

1. The Arctic

1.1. The Significance of the Arctic

The Arctic is without a doubt an impressive part of nature and our global landscape. It remains one of the most extraordinarily wild and uncharted territories that few dare to venture into on a constant basis, for it is the northernmost part of our world. Nevertheless, it most certainly has been neglected within international relations due to its geographical remoteness and inhospitable conditions.¹ To be more specific, the Arctic region is most commonly defined as the area that is above 66°34'N which is considered the Arctic Circle. Most scientists use this common Arctic Circle definition, or it can also be defined as the regions in which the average temperature for the warmest month is below 10°C.² The eight Arctic states whose territory lies within or closest to the Arctic Circle boundary are Norway, Sweden, Finland, Iceland, Russia, Canada, the United States, and Denmark (Greenland). Each of these states has their own policy and interests in the Arctic, with their own idea of why the region is important. The Arctic hosts an impressive environment, regulates the earth's climate and has numerous geopolitical interests that entice each Arctic state.

During the Northern Hemisphere's winter, it is one of the coldest and darkest places on earth, and after the September equinox the Arctic actually sees no sunlight filtering into its darkness. The March equinox that follows boosts the light and heat able to reach the Arctic and then finally in June the Arctic experiences 24 hours of sunlight³. These facts make the Arctic a true environment of extremes. The Arctic Ocean basin is situated in the Arctic Circle, the majority consisting of frozen saltwater sea ice that covers it. The Arctic's freshwater is located inside glaciers and icebergs in the area, accounting for around 20% of the world's freshwater⁴. What is ideal for the international community to first understand is the significant impact the Arctic has on our world through its environment, biodiversity, indigenous communities, and climate regulating abilities.

Even though the Arctic yields extreme conditions to survive, there are about 4 million people living in the region year-round, whether they are city dwellers or native Arctic peoples⁵. Some belong to indigenous communities like the Inuit, Sami, or Yu'pik to name a few, and have adapted to this unique environment for ages. They offer vibrant cultures, languages, and a variety of customs that are irreplaceable. Due to the pristine and wild characteristics of the Arctic, the landscape is incredibly special, providing an unspoiled habitat for animals and organisms that are not present in other parts of the world. The extent of biodiversity in the Arctic is incredible, and each species is highly interconnected, including the indigenous peoples who reside there. The most common mammalian species found in the Arctic are polar bears, seals, walrus, narwhals, caribou, arctic foxes, and snowy owls. Additionally, there are many fish, bacteria, and microbes and in general up to 21,000 species of cold-adapted creatures that call the Arctic home⁶. Polar bears, who roam and live on top of Arctic sea ice, are an iconic, well-known species that is under protection in some countries like the United States, along with many others. Arctic habitats are far reaching and divergent, from lowland tundras, wetlands, mountains, ocean shelves, millennia-old ice shelves, pack ice and coastal cliffs⁷. The untouched nature of the Arctic and limited human influence have allowed ecological and natural processes to function

¹ CONDE, E. and IGLESIAS SÁNCHEZ, S. *Global Challenges in the Arctic Region: sovereignty, environment and geopolitical balance*. New York, NY: Routledge, 2017, pp. 1-2.

² NATIONAL SNOW AND ICE DATA CENTER. *What is the Arctic?* [online]. [Accessed 7 February 2017]. Available from: <https://nsidc.org/cryosphere/arctic-meteorology/arctic.html>.

³ NATIONAL GEOGRAPHIC SOCIETY. *Arctic*. [online]. 9 October 2012. [Accessed 20 February 2017]. Available from: <https://www.nationalgeographic.org/encyclopedia/arctic/>.

⁴ *Ibid.*

⁵ NATIONAL SNOW AND ICE DATA CENTER. *Arctic People*. [online]. [Accessed 20 February 2017]. Available from: <https://nsidc.org/cryosphere/arctic-meteorology/arctic-people.html>.

