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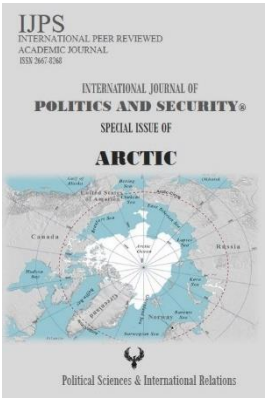

Importance of the Arctic in the Framework of Air Power Theory

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Importance of the Arctic in the Framework of Air Power Theory

Selim KURT*

Abstract

The Arctic is generally regarded as inaccessible and unproductive because of its geographical and climatic characteristics. However, despite the perception caused by these geographical disadvantages, the melting of the thick ice mass on its surface in recent years, aside from its geopolitical significance, has led this region to come to the fore in international politics. The melting in the Arctic has not only allowed natural resources that were previously not feasible for extraction to become accessible, but it has also enabled alternative transport routes to be discovered. These resources, and the Arctic's unique position in the northernmost part of the world, have led to the need to look at the Arctic region from a fresh perspective. Differing from the well-established perception that the Earth lies along an East-West direction, air power theorists assert that looking at the Earth from the Arctic region would significantly alter our perception of direction and distance by shortening distances considerably. Such a way of looking brings the Arctic region to the forefront, moving the center of focus to this region in the framework of air power, and making it the focus of the global struggle.

Keywords: *Air Power theory, Geopolitical Theories, Arctic, Arctic Circle, Alexander P. de Seversky.*

Hava Hakimiyeti Teorisi Çerçevesinde Arktik'in Önemi

Özet

Arktik, konumunun neden olduğu coğrafi ve iklimsel özellikler dolayısıyla ilk bakışta erişilemez ve verimsiz olarak görülmektedir. Ancak bu coğrafi dezanvantajalarının neden olduğu algıya rağmen bulunduğu konumun verdiği jeopolitik önemin yanı sıra son yıllarda üzerindeki kalın buz kütlesinin erimesi de uluslararası politikada ön plana çıkmasına neden olmuştur. Söz konusu erime bir taraftan daha önce işletilmesi fizibil olamayan doğal kaynakların erişilebilir hale gelmesini sağlarken, diğer taraftan da yeni ulaşım yollarının açığa çıkmasını sağlamıştır. Gerek söz konusu kaynaklar gerekse dünyanın en kuzeyinde yer almasının sağladığı mesafeleri kısıtlması gibi unsurlar Arktik'e farklı bir gözle bakılması zaruriyetini doğurmuştur. Özellikle Hava Hakimiyeti teorisyenleri yerleşik algı olan dünyanın doğu-batı yönünde uzandığı görüşünün aksine, dünyaya üstten, yani Arktik bölgesinden bakışın mesafeleri önemli oranda kısaltarak yön ve mesafe algımızı büyük ölçüde değiştireceğini iddia etmektedirler. Böyle bir bakış Arktik bölgesini ön plana çıkarak, Hava Hakimiyeti çerçevesinde kalpgahı (Heartland) bu bölgeye taşımakta ve küresel mücadelenin odağı haline getirmektedir.

Anahtar Kelimeler: *Hava Hakimiyeti Teorisi, Jeopolitik Toeriler, Arktik, Kuzey Kutup Dairesi, Alexander P. de Seversky.*

1. Introduction

The Arctic has not traditionally been in the spotlight of international politics, mainly because of its difficult to access geographical location and harsh climatic characteristics. Following the bipolar transformation of the world political map after the Second World War,

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the polar leaders turned the Arctic into an arena of struggle, as they did in many other parts of the world. During this period, the Arctic attracted the attention of polar leaders who did not want to face a sudden unexpected attack, primarily due to its advantage of shortening distances enabled by its geographical position.

However, this level of attraction decreased with the disintegration of the bipolar structure caused by the collapse of the Union of Soviet Socialist Republics (USSR) at the end of 1991. Nevertheless, a rise in the melting of the thick ice mass triggered by global warming over time has introduced several issues which brought the region back to the agenda forefront in international policy. First, it has made the virgin resources of the Arctic more easily accessible. Secondly, it has led to the emergence of new transport corridors that pass through the region. The competition in the Arctic region has also been again fueled by the Russian Federation's (R.F.) recovery and its re-entry to the international power struggle since the mid-2000s.

