The Rise of Russia's Cold-Water Ports

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I. Introduction

One of the most consistent pillars of Russian foreign policy throughout history has been its pursuit of warm-water ports.¹ Given Russia’s geographic positioning, ports which didn’t freeze over during the harsh Eurasian winters were arguably the key to its entrance as a great power. The importance of these port cities carried into the Soviet era, as influence stretched around the world, along with the need to project power globally.² However, in the age of receding arctic ice and expanding hard and soft power opportunities in the region, are ports such as St. Petersburg or Sevastopol still necessary for Russian power projection?

In this paper, I will discuss how changes in both climate and technology are reshaping Russian naval ambitions. In the past twenty-five years, Russian foreign policy planners have not only had to adapt to political changes in Europe and Asia, but also changes with their own geography. Every year, the ice which once dominated the Siberian coast recedes in a slow but certain retreat as a result of excess carbon emissions in the atmosphere. Where there were once vast swathes of sea ice, Open Ocean has appeared in its place. On the surface, merchant shipping can now travel from Europe to Asia along a route much faster and safer than those in the Indian Ocean, while on the seabed vast newly accessible petroleum reserves are being discovered. Together with the easy clearing of ice in ports using icebreakers, northern cold-water ports are quickly becoming Russia’s most valuable assets.

The thesis of my argument is really quite simple. As a result of the impact of climate change on access to mineral resources and trade routes, Russia no longer needs to pursue and control traditionally warm-water ports to maintain its economic and military power. To help present a clear and concise analysis, I will refer to this thesis as the cold-water transition theory, after the meteorological nature behind this shift in potential foreign policy possibilities. Through detailed analysis of these changes, theory applications, and consideration of dissenting opinions, I intend to prove this theory. To validate my thesis, I will use existing academic theory to build a foundation of credibility. The theory that I believe best applies to my cold-water transition thesis is offensive realism. Offensive realism theory dictates several key points, which fit well with current events in the Arctic Circle involving Russia and other regional actors.

When examining any issue involving Russia’s connection to the sea, the most obvious starting point is to briefly consider its

geographic positioning and climate. The vast majority of Russian economic power is situated far from the shore, in landlocked population centers such as Moscow. Though not a large hindrance on its own, this positioning becomes far more troublesome with the consideration of the Eurasian climate. With much of Russian territory straddling the Arctic Circle, weather conditions are a serious burden to economic development and political expansion. Considered by many to be Russia’s most notable feature, the Eurasian winter is harsh and unforgiving. With temperatures dropping as low as negative sixty-eight degrees Celsius, life can crawl to a standstill during winter months.

Of course, the climate conditions of the Russian winter not only hinder travel by land, but travel by sea as well. In the early years of the Russian Empire, the only ports within its territory froze over during the winter, requiring the empire to seek out warm-water ports if it ever wished to compete on the international stage with the other European powers. Warm-water ports can be defined as harbors which do not freeze over at any time of the year; while their counterpart, cold-water ports, can be defined as harbors whose waters freeze over during parts of the year. To address this issue and establish Russia as a true European power, Tsar Peter the Great set out to claim such a port. This quest resulted in the conquest of what is modern day St. Petersburg and other warm-water port cities, events which directly resulted in Russia’s ascendance onto the world stage. These ports continue to be economic and military centers of Russian power, having played a pivotal role in the development of the Russian and Soviet Empires.

II. Analysis

Analysis Overview

Of course, in order to even attempt to prove a theory that disagrees with conventional wisdom, a great deal of evidence must be brought in to support such claims. There are many different factors at work in cold-water transition theory, all of which stem from the central belief that climate change is a real and actively occurring shift in earth’s meteorological conditions. The resulting reduction of arctic sea ice from rising temperatures then creates a large number of opportunities for Russia and the rest of the world, which will be examined in this analysis. Such opportunities include new sea lanes, access to mineral resources, and multi-ocean access for arctic states, among a great many possibilities. In this section I will use evidence to support my claim that there exists sufficient proof that these factors signal the beginning of the end of Russian reliance on warm-water ports to maintain its current position in world affairs.

Climate Change

At the very root of cold-water transition theory is the overwhelming evidence of global climate change. Whether it is manmade, or a result of natural climate conditions, the reality of climate change is nearly scientifically undeniable. This is supported by an ever increasing

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number of scientific foundations, both national and international, coming to an agreement that the earth’s meteorological systems are changing. The process behind this is complicated, but can be simplified to a few key points.

