agreement regarding the oil spill. By doing so, the Marine Oil Pollution Preparedness and Response Cooperation Agreement was adopted by the Council as a second binding agreement under the auspices of the AC in 2013 and ratified by 2016 as an extension of task forces have been implemented since 2011. The agreement requires cooperation on human resources, know-how, equipment and technology among the Arctic states to prevent oil pollution in the region (The AC, The Oil Spill Response Agreement). Cooperation on the High Seas of the Arctic Ocean is also provided within the agreement which demonstrates how a potential oil spill is dangerous for the entire region (Vasiliev, 2015, pp. 149-150).

Regarding two prominent agreements there could be seen a dilemma. On the one hand, the SAR and Oil Spill agreements clearly indicate that oil and gas extraction and their transportation pose a threat for the delicate Arctic environment. On the other hand, both agreements show that the AC's members welcome oil and gas operations. Thus, the attempts of the AC could be seen as a preemptive role against increasing oil and gas operations. Here, the hidden fact is that the Arctic states' aim is not to prevent oil and gas operations but utilize them in a sustainable way. This outcome may be inferred within the Oil Spill agreement's recognized aim "...to promote and encourage the conservation and sustainable use of the marine and coastal environment and its natural resources..." (Knecht, 2013, pp. 175-176). Thus, drawing advantages from resource extraction and transportation in a sustainable way indicates how member states are eager in order not to keep the oil and gas industry away from the region. Here, the AC provides a common ground for solutions. For instance, the AC's collaboration with

the International Maritime Organization (IMO), constructing a mandatory Polar Code and the AMSA Report's provisions regarding shipping aims to facilitate commercial shipping activities in the region that indicates deeper levels of cooperation in the region.

On account of increasing maritime activities in polar waters, as a specialized agency of the United Nations, the International Maritime Organization (IMO) adopted a binding agreement regarding shipping regulations called "the International Code for Ships Operating in Polar Waters" (AEC, Transportation Working Group Report, 2019). The Polar Code is of vital importance that it acknowledges that extra regulations may be implemented for ships on polar waters in light of treaties called the International Convention for the Safety of Life at Sea (SOLAS), the International Convention for the Prevention of Pollution from the Ships (MARPOL), and the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (STCW) (AEC, Transportation Working Group Report, 2019).

Through binding rules of the Polar Code aiming to provide safety and protection of the polar environment during shipping activities, ships must follow the mandatory provisions underlined within Part I and Part II sections of the agreement. Whereas Part I includes mandatory rules and recommendations on safety measures, Part II accommodates binding and advising rules on pollution prevention (See at www.imo.org).

The Polar Code's significance originates from the fact that it adopts first binding rules for shipping activities in polar waters entered into force in 2017. Additionally, it is of vital importance to consider the unique characteristics of polar waters. Finally, its vitalism comes from the fact that shipping activities are increasing in the region. For this reason, the Arctic Council, in collaboration with the IMO, opts for regulating shipping activities in the Arctic region in a sustainable way via the Polar Code. Thus, it could be depicted that, shipping activities -especially commercial ones- are promoted providing that abiding by the rules under the Polar Code.

b) Commercial Shipping and Regulations

Due to presence of the world's largest zinc and nickel mines, prominent iron ore on Baffin Island and hydrocarbon exploration and exploitation -especially in

offshore Russia, Norway, Greenland and Alaska- economic development has been a key driver for constructing safe and efficient maritime transportation systems in the Arctic (Brigham, 2012, p. 309). Thus, in the long run, the main driver of marine traffic in the region will be the development of natural resources (Brigham, 2011) which is a part of economic development. Here, increasing commercial traffic volume directs the AC to take a leading role in safety regarding maritime transportation. The aforementioned AMSA report from 2009 is crucial in implementing shipping activities including all commercial marine operations. The report is of vital importance in support of the International Maritime Organization (IMO) and its recommendations for international standards for shipping in Arctic waters (Başaran, 2016, p. 473).

The AMSA report conducted by PAME has underlined some significant factors influencing Arctic navigation, such as global oil prices, new natural resource discoveries, the economic effects of marine activities, world trade models, agreements regarding ship construction rules and standards and so on (Brigham, 2013, p. 116). Among its outputs, the most prominent one regarding Arctic shipping is that “...*natural resource development and regional trade are the key drivers of increased Arctic marine activity. Global commodities prices for hydrocarbons, hard minerals, coal, etc. are driving the exploration for Arctic natural wealth*” (Brigham, 2013, p. 122). Put differently, shipping economy and advancing resource exploitation is the key driver for the increased presence of shipping companies (Lasserre, 2009). In this regard, the Arctic is transforming into an economic hub for stakeholders that was taken into consideration by the AMSA under the aegis of the AC.

The AMSA report found it necessary to adopt a mandatory set of guidelines for shipping activities -which the IMO emphasized in a draft accepted in 2002 called “Guidelines for Ships Operating in Arctic Ice-Covered Waters”- which paved the way for a mandatory “Polar Code” implemented in 2017. Here, the IMO’s endeavors were greatly welcomed by the AC, so it was accepted as an observer of the organization at the Rovaniemi Ministerial Meeting in 2019. Cooperation between the IMO and the AC indicates that regulations regarding shipping activities are indispensable once economic development priorities of the Arctic states are being implemented via resource exploitation and maritime transportation.

c) Resolved Maritime Boundary Disputes

Maritime cooperation in the Arctic has also been strengthened by resolved maritime boundary disputes owing to bilateral or multilateral agreements. Increasing economic activities are the key drivers for states to become involved in settlements pertaining to maritime disputes in the Arctic Ocean. The most significant ones are the boundary delimitation between Norway-Russia on the Barents Sea (Barents Treaty), Denmark-Iceland-Norway and US-Russia (Russia has not ratified yet).

Long-standing Russian-Norwegian constructive cooperation, including management of fish stocks and petroleum cooperation, paved the way for the 2010 delimitation agreement on the Barents (Moe, 2013b, pp. 149-150). The 2010 agreement in fact is an extension of the Grey Zone Agreement of 1978 once exclusive economic zones were established. After nearly forty years, both sides agreed on a common ground that symbolizes how maritime disputes in the region could be solved thanks to cooperation.

If the driving factors of the settlement are investigated, it can be seen that hydrocarbons exploration and exploitation should be the most prominent factors as the region has significant oil and gas reserves (Moe et al, 2011). This is strongly consistent with provisions of the agreement consisting of the border agreement, fisheries and hydrocarbon deposits pertaining to the exploitation of petroleum deposits which allowed parties to start joint oil and gas explorations in the region (Honneland, 2017, p. 92). In other words, economic interests are driving factors of the delimitation agreements on the Barents Sea (Orttung and Wenger, 2016, p. 75). Such kinds of agreements define business to business relations between Russia and Norway which could be conceptualized as “reciprocity of interests” (Bourmistrov et al, 2015, p. 77). Harshness of climate and lack of infrastructure -especially in Russia due to insufficient technology- necessitates such bilateral agreements in the Arctic. Consequently, the Barents agreement is so significant that it may become a model of cooperation in other maritime disputes, especially for the US-Canada dispute on the Beaufort Sea and Canada-Greenland on the Hans Island.

The agreement between the US and Russia is an outcome of the desire to lead greater marine activities in a cooperative manner. It sets up a maritime boundary in the North Pacific Ocean, Bering and Chukchi Seas and the Arctic Oceans and emphasizes factors pertaining to territorial seas and exclusive economic zones for

both parties and also the right for fisheries management and resource exploitation (Berbrick, 2015, p. 35). Although Russia has yet to ratify the agreement, initiatives by the US, especially by the then Obama Administration, were seeking to enhance oil and gas operations in offshore Alaska via the agreement (Berbrick, 2015, p. 26). The almost resolved maritime dispute will surely strengthen maritime cooperation between the US and Russia and then, in the whole Arctic.

As components of maritime cooperation in the Arctic, overlapping claims regarding continental shelves between Denmark, Iceland and Norway in the 1980s and 1990s were also the subject of agreements between Iceland-Norway, Denmark-Norway and Denmark-Iceland. Iceland and Norway agreed on a maritime boundary for fishing zones and a joint development zone for hydrocarbons whereas Denmark-Norway and Denmark-Iceland agreements include boundaries on fisheries zones and continental shelves (McDorman and Schofield, 2015, p. 216).

A tiny, insignificant dispute regarding the Hans Island -the only land dispute in the Arctic region- between Canada and Denmark (via Greenland) is also important for having the potential to strengthen maritime cooperation in the circum-polar north. The island is significant owing to its location in the center of the Kennedy Channel -an alternative shipping lane in the region- and potential oil reserves beneath it (Jarashow et al, 2006, p. 1593). Although both sides claim sovereignty over the island, they are attempting to solve this dispute through joint statements. Especially in 2005 and 2018, they agreed to seek cooperation through a joint statement over the existing dispute (McGwin, 2018). So far, both sides have agreed to disagree over the island but it seems that the dispute will probably be resolved for the sake of oil deposits in the region. What is important here is that both sides find it logical to solve the dispute as economic interests are appealing for Greenland to speed up its independence from Denmark and for Canada to enhance its economic development.

