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Thawing Out: The Role of the Arctic Council Service in a Melting Arctic

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As the ice to the north recedes, the Arctic Ocean expands, leaving hundreds of square miles of open ocean surrounding the North Pole, laden with highly profitable resources. Because of the effects of climate change, the Arctic's vast amount of untapped resources is beckoning to be plundered, and each arctic nation is competing for the rights to exploit them. However, the legal regime of the Arctic Ocean, the United Nations Convention for the Law of the Sea is not specific enough for application to a polar ocean. There are many overlapping economic zones in newly available areas which are becoming contested by the arctic nations, and with continued ice recession will only get worse. To resolve some of these disputes, the countries whose territories extend into the Arctic Circle (The United States, Canada, Denmark, Norway, Finland, Sweden, Iceland and Russia), participate in the Arctic Council System, an intergovernmental forum designed to promote cooperation between the nations within the Arctic Circle. The Arctic Council Service, founded in 1996, is currently the only mutually agreed upon institution presiding over all eight nations surrounding the pole; and it is drastically underequipped to preserve the political harmony of the Arctic as the effects of climate change become more severe. As the polar ice recedes and the Arctic Ocean opens, it is crucial that the Arctic Council

be given the legal authority within the arctic community to prevent serious international conflicts and promote inter-governmental cooperation.

Though it remained largely unexplored until the 19th Century, the Arctic Circle has long been a valuable territory for the nations that claim it as their northernmost border. At one time, one of the world's largest companies, The Hudson's Bay Company, had controlling interest in a vast portion of Arctic territory. This company not only collected furs and other North American goods, but they also aided in the exploration of the Arctic coastline, primarily because of the lucrative fur business. The Hudson's Bay Company solely funded many of the earliest European expeditions into the arctic. "They knew that in exploration half-hearted and inefficient cooperation leads inevitably to disaster, and in subsequent expeditions they gave valuable and effective aid (to arctic explorations)" (Mirsky 123). It was these explorations that founded the interest in the Arctic as an economic hub.

Prior to the modern era, the Arctic was generally avoided; it was the unused territory in the northern extremes of the countries that topped the globe. Up until the latter half of the 19th century, countries such as Canada and Russia laid claims to all territories leading to the North Pole.¹ As mapping improved, each country eventually staked its own claim to the land above the sixtieth parallel. At the beginning of the twentieth century, when the application of fossil fuels seized the international market, the Arctic was not yet considered; only when the ice started melting did many countries realize that they could move offshore to search for fossil fuels in a completely untapped region.² Today, the Arctic continues to be sought after for many other economic reasons, however oil is still the most sought after, moving many international companies into the Arctic speculating over the vast amounts of oil resting on the seafloor.³

Certainly, the promise of finding oil on the seafloor is a tantalizing reason to reconsider the value of territory in the Arctic Ocean.⁴ Within Russian territories alone, it is possible to extract up to ten million barrels of oil per day (Lajunesse). Russia recognizes this, having spent billions of dollars on resource expeditions to find the oil here.⁵ With conservatively priced oil, that is, in a competitive market without inflated prices, Russia stands to make tens to hundreds of millions of dollars on oil daily. This new interest in oil exploration within the Arctic Circle has been a very recent motivator for arctic countries, only having become a huge factor within the last two decades. The Arctic oil industry cannot be ignored as the global demand for carbonbased fuels increases; "The world simply needs hydrocarbons too much, and the remaining prospects are few" (Nelder).

A large cause of the renaissance for oil exploration in the north comes from ice melt, which on average, the Arctic is expected to lose "74,000 square kilometers worth of ice each year—adding up to a loss of over two million square kilometers since the late 1970s" (Lajunesse).⁶ Receding sea ice is ultimately the primary cause of the political stress in the region. The sea ice is what made the Arctic so perilous, often dooming ships who drifted too far north which made the Arctic nearly unnavigable. This made the Arctic Ocean devoid of political importance, having no international traffic. The continued recession of sea ice however will make more of the ocean more accessible, and more desirable for the arctic nations; requiring political action where none has existed before.