However, the established geographical view that the world is based mainly on an east-west-oriented course also affected international policy, theoretically leading to the region located at the northern end of the world remaining on the periphery of the international policy agenda. In other words, this traditional orientation does not match much with the Arctic's current situation, whose importance has gradually increased in international politics for the reasons mentioned above. As opposed to the established geographical perception, air power theorists who offer a way of looking at the world from the northern extremity, that is, from the Arctic region, place the Arctic at the center, being compatible with its importance in today's international politics.

Therefore, it is essential to outline the theoretical framework of the Arctic's position, whose importance is increasing with each passing day considerably, in international politics from the perspective of The Theory of Air Power. This study's primary aim is to analyze the geopolitical position and significance of the Arctic region in the context of Air Power Theory. In this framework, although references are made regarding today as necessary, the study's main purpose is to analyze the importance of the Arctic from a theoretical perspective. For this purpose, it has been tried to reveal the place and importance of the Arctic by using the works of classical theorists of the Theory of Air Power such as Alexander P. de Seversky and George T. Renner.

So, in this study, firstly, the theoretical development of The Air Power Theory in the historical process was assessed; and then, under the title of *the Arctic and the Air Power*, the geographical position of the Arctic region and its place in international politics today were examined; and finally, within the framework of the Air Power Theory, the geopolitical importance of the region was tried to be analyzed.

2. Air Power Theory

Air dominance is a geopolitical approach, which has been outlined theoretically by American aviators to a large extent. The theory's applicability has evolved significantly in scope and content, from the first aircraft's production to modern-day space studies. The theory has even taken on a different meaning with today's space studies, leading to the emergence of a concept called "Space Geopolitics." The theory's fundamental philosophy can be summarized as, "*A state that dominates the Air also dominates the entire world. For this reason, it is necessary to be always superior in aviation*."[1]

As Alexander P. de Seversky, considered a pioneer of air geopolitics, points out, modern wars require the use of all of a nation's power.[2] At this point, a nation's military forces are commonly grouped into three forces: land, sea, and air. Land power has traditionally and historically been the most widely used power component, solely against the opponent's land powers. Not only is the ability of land power to carry out parallel operations on its own extremely limited, but its probability of being implemented without causing significant damage and loss of life is also low. On the other hand, sea power can be used against centers of gravity that are directly or closely related to strategic goals, if the target is accessible by sea. Although many places in the world fit into this category, some do not. Centers of gravity of the vast majority of states and that have coasts are often located far from the sea. Seapower can mobilize faster than land power and tackle more centers of gravity, but in many cases, its ability to carry out parallel operations is very limited. It can also conduct operations, causing far less destruction and casualties than land power. However, regardless of where it is located, air power can be used effectively against almost all centers of gravity that are directly related to strategic targets. Since it can attack many targets within concise periods, air power use is exceptionally

[1] Ramazan Özey and Ali Osman Kocalar, *Siyasi Coğrafya*, 19th. edition (İstanbul: Aktif Yayıncılık, 2019), 171.
[2] Alexander P. de Seversky, *Air Power: Key to Survival* (New York: Simon and Schuster, 1950), 1.

convenient for parallel operations. Air power can also be useful when aiming to achieve the desired results with minimal destruction and loss of life.[3]

When it was heavily debated that the way of waging war would change significantly, Seversky pointed out that this meant the old rules of war would also be invalid. He stated that valuable war experience learned from the past would transform in parallel with new technological developments. For example, he referred to the unexpected Japanese assault on the Port of Pearl Harbor by the Air Forces in 1941. He noted that the widespread use of long-distance air transport, in particular, has led to significant developments and pushed aside old weapons technologies to a large extent.[4]