In the popular media, it is argued that maritime boundary disputes between the Arctic coastal states could cause conflicting issues in the region. This assessment is supported by the right that coastal states could apply to extend their continental shelves from 200 to 350 nautical miles (nm) if they can prove where the land mass ends through scientific data collected for applying the “Commission on the Limits of the Continental Shelf (CLCS)” established by the LOS Convention.

Normally, when oil and gas deposits are taken into consideration, a conflict would be likely to emerge. Thus, a sovereignty problem could be on the way.

Nevertheless, a great deal of deposits are believed to lie within the undisputed exclusive economic zones of the Arctic states. Thus, maritime disputes have no links of controlling hydrocarbons. Secondly, there is no gain in pursuing sovereignty claims once the climate and geography of the region are taken into account. Thirdly, the aforementioned settlements regarding maritime boundaries are vital signs indicating states' decisive roles in cooperative resolutions. In this context, all the Arctic states have noticed that there is no way out unless they agree on common interests to implement economic development priority areas of their Arctic strategies. Consequently, the optimal solution for the Arctic states is to cooperate in order to fulfill their economic development targets under the auspices of the Arctic Council. Below, another significant cooperative aspect among the Arctic states will be given to support our argument.

6.1.2. Cooperation on Resource Extraction

Another part of economic development aims of the Arctic states is to cooperate on resource exploration and extraction. To support this idea, it is significant to note that some scholars argue that the business issue has been recently prioritized in the region (Dodds and Nuttall, 2016, p. 188). Such a business focus -improvement of the combined economies of Arctic communities- is also indirectly included in the work of the Sustainable Development Working Group (SDWG) of the AC (SDWG, 2015). Thus, it should be noted that the AC is seeking for shouldering responsibility for oil and gas activities as part of economic development of their members and observers.

The first regulation regarding Arctic oil and gas activities, the Arctic Offshore Oil and Gas Guidelines, were adopted by PAME in 1997 and revised in 2002 and 2009, contains recommendations for oil and gas activities such as the sustainable use of resources (PAME, 2009). Though not legally binding, the Guidelines give significant actions for offshore hydrocarbon development in order that they can be implemented sustainably. Additionally, another significant assessment on hydrocarbon development was carried out by AMAP, a working group of the AC. AMAP gives comprehensive recommendations for improving and strengthening regulations of the hydrocarbon industry (AMAP, 2007).

In connection with hydrocarbons, energy issue is underlined by the Arctic Council as a separate topic for the first time in the sixth Ministerial Meeting of the Council (Tromsø), in 2009. The year 2009 is also wellknown for the announcement of commercial voyages of Beluga Shipping from Asia to Europe. Moreover, the year 2009 is significant for being the year after the release of the USGS report regarding hydrocarbons. With the awareness of this situation, the Arctic Council accommodated the energy issue in the regarding ministerial meeting by underlining common priorities. As set in the Declaration, member states of the Arctic Council clearly find it essential to promote oil and gas activities in the region in order to progress sustainable development of the region. Thus, the Declaration is vital to mention in terms of containing energy issue for the first time.

Foundation of the Arctic Economic Council (AEC) is also considered significant in the understanding of the shifting priorities in the Arctic. Created by the AC under Canadian chairmanship in 2013-2015, the AEC aims to facilitate business to business activities (B2B) and responsible economic development in the Arctic by providing advice and a business perspective to the work of the AC (AEC, 2019). By doing so, the AC demonstrates how it gives importance to economic development. As a bridge between Arctic governments and communities, the AEC offers a business perspective to AC members (Sweeney and Vauraste, 2016, p. 148). In other words, the AEC is responsible for the coordination and implementation of economic projects in the region (Kharlampieva, 2017, p. 96). Thus, the foundation of the AEC is surely another sign of stakeholders regarding economic development as a priority in the region.

As for resource exploration and extraction, development of offshore hydrocarbons is likely to increase in the long run (Keil, 2013). This projection has been clearly consistent with the development of hydrocarbons in recent years. For instance, in 2002 16.2% of global petroleum production occurred in the Arctic, showing that the region could become a new significant supply base, especially in light of increasing energy demand (Lindholt, 2006, p. 27). This aspect of the region expresses why the EU and Asian countries try to engage and apply for membership to the AC. To illustrate, the perspectives of the EU countries especially pertaining to the Russian north were motivated by natural resources (Lazhentsev, 2018, p. 482). Thus, the acceptance of the Asian countries to the AC as observers and implications on Arctic issues will be elaborated below.

6.1.3. Observer Status to Strengthen the AC as a Global Structure

Observer status in the Arctic Council is the most effective way to engage in the region for non-Arctic players. By granting observer status within the Council, non-Arctic actors have the possibility to make contributions and implement their strategies over the region. Here, roles of the observers are underlined by the Council as:

- joining to the meetings of the Arctic Council
- observing the work of the Council and provide contributions -including financial support- especially with the coordination of working groups
- proposing projects via an Arctic state or a permanent participant
- making statements, submitting documents, delivering opinions on the issues under discussion during particular meetings (See at <https://arctic-council.org/en/>).

The fact that observer status has strengthened the Council's institutional mechanism so far. By accepting the observers the Council has been resembling a multivariate structure. Here, no matter where the applicant is, the Council welcomes it rather seeing it as a threat. Nevertheless, the Council expects from observers to adopt the procedures below:

- accept and support the objectives underlined in the Ottawa Declaration
- respect the sovereignty, sovereign rights and jurisdiction of the Arctic states
- acknowledge that an enhanced legal structure including the law of the sea applies to the Arctic Ocean
- show respect for indigenous peoples' interests, cultures, values, and traditions
- have indicated a political willingness and financial capability to the work of the permanent participants and other Arctic indigenous peoples
- have indicated their interests and expertise regarding the work of the Council
- have indicated a definite interest and ability to support the work of the Council (especially via partnerships with its members making Arctic issues more familiar to the global institutional bodies) (See at <https://arctic-council.org/en/>).

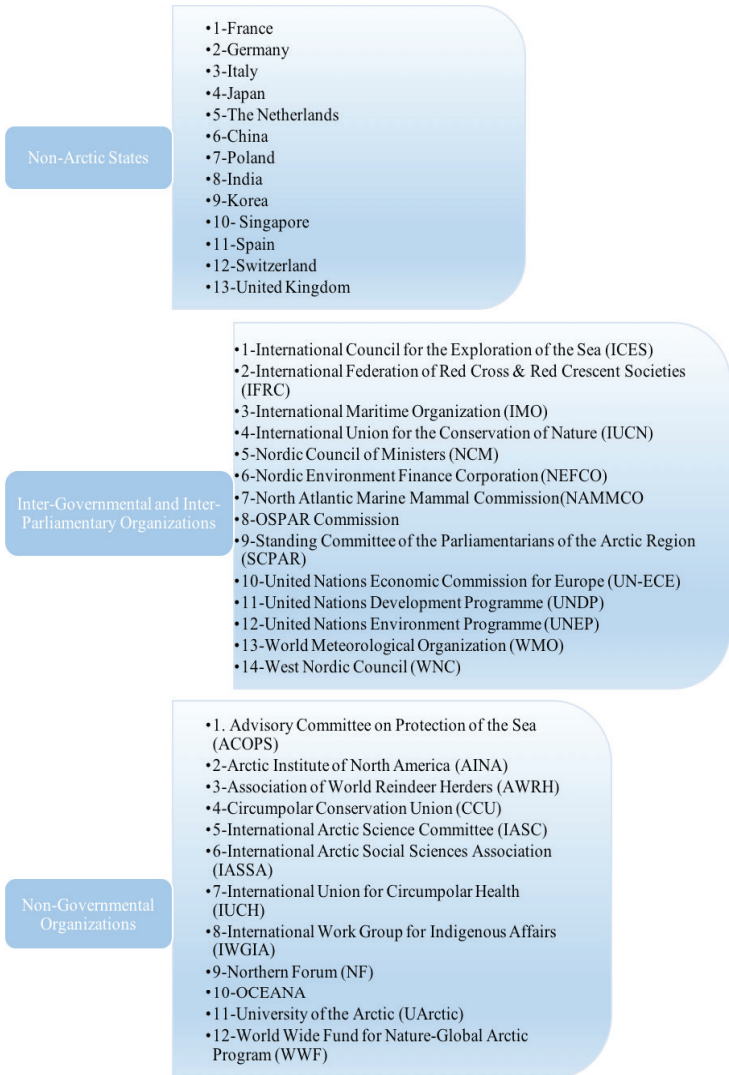
The emergence of transit routes and the exploitation of natural resources owing to global warming increased the interests of the Asian and European states to join

the AC as observers. At this point, it is necessary to note that observer status was limited to only a few non-Arctic states until the end of the 2000s. Nevertheless, after unexpected ice-melting enabled access to hydrocarbons and provided successful test-drives of commercial ships through opening Arctic routes, application to the AC for observer status was carried out by China, Japan, the Republic of Korea, Singapore, India and Italy (in 2013) and Switzerland (in 2017) (See at <https://arctic-council.org/en/>). Thus, the Arctic Council has been converted into a global structure containing both European, American and Asian powers.