The recession of polar sea ice not only exposes the Arctic for the mining of fossil fuels, but also for more months of safe passage within the previously treacherous arctic waters. The most important waterway in the Arctic Circle is the Northwest Passage, which stretches from Newfoundland, between Greenland and the Canadian Maritimes and along the North American

coastline to the Bering Strait.⁷ This Passage is a shorter distance to Asia for many European countries than the Panama Canal. There have been "centuries of exploration aimed to join Europe and Asia" (Kraska), and the Northwest Passage is geographically speaking the shortest route, the downside being it was almost always frozen shut and treacherous for most ships.⁸ "Compared to the current routes via the Panama Canal and Suez Canal, a transit from the Pacific to the Atlantic through the Northwest Passage could save two weeks of travel". Such advantages represent a great significance for global trade, which could benefit greatly from faster sea travel. With the melting of sea ice, this waterway becomes a more useful resource for international shipping in a world where "90 percent of world trade is carried by sea" (Parkey). The Northwest Passage remains under the jurisdiction of Canada, Denmark, the United States and Russia. And because of this, these countries must be cooperative in order for this particular oceanic lane to be viable and efficient; disagreement between any of these countries could close off the passage. Mediating these four countries and their interactions with a potential international shipping highway would require a large degree of high-level international cooperation, to guarantee safe passage for ships from all around the world.⁹

With increasing Arctic sea traffic, the arctic coastline would undoubtedly become more vulnerable to spying or foreign attacks in a barely developed area. This may lead the Arctic states to be much more defensive with concerns to permitting international access to the waters offshore. The Arctic Ocean is the shortest distance between many of the countries of the Arctic, and each country has its own resources and strategic establishments to defend. Previously, the geographic separation of these countries was largely maintained by sea ice, which effectively sealed off the borders between the months of September and June. This helped to keep enemies out, leaving an entire border naturally defended. Now with increased maritime activity and

greatly reduced amount of sea ice, comes the potential of new threats to the security of a country (Kraska). This is creating new oceanic borders, transforming the Arctic Ocean an eight-way freefor-all in less than thirty years. Because the territorial lines are so amorphous, who delineates the arctic territories is becoming neigh-arbitrary. And for many arctic countries, the fact that the Arctic is becoming highly traveled and mined for resources is demanding political change at an uncomfortable pace; from stagnant to agenda-topping within the course of a few decades. The Arctic is changing, and the arctic states are merely drawing lines in the sand over who controls what, a definition which is constantly changing.

The definitions of the effective range of the arctic states is currently drawn from the application of the Law of the Sea, especially regarding the Exclusive Economic Zone (EEZ). According to the Law of the Sea, nations only have control up to twelve nautical miles from their shores, with EEZs up to 200 miles offshore (Preamble).¹⁰ The EEZ of a country is specifically designated for the sole economic use of that country; other countries utilizing this area without the knowledge or consent of the primary country is grounds for punishment from that country.¹¹ The EEZ is the most important factor when determining the boundary lines within the Arctic Ocean, and implementing the EEZ is very difficult when considering proximity to the pole, as 200 miles north of any nearly any point in the Arctic Circle is likely to overlap with another country's EEZ. Currently, the EEZ is the largest international debacle in the Arctic Ocean, but soon this may not be entirely true. "Those rules (of the exclusive economic zone) mainly concern the Arctic coastal states. However, if the Arctic Ocean, because of climate change, becomes navigable part of the year, then the high seas regime in UNCLOS comes into play" (Corell). The Arctic Ocean is politically unique being governed primarily by coastal laws under the Law of the Sea, despite being large enough to require laws of the high seas.

The Arctic Ocean, like other unique bodies of water like the Mediterranean or Black sea, are listed as exceptions because it is enclosed. Article 123 of the Convention on the Law of the Sea, titled "Enclosed or Semi-Enclosed Seas" is one of the exceptions applicable to the Arctic Ocean.¹² Article 123 explains that the Law of the Sea is not entirely valid in these enclosed seas, and thus requires that management of the international waters be deferred to the countries surrounding that body of water.¹³ The fact that the Arctic Ocean is enclosed makes the primary concern for arctic waters the EEZ, is difficult to determine, creating "an international law vacuum in the Arctic" (Molenaar). Other enclosed seas draw these lines through intergovernmental agreements between the governments of countries that share that area of water. The Arctic Ocean however is considered to be too large under the current definitions of the Law of the Sea to require the application of Article 123.

The Enclosed Sea Exception is not the only exception of the Law of the Sea that causes problems. Article 234 of the Law of the Sea, which allows for the most proximate nation that controls territory near vulnerable sections of the ocean to deny access to those waters to better protect the environment and the sailors who may move into the area.¹⁴ This exception allows Canada and Russia almost complete control over polar sea routes (despite territorial delineations), because they control most of the Arctic Ocean's coastline. The United States, however, believes "that polar sea routes, on both the Canadian and Russian side of the ocean, were international straits, subject to broad navigational rights for foreign ships" (Bartenstein). The understanding of Canada and Russia, through the Law of the Sea, is that it gives them complete discretion over the movement near their territorial waters. For them, it is logical for the protection of the lives of sailors and the environment alike. The United States however is adamant that this provision under the Law of the Sea further blurs the line between international and territorial waters.¹⁵ Disagreements over territory, particularly what is international, is a debate with no middle-ground and it must be resolved as the recession of sea ice redefines the responsibilities of the Arctic States.