According to the Intergovernmental Panel on Climate Change, scientists have a ninety-five percent certainty that the root cause of climate change is a global increase of greenhouse gases, such as carbon dioxide, in the earth’s atmosphere as a result of human and geologic activities. As these gases build up in the atmosphere, they create an ever strengthening blanket that traps heat in energy. A similar process can be observed on the planet Venus, albeit caused by volcanism and on a much more dramatic scale. The increased atmospheric temperature changes both water and land temperatures, causing glaciers and snowpack to melt at far greater rates than can be replaced, resulting in even more carbon dioxide being released into the air in the process. Because of the fluidity of earth’s weather systems, changes can be very dynamic, causing very strong storm systems that vary from drought to typhoons. Overall, these changes may appear contrary to the term “global warming”; however, they are in fact a strong indicator for what is a broad increase in temperature that can still result in very strong winter weather in certain areas.

With these facts clearly laid out, it becomes apparent that there are very genuine changes occurring which can have a considerable impact geographically, but politically as well. In what can be considered one of the most immediately visible changes, the arctic ice cap which connects with Russian Siberia has begun to recede. According to statistics by the National Oceanic and Atmospheric Administration, and backed up by numerous published reports in well-known scientific journals, the total area coverage of contiguous sea ice in the arctic ocean has declined between six-seven percent every decade since record keeping began in the 1970s. This reduction is most pronounced in areas of ocean and coastline claimed and owned by Russia, with a great deal of previously impassible sections of sea now open year round. The significance of this occurrence cannot be underscored nearly enough, and is the basis for cold-water transition theory.

The resulting change in ice coverage during winter months brings an important question: are northern cities still cold-water ports after climate change? Though the original definition of a cold-water port would include winter icing, this is no longer the case. However, for the duration of this paper I will continue to call traditionally warm-water ports by that name, with the same applying to cold-water ports. This will help easily distinguish these ports from each other during analysis and maintain clarity.

New Trade Routes in the Arctic Ocean

Arguably the strongest of the “soft powers,” trade is a staple of economic power. As climate changes causes the sea ice in the Arctic to recede, a new corridor will open for year-round travel from the North Sea to Barents Straits. This route will allow for travel that is not only thirty percent faster by some estimates, \(^\text{16}\) but will be far safer than current sea lanes which traverse highly dangerous waters in the Gulf of Aden and Indonesian Archipelago. The most critical aspect of this is that the near entirety of the route moves through Russian waters, giving them unparalleled control over what could soon be a vital sea lane. The ever present influence of offensive realism driven foreign policy decisions has already begun to show itself with respect to this opportunity, as these new sea lanes are already being used for global trade. Though Chinese maritime analyst Gary Li believes that it requires “another twenty or thirty years of climate change to make it fully viable,” the number of ships using these routes increases with every year.\(^\text{17}\) According to the Northern Sea Route Information, an NGO specializing in promoting such trade routes, seventy-one vessels traversed Arctic trade routes in 2013, up from forty-six the previous year.\(^\text{18}\) Out of those vessels, the vast majority were of Russian origin. Though this pales in comparison to the estimated seventeen thousand of all nationalities which pass through the Suez Canal each year, it is still considerable growth for a previously unused passage.\(^\text{19}\) This relates to offensive realism, because it is a rapid capitalization of a potential opportunity for growth.

Another benefit of this new sea lane is its proximity to Russian ports. With immediate access to the newly opened Arctic sea lanes, port cities such as Murmansk and Vladivostok will become far more valuable for trade than ever before. In fact, should the trade routes in the north become as successful as some predict, it can be argued that northern ports would become far more valuable than any other in Russia.

Emerging Fossil Fuel Access in the Arctic Circle

As the ice caps continue to melt across the Arctic, they will begin to expose vast amounts of previously inaccessible fossil fuel deposits in the process.\(^\text{20}\) Russia currently holds the largest Arctic claim of any other country, already giving it a strong advantage against competitors for these resources.\(^\text{21}\)

Though oil prices are currently in a period of stagnation, global reserves are not finite. Current prices are a result of changes in production across OPEC states and increasing growth in North America, a situation that will certainly not last forever as global demand continues to increase with the economic growth of the global south.\(^\text{22}\)

Russia’s economic development over the past decade has been largely dictated by the export of oil and natural gas.\(^\text{23}\) This fact has

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\(^\text{17}\)Ibid


\(^\text{19}\)“NSR Transit 2013,” Northern Sea Route Information Office.


been made itself rather visible in the current Russian federal budget, which has seen a great deal of cuts across the board.\textsuperscript{24} Though some experts argue that this may be due to simultaneous sanctions imposed by the west in the aftermath of the Ukraine Crisis, there is a strong correlation between oil prices in Russian GDP during that period of time.\textsuperscript{25}