According to the AC's founding declaration, observer status can be given to non-Arctic states, inter-governmental and inter-parliamentary organizations and NGOs. The role of observers is to make contributions by joining the working groups of the Council, propose projects via an Arctic state and provide solutions on issues under discussion (See at <https://arctic-council.org/en/>). Thus, observer status could simply be taken as a tool for the observers to shape the AC's policies. The Asian states, in particular, have been pursuing this role to accelerate economic growth. They provide solutions and financial support on issues pertaining to economic development aims of the Arctic states as well as combatting environmental issues.

As indicated below, so far, the Arctic Council has welcomed 13 non-Arctic states, 14 inter-governmental and inter-parliamentary organizations and 12 NGOs as observers.

Figure 26. Observers in the AC



While the eight Arctic states signed the Arctic Environmental Protection Strategy (1991), three states -Poland, the United Kingdom and Germany- were invited to participate as observers thanks to their historical and scientific backgrounds (Exner-Pirot, 2012c, p. 48). Nevertheless, the maximal acceptance of observers was the year 2013 after they indicated their commitment to recognize the Arctic states' sovereign rights, respect the traditional lives of indigenous peoples and provide contributions -both politically and financially- for the work of permanent participants (Exner-Pirot, 2012c, p. 48). At present, financial contribution by the observers is a key factor for their involvement. Thus, observers such as China, Japan and the South Korea proceeded in this way in order to indicate their eagerness at sharing common interests.

One of the first observers of the Arctic Council, Germany's Arctic involvement is historically based on scientific research. Nevertheless, recent developments in the region has manipulated the country to update its interests regarding the region. Accordingly, the Federal Government published widened interests regarding the Arctic in 2013 as "Guidelines of the German Arctic Policy: Assume Responsibility, Seize Opportunities". Within the document, economic potential, strategic importance and environmental concerns regarding the region are mentioned (Guidelines of the German Arctic Policy, 2013). The Federal Government also supports an active EU Arctic Policy and seeks for collaboration with the EU's Common Foreign and Security Policy under the issues such as research, environmental protection, energy, industry and technology, transport, and fisheries (Guidelines of the German Arctic Policy, 2013).

As German Chancellor Angela Merkel said after a meeting with the five Nordic countries in 2019 to enhancing cooperation among parties, Germany's interests regarding the region will not only be on research projects but also on strategic significance of the region (Tommerbakke, 2019). Merkel declared that Germany has ignored the strategic development of the region in recent years, thus just after the meeting Germany's Arctic Policy Guidelines was made public (Tommerbakke, 2019). According to the document adopted by the Federal Government in August 2019, Germany:

"is committed to all international and regional agreements and calls for compliance with legally binding regulations on the development of the Arctic

- promotes multilateral cooperation, especially in the Arctic Council, and is committed to resolving overlapping sovereignty claims in the region in a co-operative manner under the premise of responsible action
- firmly believes that Germany can contribute to sustainable economic development and the predictability of future developments in the Arctic thanks to its great expertise in research, technology and environmental standards
- is committed to compliance with legally binding regulations regarding the exploitation of mineral resources and considers it necessary to set the highest environmental standards
- sees the need to exercise environmental responsibility with regard to the development of the Arctic's natural resources against the backdrop of their current great economic importance" (Germany's Arctic Policy Guidelines, 2019)

It seems that Germany's presence in the Arctic will be increasing since developments in the region -especially of polar routes- will strongly affect its economic growth. It is essential to mention that one of the largest economies in the world, Germany's Hamburg port is a significant destination for the existing polar routes. Thus, increasing transit volume via relevant routes will surely encourage Germany to ally with the Arctic states, especially the ones within the European Union.

As another pioneering observer state within the Arctic Council, the United Kingdom published its first policy framework called "Adapting to Change" regarding the Arctic in 2013. The document was based on three principles; respect, cooperation, and appropriate leadership (Adapting to Change, 2013, See at www.gov.uk). Since the document was quite conservative, the UK had to update it with a more explicit one in 2018. According to the new document, the Government is more clear about linking its interests regarding the region to its foreign policy agenda and its involvement in the region could be taken as an illustration of activating "Global Britain" concept (Gronning, 2018). The new policy framework called "Beyond the Ice: UK Policy Towards the Arctic" underline commitments such as; "projecting global influence, protecting people and the environment, and promoting prosperity (Beyond the Ice: UK Policy Towards the Arctic, 2018, See at www.gov.uk)

Under the "promoting prosperity" topics as *trade routes, energy and extractives, fisheries, connectivity and financial services* are issued. Accordingly, in respect of trade routes, the UK wants itself to be ready for advantages existing in the region to reduce costs and accelerate the transportation of its exports to Asian markets

(Beyond the Ice: UK Policy Towards the Arctic, 2018; See at www.gov.uk). Moreover, referring energy issues, the UK addresses that movements regarding pollution prevention, preparedness and response will be promoted while considering exploitation of hydrocarbons (Beyond the Ice: UK Policy Towards the Arctic, 2018; See at www.gov.uk).

Apart from permanent observer states, as one of the ad hoc observers as an institutional structure, the European Union (EU) has been updating its policy documents regarding the Arctic for decades. Since the 1990s, the EU has made efforts against the attempts of regional powers to gain territorial claim over the region, control of northern sea passages and struggling ecological deterioration via implementing its soft-power instruments (Konyshov and Sergunin, 2012, p. 43). With close cooperation with the Barents Euro-Arctic Council, the Arctic Council and the Nordic Council of Ministers, the EU adopted “The Action Plan for an Integrated Maritime Policy” revealed by the European Commission in 2007 (Konyshov and Sergunin, 2012, p. 43). The year 2008 was the starting point of the EU’s effective policy regarding the Arctic. At this time, the “Climate Change and International Security” paper from the High Representative and the European Commission, “Resolution on Arctic Governance” paper by the European Parliament, “the European Union and the Arctic Region” paper by the European Commission, “Europe’s Northern Security Dimension” paper by European Security and Defense Assembly and “The Implementation of the European Security Strategy: Providing Security in a Changing World” report by the European Commission were published, respectively (Perry and Andersen, 2012, p. 154). The EU’s interest in the Arctic region was increased by documents entitled “Council Conclusions on Arctic issues” in 2009 and “European Parliament Resolution on a Sustainable EU policy for the High North” by 2011 (Weber *et al.*, 2012, p. 157).

The Commission’s 2012 report regarding Arctic issues revealed that the EU agrees to support the efforts of the Arctic states and the needs of indigenous peoples by providing key concepts such as knowledge, responsibility and engagement (EU Commission, 2012). Despite the EU’s decisive stand on Arctic issues and its application to be an observer of the Arctic Council in 2013, the AC’s decision was not to welcome the EU because of the disagreement between the EU and Canada regarding the ban of seal products.

In 2016, a joint communication of the European Commission and the European Union's High Representative for Foreign Affairs and Security Policy was published. According to this document, climate change and related efforts, regional economic development and engagement in Arctic international cooperation (Stepien and Raspotnik, 2016, pp. 442-443) were targeted. In light of these ambitious efforts, it may be predicted that the EU's observer status is a matter of time.

Surprisingly, Turkey's involvement in Arctic issues has been moving forward in recent years. Regardless of geographical connection, Turkey, as a rising power, pays attention to the Arctic both in terms of strategical interests and scientific research. In fact, Turkey's scientific research attempts regarding the Arctic are an extension of its engagement in the Antarctic continent. Having carried out its fourth scientific expedition in the Antarctic since 2017, Turkey aims to acquire a permanent research base in the south pole in order to independently pursue its scientific research. By doing so, it aims to increase its power capacity by taking global warming into account as a decisive player of the climate diplomacy.

The Council of Ministries' decision to be a part of the Antarctic Treaty in 1995 was a starting point in Turkey's marine research interests. In fact, Turkish scientists have been making research on the Antarctic since 1967 but the first participation to the Antarctic Treaty Consultative Meeting (36th meeting) have been fulfilled by individual attempts in 2013 (Thirty-Sixth Consultative Meeting, 2013).