⁶ ARCTIC COUNCIL. *Biodiversity*. [online]. 13 May 2015. [Accessed 21 February 2017]. Available from: <https://www.arctic-council.org/index.php/en/our-work/biodiversity>.

⁷ *Ibid.*

in the past, but this fact of the Arctic is increasingly threatened nowadays due to climate change attributed to human activity.

The Arctic not only houses and cares for some of our world's most unique flora, fauna, and cultures but it possesses the impressive ability to regulate and manage global climate on an absolutely magnificent scale. Therefore, it is essential to keep the frozen nature of the Arctic intact because the world's climate and its own existence depends on it. The surface brightness of sea ice that is reflected back into space is scientifically referred to as the "albedo", and in the Arctic, it reflects back about 80% rate⁸. That light, or solar radiation, is absorbed by the Arctic Ocean at a 90% rate. So, the Arctic plays a critical role in the moderating of ocean temperatures globally, through a process called thermohaline circulation.⁹ Unfortunately, scientists have found that sea ice has been continuously declining in thickness and extent over the past 30 years, allowing more sunlight to be absorbed by the Arctic Ocean, detrimentally increasing temperatures. This has begun to affect our global weather patterns: the very nature of our climate. The poles feel the extreme repercussions of global the most, for they are the most sensitive to this absorption of light. Consequently, it is ironic that the Arctic plays such crucial role in moderating the very same climate that slowly is destroying it over time. This grand climate cycle is something that scientists are only recently beginning to fully comprehend. In this day and age the Arctic region is the spark where global warming effects are felt first, which then radiates outward to affect and change climate patterns around the world.¹⁰

1.2 Geopolitical Interests

As the ice in the Arctic Ocean increasingly deteriorates and is less present during winter and summer months, sea levels rise and the environment generally changes, questions about the geopolitics in the Arctic Ocean and region arise more fervently. When the sea ice fully disappears for entire summer seasons at a time, which some scientists estimate could happen within the next 30 years, these issues will completely dominate international relations. The Arctic Ocean area up for debate spans 14.06 million kilometers and shares borders with the key five Arctic states, namely: The United States, Russia, Canada, Norway and Denmark (Greenland). Each state has their own geopolitical interests in the region, and they will soon all claim parts of this Arctic territory more adamantly to access what the Arctic has to offer in the wake of climate change and its consequences on this specific environment.

The first principle geopolitical issue to be discussed in the Arctic is new trading routes and territorial boundaries. Once ice extent decreases in the future, more negotiations dedicated to establishing each Arctic country's sovereignty will need to be carried out. Russia for example is already planning for increased trade usage of their Northern Sea Route with the absence in quantity of seasonal sea ice. Their usage of "ice-breaker" crafts to plough through thick Arctic ice and continue trade already is prominent, and they are looking to develop further technology to advance these machines to keep routes open year-round. Many countries, including Russia, would like to see their outer continental shelf extended, in order to reach what may lie beyond the 200-nautical mile limit as outlined in the United Nations Convention on the Law of the Sea.¹¹

Other specific interests in the Arctic range from fishing, hunting, environmental and indigenous culture protection. Canada is particularly invested in upholding their solid relationship with the indigenous cultures (First Nations, Inuit, and Metis) that reside in the northernmost parts of their state within the Arctic Circle. They typically also comply and implement necessary environmental protection policy, as does Norway. A European Union ally and close partner, they work together to fund The Svalbard Integrated Arctic Earth Observing System research facility located in Norway's Svalbard archipelago. EU member state, Denmark, closely works with their autonomous state of Greenland, which boasts an extremely high

⁸ NATIONAL GEOGRAPHIC SOCIETY, *loc. cit.*

⁹ NATIONAL SNOW AND ICE DATA CENTER. *Quick Facts on Arctic Sea Ice*. [online]. 2017. [Accessed 12 March 2017]. Available from: <https://nsidc.org/cryosphere/quickfacts/sealice.html>.