A Russian drive to occupy the arctic would be verification of the offensive realism component of cold-water transition theory in action, as it would indicate a proactive effort to secure economic interests. This is, in fact, already happening. In early August of 2015, the Russian Federation submitted to the United Nations a territorial claim of more than 1.2 million square kilometers of ocean in the Arctic Ocean.\textsuperscript{26,27,28} This claim was made on the basis of the 1982 UN Convention on Law of the Sea, which dictates that a state may lay claim on waters that extend up to two-hundred miles from its continental shelf.\textsuperscript{29} Though these waters were technically still able to be claimed before the recession of the Arctic ice shelf, the opening of accessibility and exploration of fossil fuel resources on the seabed in these regions is very likely to have prompted this action. Within these newly claimed waters, the Russian Ministry of Mineral Resources believes there to be up to thirty-six billion barrels in oil and natural gas reserves.\textsuperscript{30,31} In current valuation of these resources, this would be worth over thirty trillion dollars.

Russia’s push into the Arctic for financial gain is a clear indicator of offensive realist theory at work. As mineral resources and economic opportunity become available, theory dictates that they will capitalize on these opportunities. This is important, because it can help us predict future actions by actors within the region and verifying by proxy many of the other points of analysis.

Defense Trends in the Arctic Circle

Another benefit of the retreat of Arctic sea ice is the now unhindered access to both Atlantic and Pacific oceans from Russian naval bases along the Kola Peninsula to Vladivostok in the Far East. In a theoretical conflict with NATO, control over the Atlantic supply routes connecting North America with Western Europe would be a decisive tool for either side.\textsuperscript{32} Though

St. Petersburg and the Black Sea ports are active year-round, they both require passage through geographic bottlenecks controlled by NATO powers such as the Denmark Strait in the Baltic and the Bosporus Strait in Turkey. For Russia or the former Soviet Union, the only clear route to the Atlantic originates from bases on the Kola Peninsula or Western Siberia. While in the past these bases would have been difficult or impossible to use during the harsh winter months, climate change and the development of icebreakers have made them capable of remaining active year-round.\textsuperscript{33,34}

Though there are no immediate indications of a change in military doctrine along the Arctic Circle, Russia and the former Soviet Union have already made extensive use of arctic waters in their strategic nuclear planning.

Unlike the United States, which dispersed its nuclear ballistic missile carrying submarines (SSBNs) across the world’s oceans in the hopes of using the vast expanses of water to hide, Soviet strategy took a much different approach.\textsuperscript{35} Soviet strategic planners chose to use their geographic positioning to their advantage, using the vast expanses of sea ice and natural gulfs to create a defensive shield to cover their submarines in is known as Bastion Defense Doctrine. By hiding submarines beneath ice sheets and patrolling natural bottlenecks in the Barents and Sea of Okhotsk, it was believed that Soviet SSBNs could be protected long enough during a conflict to launch their nuclear payloads in a first or second strike capacity. In this way, cold-water ports have already showed their importance to Russian foreign policy long before climate change provided additional opportunities. This is yet another example of offensive realism at play, as the previously useless ice sheets in regions such as the Barents Sea were viewed as opportunities to grow power and seized upon. Given this history, it can be predicted that planners will again attempt to find and seize upon advantages in the changing meteorological conditions for military use. In doing so, Russia will continue to lessen its dependence on warm-water ports and grow military power in the Arctic Circle.

### III. Opposing Arguments

As with anything else, there are two sides to this argument. On one side are the arguments which I have made in its support, and on the other are potential arguments against it. In this section I will attempt to address possible criticism of my thesis and analysis. Because this is not based on a currently circulated theory, but rather a new one based on many emerging trends, it would be next to impossible to find direct opposition. What I have gathered to present as a dissenting voice is a compilation of potential arguments based on current trends in foreign policy. They are by no means the only possible arguments; however, I feel these are the most important to immediately consider with respect to my analysis.

The most obvious response to the assertions made in this paper would be that ports such as St. Petersburg and Sevastopol are critical to Russia economically and militarily. Indeed, St. Petersburg is the second strongest Russian city economically by reported GDP as

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valued by the Brookings Institute, second only in the country to Moscow and comparable to Charlotte or Cleveland in the United States. Its proximity to the rest of Europe and use as the base of operations for the Russian Baltic Fleet also make a strong case for its continuing importance to Russian trade and naval power.