Even after the first aircraft, which was the primary element of air power in 1903, was built, air power's significance was underestimated in military terms, and air power in wars was perceived as a case of extreme optimism.[5] For example, Ferdinand Foch, who served as a professor at the French Military Academy before the First World War, commented that "airplanes are interesting toys, but of no military value." However, it can be stated that the perspective on air power has changed significantly since then. John A. Warden, a colonel who served in the U.S. Air Force, argued that air power today is an element that changes the nature of wars fundamentally, and stated that most people are not aware of this.[6]

Aircraft were first used as combat vehicles over Libyan territory in the Battle of Tripoli in 1911. After the First World War, aircraft use became more widespread, reaching the point of changing the wars' outcomes. Towards the end of the First World War, powerful states, with the large aircraft they built, carried out aerial bombardments, resulting in civilian casualties. During the Allied Forces' last strike in 1918, German forces conducted an air-to-ground attack using aircraft effectively. The fact that aircraft emerged as an essential instrument in both air transport and strategic areas in the Second World War along with technical and military developments in this regard increased the importance of aviation in the theories and practices aimed at political dominance over the world.[7]

[3] John A. Warden, "Strategy and Airpower," *Air & Space Power Journal* 25, no. 1 (2011): 75.
[4] Seversky, *Air Power: Key to Survival*, 5-6.
[5] Bülent Şener, *Jeopolitik: Uluslararası İlişkilerde İnsan, Devlet, Coğrafya ve Zaman Etkileşimi Üzerine Bir Giriş* (Ankara: Barış Kitabevi, 2017), 152.
[6] Warden, "Strategy and Airpower," 64.
[7] Şener, *Jeopolitik: Uluslararası İlişkilerde İnsan, Devlet, Coğrafya ve Zaman Etkileşimi Üzerine Bir Giriş*, 153.

Giulio Douhet, one of the first theorists to realize the importance of air power, has become the prominent theorist of this field with his book *The Command of the Air*. Douhet stated that people have first placed importance on ground troops in wars and then on naval troops, which were initially seen as a complementary component. However, he noted that naval troops have increased in importance over time and have become an essential instrument in wars. Douhet also stated that air was not initially considered a battlefield asset due to the inadequacies of aircraft. But it was then discovered by some far-sighted nations, especially after the First World War, that this was not the case. Pointing out that the air, similar to the seas, would become an actual battlefield over time in parallel with developments in aircraft technology, Douhet also noted that this would not eliminate the importance of land and sea wars and forces. In this context, Douhet stated that the aim of both lands, and sea and air armies are to win the war and that they should act in cooperation with each other. However, he also stated that the interdependence of these forces on each other would eliminate their freedom of movement and that each thus should have the ability to act independently of each other.[8]

Besides, Douhet noted that in old wars, the war took place mainly within the borders of which the warring parties came into contact with each other, and therefore a nation's limited number of military elements were affected by these wars, while civilians stayed physically distant from the conflict. He asserted that this war style led to a definite distinction between combatants and civilians in wars. Nevertheless, he stated that this situation has considerably changed with the use of air power. Not only the soldiers fighting on the front but also the non-combatants of the warring states have become targets. Douhet focused more on offensive warfare and considered aircraft to be an excellent offensive weapon. He also pointed out the fact that thanks to Air Forces, all states now have access to their enemies' centers of power. This has in the shortest possible way has significantly expanded the scope and scale of the war, and noted that this ability would likely be the main characteristic of future wars.[9]

Being a naval airman of Russian origin, Seversky played a crucial role in announcing how air power transformed national security and militarily expanded the geographical accessibility geographically of a nation's strike force. First arriving in the United States upon a

[8] Giulio Douhet, *The Command of The Air* (Washington, D.C.: Air Force History and Museums Program, 1998), 1-5.
[9] Douhet, *The Command of The Air*, 13.

military mission in 1918, Seversky emigrated to the U.S. and became an advisor to Billy Mitchell (1879-1936), a pioneer of military aviation. Seversky founded Republic Aircraft Corporation in 1939, which would also manufacture the P45 fighter aircraft. As he stated in his work in the early 1940s, *Victory Through Air Power (1942)*, he sought to proclaim the United States' military achievement potential through air power and long-range aircraft.[10] Having been highly critical of the importance of armies and navies, Seversky was an unrelenting proponent of air power, and he attached great importance to it. Seversky thus contributed to the expansion of the field by incorporating the theory and application of air power, as well as land and sea forces, into geopolitics.[11]