The Law of the Sea and all of its discrepancies was the only international framework that held any weight in the Arctic Ocean until 1996. As the result of an initiative to preserve the Arctic ecosystem, the 1996 Ottawa Declaration set up the Arctic Council System to promote cooperation between the eight arctic nations.¹⁶ To keep the forum peaceful, The Arctic Council defers all authority to the Law of the Sea and the UN's framework. The Arctic Council is the only inter-governmental institution solely intended for the regulation of the Arctic. This organization is a high level forum that serves to promote cooperation, coordination and interaction among the Arctic States, as well as to provide sustainable development for Arctic States and to promote interest in Arctic related issues (Declaration).¹⁷ The goals of the Arctic Council are mutualistic by nature, striving for the sustainability of an economy and the preservation of the arctic environment, while simultaneously protecting the interests of the individual arctic states.¹⁸ The Arctic Council meets on a bi-annual basis, where the representatives from the member nations discuss changes in policy and advancements regarding the territory.¹⁹ Initially, this system was designed to protect the ecosystem and the lands of the indigenous groups who live within the Arctic Circle, but due to the increasing significance of the icecap, it has become increasingly a vessel for negotiating major international concerns between the Arctic States.

Now, the sole organization specifically tasked with mediating the Arctic is being placed under pressure, as the now apparent effects of climate change drastically increase the political and economic significance of the Arctic Ocean. Estimates suggest that if annual ice recession

continues, there could be a completely ice-free Arctic summer as early as 2050 (Wanerman). An ice-free Arctic not only represents a huge opportunity for open ocean shipping along the northern sea route but also the liberation of enough space to establish large-scale resource extraction operations in this area.²⁰ Because of this opportunity, many major world powers would gladly seize the opportunity to monopolize the vast untapped resources in an area officially designated as "international waters" by the Law of the Sea. This is no exception for the circumpolar states, who are only hindered by other polar nations expanding into the same area as they are. Because every country in the Arctic's territories are so closely positioned and fiercely debated with those of another country, the Arctic Council cannot effectively represent each independently because its definitions are taken the Law of the Sea and the United Nations.

The Law of the Sea has numerous intricacies that create a scope that is far too broad for a reasonable application to the Arctic Ocean.²¹ In order for countries to be disciplined in any way by the United Nations for infractions of the Law of the Sea, that country must have first ratified the Law of the Sea.²² An appeal to a commission of the United Nations then amends the issue, but only within the effective powers of the United Nations. As of now, only seven of the eight circumpolar states have ratified the Law of the Sea; all minus the United States (Gunitskiy). The United States' failure to recognize the Law of the Sea creates many problems, especially intergovernmental problems that arise due to differences in the definition of what constitutes international waters. This disagreement is one of the reasons Canada is so particular with regards to the Northwest Passage, which the United States believes is not under the jurisdiction of Canada. Because there are no universally agreed upon definitions of arctic law, cooperation in all aspects of arctic politics is made more difficult.

Despite the inadequacy of the Law of the Sea, the Arctic Council Service as it stands today, is not a strictly better alternative. This is because the Arctic Council Service is required by its charter to refrain from all military based concerns; an unavoidable element of the arctic political environment.²³ The 1996 Ottawa Declaration dictates that: "The Arctic Council should not deal with matters related to military security" (Declaration), this is a particular mandate was designed to promote peaceful cooperation for the mutual protection of the Arctic as a culturally and ecologically distinct region. As the arctic climate causes geographic changes and the individual governments of the arctic states expand towards the North Pole, it is to be expected that in defense of their interests, that their militaries will become involved. The fact that "the Arctic Council does not impose legally binding obligations on any of its participants" (Corell), will only be further challenged when major countries decide that self-interested exploitation of the Arctic is more important than the mutual interest for arctic preservation.²⁴ Without international power, the Arctic Council can be nothing more than a silent objector to the abuse of the arctic environment and its mandates for peace would be made inconsequential.²⁵

The weaknesses of the Arctic Council cause a lack of agreement in the arctic, which is another cause of political stress. This is worsened by the fact that the United Nations, rather than the Arctic Council, is tasked with intervening when disputes get too serious. The process to have the United Nations intervene may be tragically slow, and potentially ineffective. At most, the commission appointed by the United Nations "only has a mandate to review the evidence and make recommendations, not enforce decisions" (Gunitskiy). As far as the enforcement of the United Nations goes, the Arctic Ocean may as well be lawless. The Arctic Council could easily assume the role fulfilled by the United Nations as part of its existing mandates for promoting international cooperation, but only when given the proper authority.