The Republic of Turkey published a "National Marine Research Strategy Document" in 2014 to state that its marine research extent would not only to be bounded by Turkish seas (Turkey's National Marine Research Strategy Document, 2014). The relevant document aims to enhance marine research extent pursued in Turkey in the light of national priorities and evaluate it through a holistic approach to compete sufficiently and scientifically on international level (Turkey's National Marine Research Strategy Document, 2014). By doing so, Turkey aims to be one of the pioneers on international platforms regarding marine research (Turkey's National Marine Research Strategy Document, 2014).

So far, the country has carried out four significant Antarctic expeditions, of which the last one was effectuated in February, 2020. Additionally, Turkey published its four-year plan regarding polar sciences called "National Polar Science Program (2018-2022)". According the document, four significant objectives are underlined as:

- conducting national science expeditions in the Antarctica
- implementing the National Polar Science Program
- providing bilateral cooperation on polar science and having collaboration with other countries for deploying Turkish scientists within their scientific bases
- make sure of having a permanent Turkish Science Base in the Antarctica (National Polar Science Program, 2018-2022)

Defining physical sciences, geosciences, life sciences, and social sciences and humanities as priority research themes, the relevant national program also aims to strengthen international cooperation on Arctic and Antarctic issues (National Polar Science Program, 2018-2022).

Apart from the Antarctic, Turkish attempts in the Mediterranean Sea must be slightly parenthesized as an indicator of its increasing interests on marine research. As an extension of its maritime activities, Turkey agreed a deal with Libya on the delimitation of maritime jurisdictions in the Mediterranean Sea in 2019, which was seen as a violation of international law by the EU leaders (Emmott, 2019). Nevertheless, the parties of the agreement declared that they had reached a legitimate deal in terms of international law.

To turn to the Arctic, Turkey's Minister of Foreign Affairs declared that they would apply to the Arctic Council for observer status in 2013. The application of the Republic of Turkey with regard to observer status of the Arctic Council was made in 2015 (Durak et al, 2015). Since this time, Turkey has been an ad-hoc observer of the Council. Here, Turkey's decision to engage in Arctic issues is closely related to its strategic goals. As Arctic routes are becoming increasingly accessible, active usage of these routes by global powers -especially Russia and China- may deeply affect Turkey's trade capacity as it has trade partnerships with these countries. Secondly, the exploitation and transportation of Arctic energy resources may shift the pricing policy of oil and natural gas in general. Thus, as an energy corridor, Turkey may lose its strategic role as an energy corridor between Asia and Europe. Thirdly, Russian intentions to improve northern infrastructure -especially of the Northern Sea Route- may reduce its dependency on the Istanbul and Canakkale straits in order to pass through the Marmara. Accordingly, Turkey may lose its strategic significance of the Bosphorus. Thus, by observing improvements in the region, Turkey will provide a pre-emptive role to reshape its interests. Finally, through observer status, Turkey will probably have a

crucial role within climate diplomacy to indicate that it is assertive in the struggle against climate change. By doing so, Turkey will surely contribute to its ambitious policy of being among the rising powers and take a leading role in regional and global issues.

All in all, observer status of non-Arctic states has clearly provided multifaceted coordination among the Arctic and non-Arctic states so far. As an output, it has surely strengthened the Council's institutionalist structure so far. At this point, it is substantial to interrogate the reasons for non-Arctic states to be observer.

As indicated for the Asian states, the EU or the first observers of the Council, main motivation for non-Arctic states here could be evaluated through economic interests. The fact that economic interests have been the most dominant factor triggering non-Arctic states to apply for observer status while promoting construction of a cooperative mechanism in the region. In this context, it is claimed that the race for being observer within the Arctic Council expresses a "merging of economic interests". Thus, economic motivations of the Asian involvement in the region will be indicated below.

6.1.4. Multilateral Cooperation by Asian Engagement

It could be asserted that the Asian engagement is highly motivated by economic interests, especially on commercial shipping activities. For instance, a memorandum of understanding (MoU) between China, Japan and the South Korea with the Arctic countries was signed in order to benefit from the economic opportunities of northern shipping through supporting infrastructure development (Bennett, 2014, p. 78). Accordingly, Japanese, South Korean and Chinese high technology is welcomed by the Arctic states to enhance the capacity of resource development. Moreover, free trade agreements between China-Iceland and Norway-South Korea indicate that there is a "reciprocity of interests" among the stakeholders. Having free trade agreement with the South Korea, Norwegian minister, Trond Giske, dwelt on their common interests of shipping, offshore maritime industries and oil and gas at the World Expo Day in 2012 (DNV, 2012).

The Asian involvement in Arctic issues and their acceptance as observers by the AC means that they have legitimate interests in the region (Lackenbauer and Manicom, 2015, p. 517). As the Arctic becomes more accessible due to the ice-melting, resource exploitation and transportation will also become easier. Thus, the Asian

countries desire to be a part of economic development by bilateral or multilateral relations due to their need for new markets to increase their economic capabilities.

The above-mentioned Yamal LNG project is one of the most significant aspects of multilateral cooperation in the Arctic. Located on onshore West Siberia, the world's largest integrated project for natural gas development, owned by Russian Novatek (50.1%), French Total (20%), the Chinese National Petroleum Company (20%) and Silk Road Fund (9.9%) aims to produce, liquify and transport LNG to the Asian and Europe markets (Moe, 2017, p. 269). The project is also important for the point that it welcomes Chinese engagement in the Arctic on resource extraction via its significant "Belt and Road Initiative (BRI)". Finally, contracts among Chinese, South Korean, Russian, Japanese and American ship construction companies were signed so that the produced LNG could be exported to relevant markets (Hsiung, 2016, p. 251).

Among the Asian states, the most important player for the Arctic states -especially for the small ones- is China. Strengthening its presence in Arctic governance, China focusses on economic cooperation and seeks for investments in new maritime routes and energy projects with its contribution to the construction and digitization of regional infrastructure (Jian, 2018, p. 23). On the other hand, the Arctic states -especially the Nordics and Russia- need China because of its funds, markets and capacity for infrastructure and resource exploitation (Zhao, 2016, p. 133).

China is seeking new ways for exporting its goods to European markets while importing natural resources from the region -especially through collaboration with Russia- thus, through common interests, a new dimension of Sino-Russian cooperation is likely to emerge in the region (Sinha and Gupta, 2014, p. 876). This kind of economic cooperation encompasses all necessary infrastructure including seaports, pipelines and oil terminals in the Yamal and Gydan peninsulas (Sorensen and Klimenko, 2017, p. 18) and China Oilfield Services Limited-Gazprom cooperation for mapping and drilling in the Leningradskoye field which aims to discover hydrocarbon reserves in the region (Staalesen, 2018b). As Russia plans to transport the extracted oil to Asian markets -especially to China- oil transportation via the NSR will be at the heart of Sino-Russian cooperation in the coming years (Alexeeva and Lasserre, 2012, p. 67).

China's presence in the Arctic is closely connected to its growing economic capacity and one of its components, energy security. In terms of energy security, China's existing oil and gas providers -countries of the Middle East and Africa- are in general under threat of terrorist attacks, piracy and instable government systems which directs China to find new and secure energy markets. Thus, prominent hydrocarbon reserves within a secure region triggers Chinese ambitions to become involved. Secondly, as technological and financial support is required to extract and transport these energy resources, China becomes a key player in the Arctic. Thirdly, with the potential of reducing transportation costs between Europe and Asia, new maritime routes -especially the NSR- fosters China to diversify its research to include commercial concerns alongside scientific activities.

Unlike confrontational and aggressive policies, cooperation is also an optimal solution for China. China prefers to be seen as a "responsible stakeholder" rather than a threat seeking strategic control in the region (Zoellick, 2005). It fairly recognizes sovereignty and sovereign rights of the Arctic states over the Arctic region (Hong, 2013). By doing so, China opts for enhancing economic cooperation with the Arctic states, especially the small ones and Russia.

China began a joint exploration through its corporation, the China National Offshore Oil Corporation (CNOOC), with Norwegian firm Petoro in the offshore Dreki region, with the Eykon -Icelandic energy company- to explore for oil in 2013 and to enhance economic and technological cooperation with Finland (Ufimtseva and Prior, 2017, p. 370). Relations between Iceland and China are also important to note in that it was the first European country to sign a free trade agreement (FTA) with China which indicates increasing Chinese interests in the north (Miere and Mazo, 2013, p. 131). Due to the need for investment in order to explore possible offshore oil and gas fields, Greenland also desires to have collaboration with China (Bailes, 2015, p. 142).