Seversky stated that, before air power, sea lanes were the most critical transportation route in both commercial and military terms. He stated that Britain, the imperial power of the period, transferred all its military potential to its naval power and kept its land power to the lowest possible level for achieving its imperial political aims. However, Seversky noted that from the mid-1900s onwards, sea power had become of secondary importance in the field of transport. He stated that the seas are still essential, particularly for trade, but that air forces became the dominant tool in achieving destructive power (military power) objectives. He also stated that an air power, which controls the entire "air ocean" on Earth, would undertake a role similar to being the "guarantor of peace" in the past provided by the sea power.[12] Thus, Seversky also pointed out that due to the advances in technology, air power overtook other forces over time. For this reason, he pointed out that the most important objective should be the minimum military investment in the U.S. land and sea forces and the transfer of all possible resources to the development of the air force under built-up, which he considered an undeniably superior power.[13]

Like many other air power theorists, Seversky has also been criticized for overestimating the effectiveness and efficiency of air power and for placing too much emphasis on the physical and psychological impacts of strategic bombing. Like Douhet and others, Seversky, too, recognized the importance of morale and willpower and realized that the enemy's will to fight must be reduced or distorted by some means. However, unlike them, he

[10] Bert Chapman, *Geopolitics: A Guide to the Issues* (California: Praeger, 2011), 22.
[11] Chapman, *Geopolitics: A Guide to the Issues*, 23.
[12] Seversky, *Air Power: Key to Survival*, 21.
[13] Seversky, *Air Power: Key to Survival*, 21.

rejected the idea that this could best be achieved by bombing urban areas. Instead, he preferred the use of air power against the enemy's industry or infrastructure. In short, it can be concluded that air power determines different centers of gravity to concentrate operations.[14]

Air power, even during the Cold War, was regarded as necessary, chiefly because of its ability to use intercontinental bomber aircraft and to carry nuclear bombs. Its strategic role was also mostly assessed as part of its contribution to nuclear deterrence. At this point, air power's importance was assessed mainly as part of its contribution to combined joint operations. By the 1980s, some airmen began to claim that advances in aviation technology had taken the Air Force to an important place in the Joint Force arena.[15]

At this point, it can be stated that the 1990s were considered as the years when specific air power use in military strategy was on the rise. Air forces played a vital role in the withdrawal of Iraqi forces from Kuwait in 1991. In this war, the Air Force seemed to have undergone a noticeable transformation in the definition of both effectiveness and lethality, especially since the Vietnam War.[16] There has been a widespread belief that the Air Force played a leading role in winning the ground part of the Iraq War in such a short period of time and with few casualties.[17] It has also been claimed that the Iraq War necessitated both the advancement of air power and the change in the way wars are conducted depending on air power dominance and contributed to the emergence of a new perspective about the way military operations are conducted. Besides, air forces also played a major role in ending the four-year war in Bosnia. At that time, although the US Army resisted sending troops to Bosnia and Kosovo, the most important supporter of the US army in this regard was the Air Force.[18] Also, in today's world, advanced battlefield awareness, increased aircraft ability, and advanced weapon accuracy have enhanced the likelihood of making a mass impact without having numerical superiority in military terms. At this point, air power plays a crucial role and has reached the ability to produce effects that it has not previously had until today. Furthermore, it can be stated that these new

[14] Phillip S. Meilinger, "Proselytiser and Prophet: Alexander P. de Seversky and American Airpower," *Journal of Strategic Studies* 18, no. 1 (1995): 29.
[15] Benjamin S. Lambeth, "Air power, Space Power, and Geography," *Journal of Strategic Studies* 22, no. 2-3, (1999): 63-64.
[16] Robert D. Kaplan, *The Revenge of Geography* (New York: Random House Trade Paperbacks, 2013), 16; Lambeth, "Air power, Space Power and Geography," 63.
[17] Lambeth, "Air power, Space Power and Geography," 63-64.
[18] Lambeth, "Air power, Space Power and Geography," 63.