The arctic states are not the only institutions vying for position in the Arctic. Many globalized companies have a great amount of interest in the arctic, especially the commercial fishing industry. The Arctic "already supports four of the ten largest world fisheries, and there is likely room for further growth" (Kakabadse).²⁶ One of the principles of the Arctic Council is to promote sustainable development; with the economic viability of the Arctic Ocean improving with every mile of sea-ice melted, the need for sustainability also grows. Without an authoritative voice, there is no guarantee that any of the member states of the Arctic Council will not violate this directive.

In an attempt to mitigate the control over the arctic oil industry, Europe and the United States have put forth sanctions attempting to limit Russian control over the oil market, the majority of which comes from arctic oil expeditions. These policies specifically target Russian claims to oil reserves within the Arctic Ocean and the major companies extracting oil there. "Russia's existing fields continue to pump 1 of every 8 barrels produced worldwide each day— an output valued at \$425 billion a year, about one-fifth of the country's gross domestic product" (Carroll). With twenty percent or more of a country's gross domestic product reliant or resources strictly from the Arctic, it is clear that Russia has no intentions to cease expanding out into the arctic with the potential profit observed in the area. "Russian demand for hydrocarbons is also fueled by its influence in the European market, which represents large amount of its foreign power. The dependence of key European states on Russian oil and gas supplies gives Moscow a potent foreign policy instrument to exert influence" (Roi).²⁷ Clearly, Russia is exploiting its arctic territory to the fullest extent, exerting it over the European oil market. This region is proving to be very valuable for the arctic states, and international prohibitions on other arctic

goods can only inhibit the Arctic economy, providing forum and promoting cooperation on the behalf of the Arctic Council may help to mitigate the competitiveness of the arctic oil.

Though Russia is not the only country guilty of the exploitation of the current state of the arctic economy, it stands to become the most important political actor without a change in policy. Controlling the largest stretch of territory within the Arctic Circle, Russia has the greatest interest in arctic politics. "The 'High North' in Russia encompasses more than 60% of Russian territory and extends from a land border with Norway to a sea border with the United States" (Rowe). With the melting of the icecap, Russia will be more interested in the 1.2 million square kilometers of open water newly made available to them (Baev), further spreading the massive amount of arctic territory Russia already controls. "Expanding the resource base of Russia's Arctic region so that it can 'largely satisfy Russia's needing hydrocarbon resources, water bio resources and other types of strategic raw materials' has been identified as a main objective and strategic priority in the Russian Government's policy in the Arctic to 2020 and beyond" (Rowe). Russia's expanding territorial horizon is mirroring their ambitious foreign policy, an ambition that is being well-fed by the melting arctic, filled with new expansion opportunities and economic ventures.²⁸

Under the guise of sovereignty, Russia is making no attempt to hide its interests with regards to the newly accessible Arctic territories just outside of their EEZ.²⁹ Russia very clearly wants to expand into the Arctic Ocean, they even planted their flag on the seafloor directly beneath the North Pole in 2007, demonstrating a level of ambitiousness no other country considered to do. However, this area of the ocean is still frozen year round, and not legally under the jurisdiction of any country. Simply, Russia is demonstrating to its observers, especially the other arctic nations, that it is making the first movements for control over the Arctic Ocean.

Because "Russian interests will be critical to its behavior in global politics" (Roi), Russia will respond accordingly to better its agenda moving forward. Examining the planting of the Russian flag beneath the North Pole is a clear display of Russian intent in the Arctic Ocean. For the other arctic nations, the Arctic Council and indeed, the international community of the world, Russian movements in the Arctic Circle is a cause for alarm. Russia is pushing into one of the only frontier regions left on earth, which left unchecked, could give Russia's authoritative and ambitious government an upper hand. The Arctic Council may be one of the only institutions capable of monitoring and legal claims to the prospects of Russia in the coming years.