In fact, Chinese engagement in the Arctic was welcomed by almost all the Nordic countries due to their own interest in cooperating with China. Thus, relations among the parties are surely reciprocal. On the other hand, China has managed to construct political and economic partnerships with the Scandinavians including Arctic navigation, resource extraction, academic exchange and joint research (Alexeeva and Lasserre, 2012, p. 63). By doing so, China aims to be supported by the Nordic countries while claiming interests in the AC (Guschin, 2013).

Even though it has not revealed an Arctic strategy document, China preferred to indicate its position regarding the region through its “White Paper” released in early 2018. Within this document, China stated its aim to become engaged in issues such as climate change, scientific research, utilization of shipping routes and resource exploration and exploitation (White Paper, 2018). Additionally, China aims to link the Arctic to its “Belt and Road Initiative (BRI)” via its planned “Polar Silk Road”. China emphasized these aims in its paper by stating that:

“The utilization of sea routes and exploration and development of the resources in the Arctic may have a huge impact on the energy strategy and economic development of China.... China’s capital, technology, market, knowledge and experience is expected to play a major role in expanding the network of shipping routes in the Arctic and facilitating the economic and social progress of the coastal states along the routes” (White Paper, 2018).

Japan and the Republic of Korea are other significant Asian observers of the AC. Alongwith long term scientific research in the Arctic, both countries have been especially interested in maritime transportation and energy resources (Miere and Mazo, 2013, p. 131). Korea’s growing energy demand could probably be supplied by transportation of hydrocarbons via shorter Arctic routes. Reasonably, Korea wants to reinforce its presence via financial support for energy companies. For instance, a Korean company, Korea Gas Corp (KOGAS), purchased 20% of a Canadian Arctic gas field in the Mackenzie Delta in 2011 which indicates the first Korean resource development deal in the Arctic (Energy-Pedia News, 2011).

Another major Asian power, Japan is considered as a “latecomer to the Arctic race” in the Arctic (Dadwal, 2014, p. 817). Due to a decrease in nuclear capacity because of Fukushima Daiichi incident, Japan aims to diversify its energy sources via implementing energy deals with the Arctic littoral states, especially with Russia (Dadwal, 2014, p. 818). According to a Japan Institute of International Affairs report regarding Japan’s foreign strategy and Arctic governance, Japan’s goals are as follows:

- Carving out win-win relationships with the Arctic littoral states on resource exploration and development,
- Implementing UNCLOS appropriately in the region,
- Having a closer cooperation with the US on Arctic issues,

- Playing a pioneering role in environmental protection,
- Implementing a proactive Arctic diplomacy,
- Constructing institutional mechanisms regarding Arctic policy (Tonami, 2013).

Japan's strategy document regarding the Arctic was published in 2015. Within the document, global environmental issues, indigenous peoples, science and technology, implementing the law of the sea and constructing international cooperation, Arctic sea routes, natural resource development and national security were addressed as important Arctic issues (Japan's Arctic Policy, 2015). Japan aims to have international or bilateral cooperation with the Arctic and non-Arctic states in order to play a decisive role in the region (Japan's Arctic Policy, 2015).

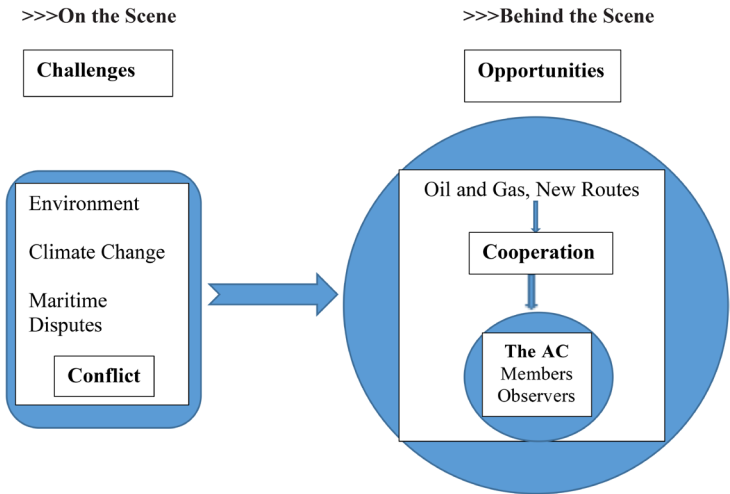
Another new comer to the Arctic as observer state of the Arctic Council, India's interest regarding the polar regions -based on scientific research and technical co-operation- has started with the Antarctic since 1950s (Sinha and Gupta, 2014, p. 877). In 1980s, India established the National Centre for Antarctic & Ocean Research (NCAOR) in Goa and three permanent research stations in the relevant continent were set up (Dadwal, 2014, p. 818). After signing 1925 Svalbard Treaty, India set up a scientific station in Ny Alesund that reinforces its role of contributing polar sciences (Dadwal, 2014, p. 818). Here, to interpret India's interests regarding the polar regions, it is significant to note that its attempts have generally been perceived through 'knowledge-power interface' (Sinha and Gupta, 2014, p. 877). Nevertheless, after publication of the USGS report predicting hydrocarbon reserves of the Arctic, India's position regarding the region has been more complicated.

As one of the leading countries in the world in terms of energy consumption, the Arctic region could be a new resource base for India (Dadwal, 2014, p. 818). Through its observer status within the Arctic Council obtained in 2013, India has the advantage to observe improvements in the region and to have coordination with private and public players -for instance offshore oil and gas blocks in the Barents Sea and Black Sea were offered by Russian Rosneft Company to the India's state-owned Oil and Natural Gas Corp. (ONGC) (Dadwal, 2014, p. 819).

In a nutshell, it should be noted that the Asian engagement provides cooperation in the region that indirectly strengthens the AC. Secondly, economic

development aims of the Arctic states are compatible with those of Asian countries, thus triggering them to concentrate on economic cooperation. It is a fact that common interests of the Arctic states and the Asian observer states have been the main motivation for cooperation under the auspices of the AC. Thus, there has been a “reciprocity of interests” or “business to business” case with the Asian involvement.

Figure 27. The Arctic Issue



To conclude this chapter, seven crucial points are noteworthy:

- While challenges pertaining to the Arctic can be seen in the above figure, there are opportunities behind the scene which the Arctic states find more appealing under the auspices of the AC,
- Unlike confrontation, cooperation is perceived by all the Arctic states as the optimal solution in order to enhance economic development,
- Cooperation on maritime activities and resource extraction have been priority areas for the stakeholders,
- Regulations on search and rescue, oil spills, commercial shipping and oil and gas activities indicate that all the Arctic states regard resource extraction and

maritime transportation as two significant pillars in economic development issue,

- Resolved maritime disputes have so far been an indicator of the Arctic states' willingness to prioritize economic interests rather than sovereignty issues,
- Asian observers' involvement in the region has been facilitating cooperation and economic development aims of the Arctic states,
- The Asian involvement as observers has been strengthening the AC.

VII

CONCLUSION

The Arctic has been witnessing a considerable change. Whereas world politics is full of hot conflicts -especially in the Middle-East, Africa and Eurasia- the Arctic has experienced increasing cooperation for decades. While throughout the two world wars the region was an area of military rivalry, after the World War II it was strongly affected by soft power instruments. Herein, environmental concerns were effective as climate change was an issue for all stakeholders to combat.

During the first term of climate change sensitivity, there was public desire to tackle the hard consequences of global climate change. Some states were eager to minimize carbon emissions by opting for alternative energy resources. However, utilizing fossil fuels remain decisive. Analysts have claimed that states' dependency on hydrocarbon resources will continue to grow until around the 2040s. Thus, the Arctic will probably be spotlighted owing to its potential hydrocarbon resources. Moreover, as the existing polar sea routes are becoming more accessible, commercial inter-continental shipping activities have been another provocative shift for states whose trade capacity is dependent on maritime transportation. As a component of these activities, the shipment of hydrocarbon resources is also significant. Thus, two inciting developments in the Arctic -resource exploitation and transportation- have been catalyzers in manipulating states' interests in the region. Nevertheless, for especially economic reasons mentioned above, all stakeholders opt for cooperation rather than confrontation. Thus, cooperative choices of states have overshadowed conflicting issues regarding sovereignty and national security for the sake of economic concerns. Consequently, it could be stated that an age of cooperation is in effect in the Arctic.

Cooperation in the Arctic is twofold. As previously described, the first desire of the Arctic states for cooperation was strongly affected by environmental concerns. To combat environmental risks, which are mostly caused by climate change, significant organizations have been formed such as the Arctic Council. The Council has so far addressed many environmental risks which encouraged maritime cooperation among its members. For instance, the first legally binding agreements

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of the AC were interested in search and rescue and oil spill response in the Arctic Ocean thus strengthening maritime cooperation.