capabilities were demonstrated with encouraging results by the Allied Force Operation in the former Yugoslavia's skies.[19] Also, air power again became the most critical element that prevented Saddam's intervention for more than a decade in the No-Fly Zone created in northern Iraq during the same period.[20]

In addition to the Iraqi intervention in 1991, the U.S. launched a global counterterrorism campaign after the September 11 attacks; its operations in Afghanistan in 2001 and Iraq in 2003 also made the air power theory a current issue. It seems clear that during both operations, the U.S. has prioritized airstrikes. It was also observed that the U.S., which had dropped a large number of bombs on pre-determined targets with its air operations and hit their targets accurately to a large extent, had difficulty exhibiting the same success in the ground phase of the operations. Both operations have, therefore, proved that air operations alone would not be adequate.[21]

Considerations such as the ever more sophisticated use of electronic equipment and the high performance required for assault aircraft have made building up an Air Force expensive today, making it completely unaffordable for some states. Therefore, it can be claimed that in air warfare, wealthy states have a significant advantage over relatively poor states. Despite its costs, air superiority is often considered key to success in ground operations, especially in open terrain. The U.S. bombings of Iraq (1991-2003), Serbia (1999), and Afghanistan (2001) not only targeted the morale of the adversary population but also demonstrated the effectiveness of air power directed remotely and directly at combat positions. It is stated that the U.S., which actively used its air power during these operations, demonstrated its capacity to cause significant losses of adversary military forces from a long distance, with very few casualties of its own, is an unprecedented air operations success in history. Remarkably, the operation conducted in 2003 against Iraq demonstrated both the usefulness and limits of air power. In the first few days of the war, pinpoint bombings against Baghdad destroyed hundreds of targets that were very valuable to the Baghdad administration. Nevertheless, despite this achievement, the U.S. forces were obliged to reach Baghdad by fighting on land. This war could not be won

[19] Lambeth, "Air power, Space Power and Geography," 73.
[20] Kaplan, *The Revenge of Geography*, 17.
[21] Özey and Kocalar, *Siyasi Coğrafya*, 174.

only by air attacks. As Ground Forces pointed out, "no one has ever surrendered to an aircraft."[22]

Airspace, which gives access to the entire Earth, offers important opportunities, such as the shortest path to targets and the possibility of surveillance and intervention. But all aircraft built so far take off from the ground or sea-based carriers, and after a certain amount of time in the air, they have to return to the ground. Even winged flying animals that spend a significant amount of their lives in the air need land and sea to obtain their necessary food, and in current conditions, a living creature's long period of survival in the air does not seem very likely.[23]

3. The Arctic and Air Power Theory

Fundamentally, geopolitics is concerned with the relations between geographic location and power politics. Since geographic parameters typically influence state interaction dynamics, geopolitics is often used to describe and analyze the monitoring and management of conflicting national interests within a specific geographical context. Geopolitical analysis is closely related to the realist perspective in the study of international relations. According to realists, the top national interest is the state's survival. It is assumed that the primary means of ensuring security in an anarchic international system are military power and economic wealth. At this point, the primary basis of geopolitical thinking is that power and geography are necessary for international relations. Some regions are of particular attention because they are rich in resources and are essential for communication and transport opportunities in the broadest sense (that is, land, sea, and air). In this context, it can be stated that the Arctic region meets the essential criteria for geopolitical importance; this region is rich in living and mineral resources, and the vast area it covers has the potential to both connect and separate global powers and continents.[24]