One of the ways Russia is rationalizing its expansion into the center of the Arctic Ocean is through the Law of the Sea's Commission on the Limits of the Continental Shelf, which permits extensions of EEZs in maritime regions. This would enable Russia to legally exploit what could be considered international waters in the center of the Arctic Ocean.³⁰ The continental shelf exception allows for legal expansions of the EEZ beyond the 200 nautical mile limit if the continental shelf extends beyond the 200 mile line.³¹ Many Arctic countries can claim this exception to extend their EEZ further out to sea, which in an enclosed area like the Arctic Ocean will eventually overlap with the maritime territory of another country.³² The extension of the economic zone is confirmed or denied only after a petition to extend their EEZ is reviewed by a board of geologists and surveyors appointed by the United Nations.³³ They are tasked with determining if the continental shelf indeed extends beyond the economic zone, and exactly where it ends. Their decision is "final and binding" (Kwiatkowska), and determines the boundaries of EEZs as recognized by the United Nations.³⁴ However, the Commission for the Limits of the Continental Shelf "has no mandate to settle boundary disputes, nor can it make any decisions that will bias future resolution to such disputes. Any boundary disagreements must be resolved

between the States themselves" (Kwiatkowska).³⁵ This means that when disputes arise between two or more countries regarding the use of overlapping maritime territory, there is no moderator in the discussion; it is strictly a concern between the two countries, and for many arctic countries, ceding any territory to another could be risky. This is where the Arctic Council could step in. In an area as conflicting and turbulent as the Arctic Ocean having a middle ground or an unbiased party to help to make compromises in situations where both claims are valid could be indispensable.³⁶

Disputes over the territory in the Arctic Circle are not uncommon or unprecedented, one of the first major controversies occurred in the early twentieth century. Norway's Svalbard archipelago has been greatly disputed as a valuable Arctic territory.³⁷ In the early 1900's, the Svalbard archipelago, was a highly contested landmass which at the time was not under the jurisdiction of any nation. Being well within the Arctic Circle, the archipelago was valued for fishing exploits, mining and tourism (Pedersen). After World War I, as part of the postwar peace negotiations, it was given to Norway. This gave Norway complete sovereignty over the archipelago and its territorial waters. In the 1920's, the extent of territorial waters was 12 miles. As international laws changed, particularly with the enactment of the Law of the Sea, Norway's sovereign control over the mountainous island chain gave Norway much more influence than initially intended. New understandings of maritime law dictate that: "The coastal state is not required to claim sovereign rights over the continental shelf or to exercise them. Such rights arise automatically by operation of international law" (Anderson), therefore, Norway's assertion of its rights regarding Svalbard, under any system of maritime law is valid. Norway's ownership of the Svalbard archipelago is now another base from which Norway can extend its EEZ under the Law of the Sea. The Arctic Council was not established at the time of the creation of neither the

Svalbard treaty nor the Law of the Sea, and when dispute like the Svalbard dispute arise, the lack of dedicated may have contributed to the lackluster decision making.

The changes in international maritime law were not considered in 1920, and the now 200 mile EEZ around a geographically separated and sovereign part of Norway is providing great benefit. The United States and Russia, who are both signers of the Svalbard decision, reject Norway's claims to an EEZ utilizing Svalbard as an extension point. Their understanding of Svalbard as the sovereign territory of Norway is understood through the terms of the Svalbard Treaty, up to the original limits of Svalbard's territorial waters 12 miles offshore.³⁸ "The United States fully reserves all rights which it may have under the [Svalbard] Treaty" (Pedersen), however, greatly challenges the reservation of a 200 mile economic zone because of newly defined laws that ignore the parameters of the original Svalbard decision. Both Russia and the United States maintain that the current division of influence in the Arctic is not adequate or proper to determine the division of the Arctic Ocean. As demonstrated by the Svalbard dispute, the usage of the Law of the Sea as the legal body in the arctic is problematic. Given the substantial changes in the area, the Law of the Sea has not demonstrated enough flexibility to meet the needs of a terraforming pole.

The Arctic Circle is a very limited and highly contested area, and as its economic viability increases due to ice melt, so too does its volatility; the Arctic nations must make begin to work together, or refreeze the icecap. As a valuable resource for international shipping and resource extraction, peaceful cooperation and sustainably developing the Arctic will be among the greatest challenges facing the circumpolar nations. There is a need for concise and definitive policymaking to help equally balance the usage of the Arctic Ocean amongst all of the Arctic nations. Simply, there are many problems that need to be solved, and the obvious answer is to

implement inter-governmental efforts in the form of the Arctic Council. The Arctic Council Service stands as an already existing, yet powerless body through which the Arctic nations can cooperate. Empowerment of the Arctic Council service can help to clarify, off of the already standing frameworks of the Law of the Sea, many of the territorial disputes between Arctic states. Climate change is still occurring in the Arctic, and these changes will continue to bring the politics of the icecap into question. The Arctic Council exists because among all of the arctic nations, the mutual interest of a protected and sustainable Arctic was of great importance. For the good of the international community and the relations between the eight Arctic nations, it is crucial that the Arctic Council be empowered and its decisions enforced to promote cooperation in a highly competitive region and avoid international conflict.