In later times, especially since the 2000s, economic interests have been of primary importance for the Arctic states. According as environmental risks promoting the Arctic states to pursue maritime cooperation, economic concerns also have paved the way for regulations regarding resource exploitation and commercial shipping activities. Thus, cooperation has been pursued both on the maritime affairs and resource exploitation thanks to economic concerns. As the most important institution in the Arctic, the Arctic Council is roughly a result of this struggle.

The fact is that the Arctic Council was founded on common issues, in particular on sustainable development and environmental protection. To protect the delicate environment of the region, the Arctic states have indicated their desire to prioritize holistic approaches as they need to have collaboration due to insufficient infrastructure. Consequently, cooperative attitudes have been efficient in protecting the Arctic's delicate environment so far. Among the attitudes in question, the structure of the Arctic Council and its collaboration and coordination with other institutions has surely been significant.

Founded in 1996, the Arctic Council has been the most significant example of cooperation in the Arctic. All the eight members of the Council have been decisive in collaborating with each other. Unlike the confrontational policies of the relevant states throughout the war years, cooperation has been willingly preferred in the region owing to the Arctic Council's cooperative role. Thus, the first contribution of this study is to indicate that conflicting issues are no longer welcomed in the region. On the contrary, stakeholders are seeking for strengthening cooperation so as to gather on common interests. At this point, it is also of vital importance to emphasize the common interests of the Arctic states. As climate change offers opportunities for the Arctic states, this study has attempted to delineate the relevant benefits.

The ice-melting offers advantages and challenges in the circumpolar north. Many research papers focus on this dilemma. While lots of scientific studies focus on maritime boundary disputes and environmental risks, which could be included into realist and constructivist perspectives of regime theory, exploitation and transportation of oil and gas resources is meaningful with a neoliberal perception. Thus, unlike realist or cognitivist approaches of regime samples, in this

work it is asserted that neoliberal policy perception has been the main motivator of the Arctic Council and its members. Therefore, this work aims to contribute to the Arctic literature by giving importance to the ignored neoliberal policies and neoliberal institutionalism when the Arctic Council is taken into consideration. This idea is especially supported by developments in the region after the appraisal regarding hydrocarbon reserves and accessible alternative maritime routes.

According to future projections, the Arctic will most probably be an epicenter of energy rivalry as it is asserted that the region holds approximately a quarter of the world's energy deposits. With this in mind, there is a common perception among the Arctic states to share this wealth with each other. Thus, in place of returning to maritime boundary disputes or environmental concerns, they have been determined to utilize oil and gas resources and the unfolding maritime routes in line with economic development plans outlined in their strategy documents through a cooperative manner. Here, this paper also attempts to clarify the fact that economic development aims trigger the Arctic states to cooperate under the aegis of the Arctic Council as they need to cooperate so as to utilize the advantages indicated above.

It can be seen that the only subject which the Arctic states have convergence on is economic development. All the Arctic states fairly show unanimity on economic development within their strategy documents pertaining to the Arctic whereas sovereignty and national security is privileged for some. For instance, when evaluating the Arctic, Finland, Iceland and Sweden are not very concerned about sovereignty and national security priorities. On the contrary, they are determined to focus on economic development concept as the other states do. Even though there is no unanimity in how to combat the consequences of climate change -such as on the Paris Climate Agreement- economic development aims are significant for all parties in the Arctic to effectuate. Thus, another contribution of this work is to claim that economic development is the primary target for the Arctic states.

Prioritizing economic development has also encouraged the Arctic states to solve maritime boundary disputes. The Arctic states have opted for applying dispute settlements for the sake of economic interests, especially through the use of bilateral agreements. Here, the most concrete example occurred with the Norwegian-Russian boundary delimitation on the Barents Sea in 2010. Both parties approved a settlement on the long-running dispute in order to focus on economic

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benefits such as fishing, oil and gas exploration and utilizing the Northeast Passage. At this juncture, the Arctic Council, as an organization providing cooperation, played a role in holding both sides at the same table by minimizing ambiguity among the parties.

Discordance on maritime boundaries also exists pertaining to continental shelves. Attempts of the Arctic states to extend their continental shelves from 200 to 350 nautical miles under the LOS Convention are taken as a sovereignty issue in the popular media. However, extending continental shelves allows control of a larger area which may be full of advantages such as oil and gas deposits and fish stocks. If many media reports which claim that the existing problem could cause conflicts among the Arctic states are to be believed, the Arctic will be confronted with considerable competition in the short run. Nevertheless, as lots of energy deposits are in offshore areas, there will be no rivalry on energy resources among the Arctic states while attempting to extend their continental shelves. Thus, a “resource wars” scenario in the Arctic is unlikely to occur. The Arctic states have preferred to freeze sovereignty issues but instead prefer to pursue the relevant benefits of the Arctic by applying bilateral agreements.

In this paper it is also asserted that the involvement of energy companies in the Arctic could be explained in terms of the Arctic states’ economic development aims. To further economic development aims as common interests, the Arctic states enabled energy companies to carry out exploration and exploitation in the Arctic. Moreover, giant shipping companies such as COSCO Shipping of China have started enterprises to utilize the alternative maritime routes of the Arctic. Therein, involvement of international corporations in the Arctic provides two advantages. Firstly, the corporations in question have paved the way for cooperation among the Arctic states. Secondly, their initiatives to extract oil and gas resources and utilize the Northern Sea Route and the Northwest Passage reinforce the conclusion that economic concerns are prioritized in the region. Owing to these initiatives, the Arctic states find the opportunity to progress economic development of the area. Consequently, cooperation -especially on economic interests- also finds meaning with the engagement of international corporations.

Observer status given by the Arctic Council to non-Arctic states is another additional instrument of cooperation. It can be stated that lots of countries are aware of the improvements in the Arctic. Nevertheless, some of them have preferred to

apply for observer status of the Arctic Council and only some have been granted by the Council. For instance, Turkey and the European Union's applications have not yet been accepted. The policy perception of states applying for the observer status is very different. While some prefer to tackle climate change, others opt for increasing sustainable development, as consistent with the Council's founding philosophy. However, the latter choice has been the more preferred option in recent years. This is meaningful, especially in light of the Asian involvement in the region.

Although the interests of China, India, Korea and Singapore regarding the Arctic are multidimensional, their involvement in the Arctic Council as observers is strongly influenced by economic desires. The Asian involvement corresponds to the age of sharing facilities of the region. Through its considerable oil and gas deposits and alternative maritime routes, the Arctic is a possible market for the Asian countries to increase their economic capacity.

It is not a coincidence that the states in question are energy-dependent. Thus, one of the significant reasons triggering them to become involved in the Arctic is to utilize hydrocarbon resources of the region. The fact that, these countries need to find a solution to obtain alternative energy suppliers as their energy consumption is increasing. Thus, harboring large deposits of oil and gas, the Arctic could be a more secure supplier for the relevant energy newcomers.

The seaborne trade capacity of the relevant states also directs them to have a presence in the Arctic. The Northern Sea Route and the Northwest Passage have paved the way for intercontinental commercial shipping since they are more secure and provide lower costs once compared to the traditional ones. Since the Asian involvement is closely connected to the existing alternative polar routes, investments of Asian shipping companies in the region aim to improve economic growth of the states in question via commercial shipping activities. As a consequence, it should be inferred that the Asian engagement in the Arctic, which strengthens cooperation, is an outcome of economic interests.

One of the most significant indicators symbolizing the geoeconomic period of the Arctic is regarding the foundation of the Arctic Economic Council (AEC). As consistent with its vision, the Arctic Council (AC) has adopted the foundation of the AEC during the Canadian Chairmanship (2013-2015). The Arctic Council plans to have close cooperation with the AEC on business activities. Here, the AEC aims to add a business perspective to the work of the AC. In addition,

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it aims to facilitate economic development of the Arctic. Thus, the foundation of the Arctic Economic Council indicates that economic development of the region is of vital importance for the Arctic Council. This argument strongly indicates why a Memorandum of Understanding (MoU) was signed between the AC and the AEC in 2019. Through the relevant memorandum, both Councils aim to strengthen cooperation and collaboration. Thus, the increasing importance of economic development in the Arctic reasserts its claim through the foundation of the AEC and its planned coordination with the AC.

Since the Arctic states prioritize economic development within their national strategies regarding the Arctic region, in this paper it is concluded that the neoliberal perspective of regime theory has the best explanatory instruments in grasping cooperative initiatives indicated in the institutional structure of the Arctic Council. By doing so, the Arctic Council has been successful so far to play its peace-making role through holding its members whose policy perceptions are different.

Success of the Arctic Council also comes from the fact that the Arctic international relations have been transforming from purely geopolitics to geoeconomics. Just after the appraisal of hydrocarbons of the region and starting of commercial voyages, geoeconomic understanding of the region is more reasonable to mention. Thus, unlike conflicting issues underlined by geopolitics, cooperative attempts are more welcomed in the region. Consequently, political assessment is more suggestive through geoeconomics.