Even if Russian interests in the arctic continue to increase, it can be strongly argued that Russia will continue to have concern for developments in the remaining part of the globe beneath the Arctic Circle. The current Russian military action against ISIS is one such current event that can be used to highlight this point. Russian movements in support of the Assad regime make use of ports around the Black Sea and in Syria, in the same way that they could be used for other operations across the Middle East. Based on these events, a case can be made that so long as developments outside of the Arctic Circle influence Russian economic and political standing; it will continue to require warm-water ports to compete for global power.

Critics of cold-water transition theory would of course have many critiques relating directly to current events. Russia’s moves in the Black Sea and Syria are contrary to the idea of a shift towards arctic power. This is not without strong reasoning, as Syrian ports in the Mediterranean are vital to power projection and the port of Sevastopol in Crimea can be considered the jewel of the Russian Black Sea Fleet. Actions in Syria and Ukraine can be considered evidence that Russia continues to pursue southern ports.

Even while remaining within the realm of offensive realism, it can be argued that these actions are further proof that Russian foreign policy is making use of offensive realism to expand power outside of the arctic and would potentially do so in the future as part of a global strategy. In Syria, it is speculated that Russian support for the Assad regime is not only based on the trade of arms, but assurance of the continued use of the only permanent Russian naval base outside of the Russian territory. If this is correct, then it would fit well with an offensive realist narrative of pursuing every possible point of power expansion around the world.

In response to these criticisms, I have a number of rebuttals. Though there are many valid points to be made in opposition to the idea of a shift away from warm-water ports, I believe that these arguments are largely unable to conclusively prove a requirement for warm-water ports in the future. With regards to the argument in favor of a continued requirement for warm-water ports built upon strong reasoning, I do not believe that this criticism would necessarily disprove cold-water transition theory. In the coming decades, fossil fuel resources in the Middle East are expected

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39 “Syrian Civil War: Russian Navy Base Tartus In Syria Giving NATO Cause For Concern While Helping To Prop Up Assad Regime,”
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to decline with continued use, allowing for a shift of power towards the next frontier in oil and natural gas, the Arctic Ocean.\textsuperscript{42} Even in the very likely scenario that global hotspots for military and economic activity continue to appear outside of the Arctic Circle, the opening of access to northern ports will allow for power to be projected from those harbors without need for others in warmer waters.\textsuperscript{43,44,45} As was discussed in the military section of the analysis, the recession of sea ice will provide cold-water ports with easy access to both Pacific and Atlantic oceans, and by extension, the rest of the world. Under this reasoning, I would argue that Russia could continue to function at a similar capacity militarily and economically in a situation where it no longer had the ability to use its warm-water harbors. This would be in keeping with my thesis, which states that Russia no longer requires access to the sea to remain a global power.

In relation to the question of Russian activity in Syria, there are a number of factors at play in this decision. From a strategic standpoint, the Mediterranean would most likely be blocked at both exits during a conflict with the west. The only potential use of Syrian ports would be to contest NATO forces in the Mediterranean while being completely isolated from the rest of the Russian Navy and Air Force.\textsuperscript{46} Though this would be a thorn in the side of NATO forces in Southern European and would require a diversion of resources from other theaters, the considerable air and sea power of France, Italy, Turkey, Greece, and of course the US and UK would no doubt be overwhelming for and Russian fleet. This is of course before even considering the proximity of this port to NATO bases in Turkey. While these bases are certainly useful during peacetime for supply and maintenance purposes, they would be isolated from the Russian mainland during a conflict with the West. Altogether, I would assert that these responses effectively counter the most obvious criticisms to my analysis and the thesis it supports.

**IV. Conclusion**

After considerable analysis and discussion of the impact that global climate change will have on the politics of the Arctic Circle, along with the resulting changes in oceanic access from traditionally cold-water ports, a clear picture can be made of current and future events. The picture made in this analysis points towards a shift in possible Russian power from traditionally warm-water ports to cold-water ones along the Arctic Circle. Based upon the supporting evidence for this assertion, it can be concluded that the thesis argument that Russia no longer needs to pursue and control traditionally warm-water ports to maintain its economic and military power is based upon sound reasoning. Though critics may be able to argue that a modern Russia cannot live without its southern ports, the evidence brought to support cold-water transition theory has delivered a clear argument for a decisive change in what has been fundamental Russian foreign policy for more than three hundred years. What was once a hindrance to its ability to ability to become global superpower, Russia’s cold-water ports will soon become the key to its reentry as a power player on the world stage.

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\textsuperscript{44} Staalesen, Atle, “New Icebreakers Open Way for Russia in Arctic,” *Barentsobserver*. (2015).