Endotes

¹ For a map of the Arctic Circle, see appendix A

² Many countries are now beginning to see and expand into newly released territory. "At issue today is a roughly circular territory around the extreme north that extends beyond this perimeter. In 2001, Russia claimed 460,800 square miles of this territory, an area about the size of Western Europe" (Gunitskiy). Russia is particularly aggressive here, controlling the most area of the Arctic Circle, Russia

³ ExxonMobil is one of the principal countries striving to set up its oil derricks in the Arctic. They are working continuously with Russia, who control most of the Arctic Ocean in multi-million dollar operations (Carroll). However, the risk associated with working in these conditions currently is seasonable, and the only way to keep oil drilling in the extreme north profitable is if the price of oil is high and consistent.

⁴ For a map of an oil survey in the Arctic Circle see appendix B

⁵ This is especially true when considering Universitetskaya-1, a "\$700 million joint exploration project that Rosneft, the Russian state-owned oil company, is developing in the Arctic with ExxonMobil" (Carroll).

⁶ For a depiction of projected summer ice extents for the twenty-first century, see appendix C

⁷ The Polar Sea routes are becoming more viable as ice recedes for longer periods of time. This is especially true for coastal routes such as the Northwest passage and the Northern Sea Route. For a map of the Northwest Passage and other polar sea routes, see appendix D

⁸ This is a crucial point in understanding the importance of trans-continental trade. For hundreds of years, exotic goods from Asia were the greatly sought after in Europe, and shipping these things by land would be perilous journeys in excess of many months. By sea, it was more likely to reach port in similar amounts of time. In fact, the colonization of the new world was brought about by the desire for faster shipping lanes to Asia from Europe, when Columbus crossed the Atlantic he was searching for India. "Since European colonization of North America began, explorers have sought a usable route around the northern coast of North America" (Kim). However, "Using the Northwest Passage had previously been considered commercially impractical due to multi-year pack ice that rendered navigation hazardous or impossible" now that pack ice is receding, navigating this passage will save many ships nearly 4,000 miles as opposed to the Panama Canal.

⁹ This Area not only represents a potentially lucrative shipping highway for international ships, but also a fragile and valuable economic zone for the countries who hold the territory. Therefore, Canada, The United States, Denmark and Russia may be more reluctant to allow foreign ships into their economic zones for the sake of shipping efficiency.

¹⁰ Articles 57, 58 and 59 of the Law of the Sea are the most significant for determining the responsibility of arctic states in their EEZs. For the Charter regarding Exclusive Economic Zones for the United Nations Convention for the Law of the Sea, see appendix E.

¹¹ Article 25, of Section II of the Law of the Sea defers all authority to the nation whose exclusive economic zone was infringed for the defense and actions against intrusive actions from other nations. This means that if another country were to infringe upon the boundaries of the

exclusive economic zone of a particular country, they are authorized by the Law of the Sea to defend it, through any means necessary.

¹² For the Articles pertaining to Enclosed Seas under the Law of the Sea, see appendix F.

¹³ Article 123 is in place "to create a level playing field and regional uniformity", and maintain that international waters are shared, above all else, despite the "vacuum" state that enclosed waters exist in (Preamble).

¹⁴ This exception specifically regards access to waters when considering dangerous ice or wildlife refuges prone to damage done by ships. In these instances, for the safety of the local emergency response teams and international sailors, The Law of the Sea gives authority to the most proximate nation, who is responsible for search and rescue. Prevention is key here, because if deemed too dangerous by the rescuing nation, or vulnerable it is their duty to make resolve the issue.

¹⁵ The Law of the Sea, which is currently considered the governing document for the Arctic Ocean, is not universally agreed upon by all of the Arctic nations.

¹⁶ Non-Arctic countries are not excluded from the Arctic Council; these countries are categorized by the member states as "primary participants" and "observing nations" (Arctic Council). Primary participant nations are countries such as the United Kingdoms, France and Germany, and observer nations are countries such as India and China. The distinction here is made by the Arctic council. Permanent participants are the political structures of indigenous people who are non-affiliated with countries, who are considered members of the Council, though not as heavily weighted. Observers are strictly so, invited to sit in on the bi–annual meetings of the council; they are not permitted to vote on changes to the system. Some observers

(China, India) are considered "ad-hoc", and must request permission to attend summits. Observer nations are non-arctic nations with interest in the motions being carried regarding arctic policies. Countries with significant interest in utilizing the arctic territory for scientific exploration or shipping would apply to become an observer. For the 1996 Ottawa Declaration, See Appendix G.