Referring to climate change, whereas it is generally conceived as a threat, in terms of the Arctic states and new comers of the region the situation is more complicated. On the one hand, they have been decisive to struggle against the effects of climate change. On the other hand, they have been too anxious to utilize opportunities existing in the region. Nevertheless, against a common climate change threat, the members of the Council -including observers- seem to be remained firm on benefiting opportunities. As a consequence, existing economic potential of the region should be evaluated once referring to common interests of the key players in the region.

Before make a conclusion, it is important to give suggestions for enlightening and inspiring literature regarding Arctic issues. First of all, it should be noted that Arctic politics can not be understood without considering the economic interests of

the stakeholders. When making inferences, economic development aims of the stakeholders ought to be underlined.

Secondly, geopolitical competition is not preferred in the region any more. On the contrary, parties are willing to construct permanent cooperation in the region. Especially, cooperation on economic issues is prioritized. Thus, there is no need to interpretate Arctic politics as a “race to resources” or to focus on a “resource wars” scenario. Since common sharing of the resources is likely to occur in the region, cooperation will supposably be influential in the region.

Thirdly, when disputes regarding maritime boundaries are considered, the Norwegian-Russian agreement of 2010 should be taken as a model to provide cooperation on economic interests. The relevant agreement clearly indicates that instead of only evaluating maritime boundaries in terms of sovereignty, economic concerns must be included. By doing so, existing disputes among the Arctic states may be quite simply resolved or ignored for the sake of economic interests. Consequently, there will be no boundary disputes in the coming years.

Instead of considering the Asian involvement in the Arctic as a threat, it should be better to encourage them to realize proactive policies in the region as they take on responsibility for economic interests. Due to the fact that the Arctic states need investment, the Asian involvement may close this gap owing to their investments in the region. Moreover, since the Asian observers declare that they will respect the national sovereignty issues of Arctic states once engaged in the region, the Asian involvement ought to be seen as a cooperative step, not a threat.

Energy projects commenced by giant energy companies have paved the way for multifaceted cooperation among the Arctic states. Significant projects implemented in the region, such as the Yamal LNG Project, will surely strengthen cooperation between stakeholders. Thus, more projects have to be built in order to construct stability in the region.

Finally, regulations regarding oil and gas activities in the region should be expanded under the aegis of the Arctic Council. As the Arctic Council aims to promote cooperation on common Arctic issues such as sustainable development and environmental protection, economic development aims of the Arctic states should be clearly identified. In this context, the Arctic Council should strengthen cooperation with the Arctic Economic Council. As utilizing hydrocarbons is generally

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in progress, oil and gas activities of the Arctic states will probably increase. Thus, the Arctic Council has to provide a balance between environmental concerns and economic interests. Although the Arctic states define economic development aims as common interests, they have to abide by environmental concerns in order to utilize resources in a sustainable way.

As this paper is written in Turkey, it will be rewarding to clarify Turkey's involvement in polar regions. Though Turkey's engagement into the climate diplomacy is not old enough, its desired contribution is quite remarkable.

First of all, Turkey's attempts to construct a permanent research base in the Antarctic is an extension of its increasing marine research capacity of late years. In this context, it is significant to note that the regarding country's interest on polar sciences is a part of the aims to place itself not only in regional waters but also in international waters. Thus, aiming to strengthen its presence in both polar regions, Turkey has been in a prudent progress in recent years.

Since 2017, Turkey has managed four significant research expeditions in the Antarctic so far. From the first expedition to the last one, it has achieved a phenomenal success in its own right including becoming an associate member of the Scientific Committee on Antarctic Research (SCAR). Additionally, having produced its national program on polar sciences Turkey has started to implement a four-year strategy regarding the two poles. Thus, it seems that it is not so far for Turkey to be welcomed by the Antarctic Treaty System (ATS) to have a permanent research base in the regarding continent in order to implement its scientific research themes underlined in the national program regarding polar sciences.

On the side of the Arctic, Turkey's first science expedition in the region was realized in 2019. The fact that, its objectified interest regarding the region has started with the application for the observer status of the Arctic Council in 2015. Since then, as an ad-hoc observer of the Arctic Council, Turkey's program regarding the region is intensifying but still is not clear enough. Nevertheless, it is logical to predict that a more comprehensive strategy regarding the region will be published soon owing to its relentlessly interest to be present in the region.

As a rising power, Turkey's interest on marine activities is historically linked to its sea power memory. Being aware of the experience that the land power is strengthened with naval power, Turkey aims to increase its regional power capacity. But, it

is not clearly limited to regional dynamics. Thus, Turkey seeks for enhancing its naval capacity beyond its boundaries as well. Here, Turkish presence in the Arctic waters will have many outputs.

Firstly, Turkey will contribute to science diplomacy through its scientific research on polar sciences. Being a part of the United Nations Framework Convention on Climate Change (UNFCCC) since 2004, Turkey has demonstrated its enthusiasm regarding prompting action against global climate change. Thus, Turkey's engagement within the Arctic Council as an observer, will fairly be a supporting instrument for its role within climate diplomacy.

Secondly, existing economic opportunities in the Arctic are so inciting that Turkey may opt for benefiting them via its presence in the Arctic. As new existing polar maritime routes -the Northwest Passage and the Northern Sea Route- are being accessible and hydrocarbons of the region are getting feasible through technological improvements, Turkey may facilitate the occurring advantages by having joint explorations with the member states of the Council.

Thirdly, through the observer status, Turkey may contribute to the work of the Council and provide financial support for the proposed projects -for instance on indigenous peoples, improving infrastructure capacity of the region, or protecting the environment- within the Council. Additionally, it may have close coordination with the members of the Arctic Council in order to share expertise with respect to Arctic issues in general. By doing so, it will have the prestige to be one of the leading countries focusing on Arctic issues.

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APPENDICES:

1. DECLARATION ON THE ESTABLISHMENT OF THE ARCTIC COUNCIL

THE REPRESENTATIVES of the Governments of Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States of America (hereinafter referred to as the Arctic States) meeting in Ottawa;

AFFIRMING our commitment to the well-being of the inhabitants of the Arctic, including recognition of the special relationship and unique contributions to the Arctic of indigenous people and their communities;

AFFIRMING our commitment to sustainable development in the Arctic region, including economic and social development, improved health conditions and cultural well-being;

AFFIRMING concurrently our commitment to the protection of the Arctic environment, including the health of Arctic ecosystems, maintenance or biodiversity in the Arctic region and conservation and sustainable use of natural resources;

RECOGNIZING the contributions of the Arctic Environmental Protection Strategy to these commitments;

RECOGNIZING the traditional knowledge of the indigenous people of the Arctic and their communities and taking note of its importance and that of Arctic science and research to the collective understanding of the circumpolar Arctic;

DESIRING further to provide a means for promoting cooperative activities to address Arctic issues requiring circumpolar cooperation, and to ensure full consultation with and the full involvement of indigenous people and their communities and other inhabitants of the Arctic in such activities;

RECOGNIZING the valuable contribution and support of the Inuit Circumpolar Conference, Saami Council, and the Association of the Indigenous Minorities of the North, Siberia, and the Far East of the Russian Federation in the development of the Arctic Council;

DESIRING to provide for regular intergovernmental consideration of and consultation on Arctic issues.

HEREBY DECLARE:

1. The Arctic Council is established as a high level forum to:

(a) provide a means for promoting cooperation, coordination and interaction among the Arctic States, with the involvement of the Arctic indigenous communities and other Arctic inhabitants on common Arctic issues², in particular issues of sustainable development and environmental protection in the Arctic.

(b) oversee and coordinate the programs established under the AEPS on the Arctic Monitoring and Assessment Program (AMAP); Conservation of Arctic Flora and Fauna (CAFF); Protection of the Arctic Marine Environment (PAME); and Emergency Prevention, Preparedness and Response (EPPR).

(c) adopt terms of reference for, and oversee and coordinate a sustainable development program.

(d) disseminate information, encourage education and promote interest in Arctic-related issues.

2. Members of the Arctic Council are: Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States of America (the Arctic States).

The Inuit Circumpolar Conference, the Saami Council and the Association of Indigenous Minorities of the North, Siberia and the Far East of the Russian Federation are Permanent Participants in the Arctic Council. Permanent participation equally is open to other Arctic organizations of indigenous peoples³ with majority Arctic indigenous constituency, representing:

(a) a single indigenous people resident in more than one Arctic State; or

(b) more than one Arctic indigenous people resident in a single Arctic state.

The determination that such an organization has met this criterion is to be made by decision of the Council. The number of Permanent Participants should at any time be less than the number of members.