¹⁰ *Ibid.*

¹¹ CONDE, E. and Yaneva, Z. Arctic outer continental shelf. In: CONDE, E. and IGLESIAS SÁNCHEZ S. *Global Challenges in the Arctic Region: sovereignty, environment and geopolitical balance*. New York, NY: Routledge, 2017, pp. 19-41.

indigenous population, with some 88% Inuit and 12% Danish, in 2012.¹² It could be said that the emphasis in these Arctic states leans more toward environmental and indigenous protection interests, while keeping their energy and sovereignty rights close as well.

Security, defense, and militarizing the Arctic are other important concepts to be examined. Russia deems this highly necessary, as they already have constructed numerous Arctic Ocean bordering bases, and just finished building a new military base this past April 2017.¹³ This demonstrates their eagerness to expand and construct in the Arctic, controversial and bold move to other states. They are stealthily plotting their expansion in the Arctic, in the wake of climate change. This should put countries like the United States on alert, as they could possibly start to compete with Russia to increase their potential in security and defense in the area, to then create oil drilling advantages. U.S. foreign policy is involved in numerous other conflicts and issues that have been considered higher priorities than the Arctic, and the funding for Arctic research and security is minor compared to other Arctic states. Depending on the views of each president and political leaders of the U.S., there will either be more interest to protect and preserve the Arctic environment, or more interest in militarizing and drilling for oil to find new energy resources. Time will tell if Russia's quick actions in the Arctic will trigger more response from the U.S. in the fight for geopolitical interests.

To continue, when our climate warms and sea ice melts that is precisely when more energy resources extraction opportunities, that previously were not reachable, become available. Global warming is opening the door to increased energy exploitation like we have never seen before, in the search for resources once previously hidden under the dense layers of ice. It is estimated by the U.S. Geological Survey that the Arctic contains 13% (90 billion barrels) of the worlds undiscovered oil reserves and 30% of natural gas resources.¹⁴ Naturally Arctic states that have legal claim to the icy Arctic waters are keen to take advantage of this prospect to improve their economies and their geopolitical status, as it is known that, “energía es un arma geopolítica de estrategia.”¹⁵ As scientific research prospers in the Arctic region, there could be new discoveries about energy resources that further drive the push in Arctic geopolitics. While certainly each country has their own national interests at heart, and the for new sources of energy is evident, we will inevitably see the relevance of environmental protection in the Arctic put into question by some political leaders, as the quest for more oil, militarization or battles for territory intensely take precedence.

Each Arctic state has issued its own variance of Arctic policy, demonstrating which interests are most valuable and important to each. Clearly the interests of others may not always coincide, and in addition many interests are equivalent regarding this complex Arctic region in the north of our planet. The important thing is that policy is in fact being made and continues to be reviewed and revised, to align with the ever-increasing conditions of the Arctic and the state of global warming that threatens it. Now and in the future, environmental protection is an interest that cannot be ignored in the region. The geopolitical tensions that are in the process of arising to even larger heights will soon turn into a dominance race to control the fate of the Arctic region. Environmental threats will increase as more sea ice continuously disappears for months at a time. Somehow, all roads lead back to one of the biggest threats facing our planet today; climate change.

¹² CIA. *The World Factbook: Greenland*. [online]. June 2012. [Accessed 12 March 2017]. Available from: <https://www.cia.gov/library/publications/the-world-factbook/geos/gl.html>.

¹³ BBC NEWS. *Russia's new Arctic Trefoil military base unveiled with virtual tour*. [online]. 18 April 2017. [Accessed 29 March 2017]. Available from: <http://www.bbc.com/news/world-europe-39629819>.

¹⁴ U.S. GEOLOGICAL SURVEY. *Circum-Arctic Resource Appraisal: Estimates of Undiscovered Oil and Gas North of the Arctic Circle* [online]. rep. 2008. [Accessed 15 June 2017]. Available from: <https://pubs.usgs.gov/fs/2008/3049/fs2008-3049.pdf>.

¹⁵ DE LAS HERAS PÉREZ, BEATRIZ, Catedrática de la Universidad de Deusto [personal interview] April 20, 2017.