¹⁷ The member states as recognized by the Arctic Council are: Canada, The United States, Russia, Norway, Denmark, Sweden, Finland, Iceland and any group of native people who is established in the Arctic Circle.

¹⁸ The Arctic Council works for as long as the member nations are compliant with its charter. If one of the goals of the Arctic council is to prevent destruction of the environment and a member nation were to be observed in violating this, the forum would intervene at one of the bi-annual summits requesting the cease of destructive actions. Refusal to do so may result in the omission of council funding for various Arctic affairs in that country. Beyond this, the Arctic Council cannot prevent in any tangible way violations of its sanctions.

¹⁹ Additionally, the Arctic Council distributes funding to the member nations for various endeavors, such as scientific studies. These funds are collected by contributions from the member states and donations made by observers and participants of the Arctic Council. These funds help to incentivize the Arctic nations to promote growth within the Arctic Circle, but in a cooperative and orderly manner. The funds are distributed frequently for scientific research and cultural enrichment programs for those with native ancestry.

²⁰ Obviously, an ice-free pole will also represent greatly risen ocean levels, which could pose additional hazards directly to arctic states and indeed, the rest of the world's coastlines. Regardless of the negative impacts of climate change, the Arctic will still represent a new

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frontier for the countries here. Freed from permafrost, new cities and towns may be built along the northern coasts, and there may be a great surge in development and agriculture during the months when it is available. Such changes could have interesting impacts on the global economy. What is foreseeable is that fossil fuels will not be losing importance, and will become available sooner than other effects of climate change.

²¹ The Arctic Council Service however, is mutually agreed upon by all eight polar states, and strictly concerns itself with arctic affairs, including maritime safety, but also with considerations for environmental protection, resource management and international cooperation Despite this, because it was not designed to fit the purposes of international enforcement of the predominantly frozen Arctic Ocean in 1996, it is dramatically ill-equipped to manage the disputes becoming more prevalent with the significant recession of seasonal ice sheets today. This leaves a considerable gap in the political management of this area.

²² This essentially makes the United States invulnerable to infringements of the Law of the Sea. This disagreement is a strong foundation for the disagreements in the Arctic Ocean.

²³ Many world powers have had military presence in the Arctic Circle for decades.
Military presence, whether for exercises, bases or surveillance has become a norm in the Arctic Circle.

²⁴ Because of the individual interest of each arctic states, another international organization is needed to portion out the territories. The default organization for the moderation of the Arctic is currently the United Nations, and its Convention for the Law of the Sea (The Law of the Sea, or UNCLOS). The Law of the Sea is currently considered to be the only legal body for the Arctic Ocean; the most agreed upon set of international laws regarding maritime

conflicts is the Law of the Sea. For the purposes of the Arctic Ocean, the articles regarding territorial and international waters are the most significant.

²⁵ Though it is not likely that an empowered Arctic Council could entirely prevent military action from its members, it nevertheless separates itself entirely from the militaristic actions of its members, deferring all authority to the United Nations and its commissions, removing all possibility of preventative measures.

²⁶ Arctic Fishing is one of the largest commercial fishing industries. Particularly with King Crab, Cod and Salmon. These fisheries are only becoming more exploitable with the recession of polar ice. "As Arctic sea ice recedes due to climate change, there is increasing interest in commercial fishing in Arctic waters". The Bering fishing region is often referred to as America's "fish basket," with about "60 percent of U.S. commercial landings, according to the state fishing industry" (Winter). The Sustainability of the fishing industry is of great concern when considering environmental change, because the climate and the industry are directly linked. As an explanation of the financial importance of the Arctic, it is becoming more apparent, at least to the US government, that the climate change is having impacts on the industry. For a Map of the current fisheries and economic regions of the Arctic, see appendix I.

²⁷ "the Arctic produces about 1/10 of the world's crude oil and a quarter of its gas. Of this, 80 percent of the oil and 99 percent of the gas come from Russia" (Rowe). As it stands, Russia's control of the Oil market is sizeable, but when one considers the potential increase that could be seized from an expedition in the Arctic Ocean Russia can be definitively poised as a global superpower.

²⁸ Russia's interest in the Arctic has always been profound, especially in the early 1900's, where the coastal Arctic waterways were crucial for shipping from eastern Russia to Moscow. During the Second World War, these arctic coastlines, particularly in the North Sea, proved to be a weakness for Russia. Many of Russia's wartime supplies were shipped to their major cities in this region; easy targets for German U-boats. "U-boats claimed to have sunk eleven or twelve merchant ships totaling 42,000 gross registered tons, one destroyer, five escort vessels, a tug, and some barges, and to have bombarded a number of shore stations and laid a great many mines" (Armstrong 100). Such losses were numerous throughout the war, and Russia's troops and cities were continuously starved as a result. World War II demonstrated to the Russians that they weren't the only ones who occupied the north, and that they risked a great deal by sending supplies via this route. Russia was punished by Germany for investing so heavily into the Arctic's sea lanes. With the arctic being so massive, and constituting so much to the Russian economy and national security,²⁸ a strong presence within the Arctic is not only beneficial, but necessary to maintain Russian interests in the Arctic Circle. The Arctic is not only a great asset for Russia, but as demonstrated by the Germans, a great weakness.