2 The Arctic Council should not deal with matters related to military security

3 The use of the term "peoples" in this Declaration shall not be construed as having any implications as regard the rights which may attach to the term under international law.

The category of Permanent Participation is created to provide for active participation and full consultation with the Arctic indigenous representatives within the Arctic Council.

3. Observer status in the Arctic Council is open to:
 - (a) non-Arctic states;
 - (b) inter-governmental and inter-parliamentary organizations, global and regional; and
 - (c) non-governmental organizations that the Council determines can contribute to its work.
4. The Council should normally meet on a biennial basis, with meetings of senior officials taking place more frequently, to provide for liaison and coordination. Each Arctic State should designate a focal point on matters related to the Arctic Council.
5. Responsibility for hosting meetings of the Arctic Council, including provision of secretariat support functions, should rotate sequentially among the Arctic States.
6. The Arctic Council, as its first order of business, should adopt rules of procedure for its meetings and those of its working groups.
7. Decisions of the Arctic Council are to be by consensus of the Members
8. The Indigenous Peoples' Secretariat established under AEPS is to continue under the framework of the Arctic Council.
9. The Arctic Council should regularly review the priorities and financing of its programs and associated structures,

THEREFORE, we the undersigned representatives of our respective Governments, recognizing the Arctic Council's political significance and intending to promote its results, have signed this Declaration.

SIGNED by the representatives of the Arctic States in Ottawa, this 19th day of September 1996.

2. JOINT COMMUNIQUE OF THE GOVERNMENT OF THE ARCTIC COUNTRIES ON THE ESTABLISHMENT OF THE ARCTIC COUNTRIES

Ministers and Senior Representatives of the Governments of Canada, Denmark, Finland, Iceland, Norway, the Russian Federation, Sweden and the United States of America met in Ottawa, Canada, on September 19, 1996, and signed the Declaration on the Establishment of the Arctic Council.

This inaugural meeting was attended by the leaders and senior representatives of three international Arctic indigenous organizations -the Inuit Circumpolar Conference, the Saami Council, and the Association of Indigenous Minorities of the North, Siberia, and the Far East of the Russian Federation, as Permanent Participants in the Council.

Also present at the signing ceremony were the Standing Committee of Parliamentarians of the Arctic Region; the Nordic Council of Ministers; the Nordic Council Finnish Secretariat; the non-Arctic States of Great Britain, Germany, Japan, Poland and the Netherlands; the International Union for Circumpolar Health; the International Arctic Science Committee; the United Nations Environment Programme; the International Union for the Conservation of Nature; the Advisory Committee on Protection of the Sea; and the World Wildlife Fund.

Ministers viewed the establishment of this new intergovernmental forum as an important milestone in their commitment to enhance cooperation in the circumpolar North. The Council will provide a mechanism for addressing the common concerns and challenges faced by their governments and the people of the Arctic. To this end, Ministers referred particularly to the protection of the Arctic environment and sustainable development as a means of improving the economic, social and cultural well-being in the North.

Ministers noted that the indigenous people of the Arctic have played an important role in the negotiations to create the Arctic Council. The Declaration provides for their full consultation and involvement in the, Arctic Council. To this end, the Inuit Circumpolar Conference, the Saami Council, and the Association of the Indigenous Minorities of the North, Siberia, and the Far East of the Russian Federation, are named as Permanent Participants in the Arctic Council. Provision is also made for additional organizations representing Arctic indigenous people to become Permanent Participants.

Ministers acknowledged the significant work accomplished under the Arctic Environmental Protection Strategy (AEPS), whose existing programs will be integrated within the Council. They agreed to complete the integration process by the time of the final AEPS Ministerial meeting being held in Norway in 1997.

The Ministers recognized the contribution of international science to the knowledge and understanding of the Arctic region and noted the role that scientific co-operation, through the International Arctic Science Committee and other organizations, is playing in developing a truly circumpolar cooperation.

Ministers welcomed the attendance of the Standing Committee of the Parliamentarians of the Arctic Region and looked forward to its future participation in the meetings of the Council. They also recognized the need for providing the opportunity to non-Arctic countries, governmental and non-governmental organizations with Arctic interests to participate actively, as Observers, in the work of the Council, and to draw on their experience.

Ministers set the initial priority tasks for the start-up of the Council as follows:

- Developing, for adoption by the Council, rules of procedure;
- Developing, for adoption by the Council, terms of reference for a sustainable development program as a basis for collaborative projects; and
- Ensuring an effective transition of the AEPS into the Arctic Council, to be completed at the time of the 1997 AEPS Ministerial meeting in Norway.

Ministers expressed their appreciation to Canada for hosting the inauguration of the Arctic Council, and welcomed Canada's offer to host the first meeting of the Council in 1998.

CURRICULUM VITAE

Personel Information

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Education

2015-2020	Yalova University, International Relations (Ph.D.)
2019 (January-June)	Visiting Researcher, German University of Administrative Sciences Speyer
2013-2015	Yalova University, International Relations (Master of Arts)
2009-2010 (September- March)	Erasmus Exchange Program -Instituto Superior de Contabilidade e Administracao do Porto (ISCAP, Portugal)
2007-2012	Uludag University, International Relations (Bachelor)

Experience

2018-2020	Research Assistant, Firat University
2014-2018	Research Assistant, Yalova University
2009 (June)	Trainee, Eurasian Strategical Research Center

Languages

English (Upper)

Portuguese (Elementary)

Turkish (Advanced)

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Dissertations

- **Doctorate (2020):** From Conflict to Cooperation: Analyzing the Arctic Council as an Institution Constructing Stability (in English)
- **Master of Arts (2015):** The Independence Process of Bosnia Herzegovina after the Cold War and Alija Izzetbegovic (in Turkish)

Essays

- Dağcı, Gül Tuba and Adnan Dal. (2016). "The Independence Process of Bosnia-Herzegovina after the Cold War and Alija Izzetbegovic". *Yalova University, Journal of Social Sciences*. Volume 6, Number 11, (107- 129).
- Dağcı, Gül Tuba and Adnan Dal. (2014). "From the Ottoman Empire to Now: Discussion on Religion, State and Laicism", *Yalova University, Journal of Peace Research and Conflict*. Volume 2, Number 1, (37-47).
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- Adnan Dal. *Cooperative Role of the Arctic Council as an Example of Regime Formation*. Ijopec Publication, London. June 2020. (Upcoming)
- Adnan Dal. *Political Understanding and Philosophical Thinking of Alija Izzetbegovic*. Çizgi Kitabevi. Konya. April 2020.

Papers

- Dal, Adnan. (2019). "Transformation of Arctic Politics from Conflict to Cooperation" *IV. International European Conference on Social Sciences*. (Full Paper), 11-13 October 2019, Diyarbakir

- Dal, Adnan. (2019). "The Role of the Arctic Council on Arctic Governance". *IV. International European Conference on Social Sciences*. (Abstract), 11-13 October 2019, Diyarbakir
- Dal, Adnan. (2019). "The Arctic: From Geopolitical Competition to Geo-economic Cooperation" (Poster), *III. National Workshop on Polar Sciences*. 5-6 September 2019, METU, Ankara.

Research Areas

Arctic politics, climate change, energy geopolitics, geoeconomics, polar issues

COOPERATIVE ROLE OF THE ARCTIC COUNCIL AS AN EXAMPLE OF REGIME FORMATION

It is a fact that the climate is changing globally. As a remote, harsh part of the world, climate of the Arctic is changing as well. The Arctic ice is melting at an astonishing rate. Thus, the region is getting more accessible. Even the Arctic sea routes are ice-free nearly for five months a year right now, this period will probably last longer in the coming years. Moreover, hydrocarbon explorations in the region will increase the expectations regarding an ice-free Arctic since the economic potential of the region is rising to the surface. Under these circumstances, the Arctic has recently been witnessing both challenges and opportunities. The latter includes the exploitation of hydrocarbons and utilization accessible maritime routes – both of which are opportunities gathering less attention– whereas conflicting issues regarding sovereignty and national security are regularly thematized by politicians and media. Here, the point is that, whereas challenges are being underlined, the opportunities are being ignored. Put differently, while politicians and the media address issues pertaining to the regional policies – especially conflicting ones and ecology of the region– on the other hand economic potential of the region triggered by the ice-melting is paid no mind. With this in mind, as one of the most significant institutions in the region, the Arctic Council aims to manage the issues in question. Thus, this book aims to provide enlightenment on the Arctic states' predominant intent to utilize opportunities under the auspices of the Arctic Council via neoliberal policies. The book indicates that the Arctic Council –as an example of regime formation– could be best understood via neoliberal perspective of regime theory since its members plan to further economic development of the region as a common priority.

ADNAN DAL COOPERATIVE ROLE OF THE ARCTIC COUNCIL AS AN EXAMPLE OF REGIME FORMATION