²⁹ The attitude of the Russian Federation we see today stems from a rebirth the Soviet mentality, which is now guiding modern advances into the arctic. They wanted to portray strength at all times. The USSR would release statements such as: "annual freight turnover had increased fourfold since 1940" (Armstrong 104), a clear attempt to intimidate other countries through economic superiority because of the Arctic. This information was so secretive, that when entering ports, it was said that the Soviet ships would confiscate binoculars and cameras from anyone in the port to prevent any possible espionage (Armstrong 103). The majority of the

shipping done here was timber, which at the time was the largest industry in the northern sector of Russia, and moving the Timber from Siberia to Europe was only facilitated by the northern sea route. As a result of the rebirth of this mentality Russia's international cooperation has changed, so much so, that it could be described as: "haphazard and focused primarily on emergency measures" (Rowe). With Regards to the Arctic, Russia is still propagating its Sovietera agenda of economic gains in a highly competitive way. If this behavior continues, the political environment of the arctic will be put under even more stress.

³⁰ Universally, 200 nautical miles from the coastline of a nation is considered the exclusive economic zone, regardless if the continental shelf extends that far offshore. This remains true until the continental shelf begins to slope into deep water. From the end of the Continental shelf, the exclusive economic zone is further extended sixty nautical miles from the drop-off point.

³¹ This is defined by Article 76, sections 4-7 of the United Nations Convention of the Law of the Sea. For the articles of the Law of the Sea regarding the definition of the Continental Shelf, see appendix J.

³² Russia is particularly interested in the use of this exception, claiming the Losmonov Ridge, which crosses the middle of the Arctic Ocean as an extension of its Continental shelf. "By law, states that have ratified UNCLOS can petition a special UN commission, the Commission on the Limits of the Continental Shelf (CLCS), to extend their economic zone—but only if they can demonstrate that the area in question is connected to their own continental shelf. Russia's delegation argued that its continental shelf is connected to the North Pole via the 1,100-mile Losmonov Ridge, which bisects the Arctic Ocean, stretching between Siberia and Canada's

Ellesmere Island" (Gunitskiy). This claim would give Russia a large area in the center of the Ocean as its exclusive economic property. For a map of the Continental Shelves within the Arctic Circle, see appendix K.

³³ They do this by determining where the points of measurement are, and when geographically, the changes in the shelf are significant enough to determine that it has ended, and is becoming Open Ocean. There are many determining factors here. Including seafloor soil composition, ocean depth, and the type of rocks on the seafloor and also depth-gradient and nearest neighbor determinations.

³⁴ Russia's particular utilization of this legal exception as a justification for expansion into the center of the Arctic Ocean is troublesome. While Russia's claim is currently under review by the Commission for the Limits of the Continental Shelf, if Russia's claim was found to be valid via the Losmonov ridge, Russia will be legally enabled to have control over much of the middle of the Arctic Ocean.

³⁵ "Because of its fundamental duty not to prejudice any disputes, or other matters, concerning maritime boundaries and related issues, consideration by the CLCS of the preliminary Submissions by coastal states (and *Notes Verbales* by other states concerned) on the limits of their outer CS (OCS) beyond 200 nautical miles (nm) provide a useful stimulus for the resolution of these disputes" (Kwiatkowska). The mandate of the Commission for the Limits of the Continental Shelf is to avoid prejudices and make decisions based on the validity of motion for extension. Regardless of intent, the CLCS is not working for or against any party.

³⁶ Please refer to appendix H for the current divisions of maritime territory, and Appendix K for a map of the continental shelves. Comparing these two maps will show how the divisions of polar territory is influenced by the continental shelf exception.

³⁷ For a map of the Svalbard Archipelago see appendix L.

³⁸ "If interpreted literally, the Svalbard Treaty does not apply to areas beyond the territorial sea, currently drawn by Norway as being 12 nautical miles from the baselines of Svalbard. Norway takes this view and thus maintains that it has exclusive rights under the 1982 United Nations Convention on the Law of the Sea (LOS Convention) to exploit the resources beyond the territorial sea of Svalbard" (Pedersen)