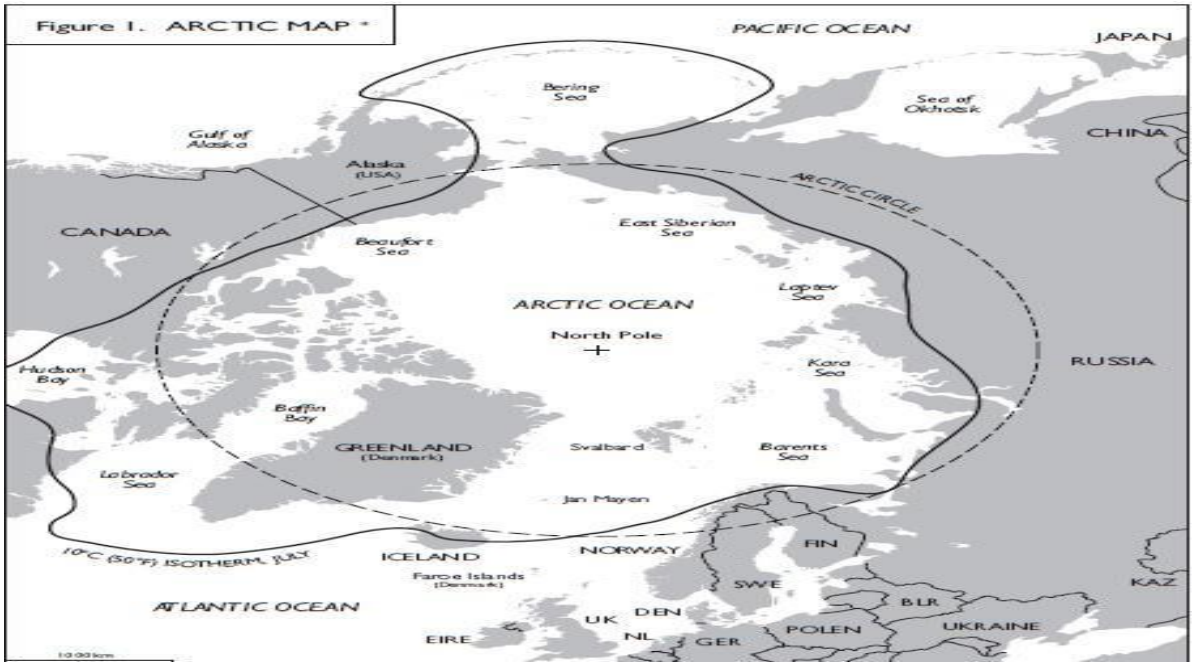
3.1. The Arctic Region and Its Place in International Politics

The most common and basic definition of the Arctic describes the region as the land and sea area in the north of the Arctic Circle (Circle of latitude about 66 34' North). In this context,

[22] Joshua S. Goldstein and Jon C. Pevehouse, *Uluslararası İlişkiler*, 2nd. edition (Ankara: BB101 Yayınları, 2017), 270-271.
[23] Özey and Kocalar, *Siyasi Coğrafya*, 174.
[24] Rolf Tamnes and Kristine Offerdal, "Introduction," in *Geopolitics and Security in the Arctic*, ed. Rolf Tamnes and Kristine Offerdal (New York: Routledge, 2014), 6.

the Arctic Circle definition covers one-third of Alaska and the Chukchi Sea, which separates this part of Alaska from Russia, and U.S. territorial and Exclusive Economic Zone (EEZ) waters north of Alaska. The area within the Arctic Circle is about 8.14 million square miles. This is about 4.1% (or between 1/24 and 1/25) of the Earth's surface, and more than double the land area of the U.S., which is nearly 3.5 million square miles.[25]

Figure 1. Arctic Map[26]



Although the Arctic region is recently referred to as an energy base, it is already known that energy sources have existed in the region since the 18th century. The deep ice cover, harsh terrain, and challenging physical environment of the Arctic region hampered drilling operations; and exploration activities were only able to begin in the 1920s and increased from the 1960s onwards. Unlike other regions where there was an increase in activity after hydrocarbon resources were discovered, the Arctic has maintained its position as one of the few remaining untouched regions in the world. In contrast to other energy-rich regions such as West

[25] Ronald O'Rourke et al., "Changes in the Arctic: Background and Issues for Congress," *Congressional Research Service* (2020): 1-2.
[26] Jeppe Strandsbjerg, "Cartography and Geopolitics in the Arctic Region," *DIIS Working Paper*, no. 20 (2010): 9.

and Central Asia, this region has managed to stay out of the geopolitical competition despite having vast untapped energy and mineral resources.[27]

However, as we come to the present day, the geopolitical focus on the Arctic region has been rising along with the region's importance. It seems there are two main reasons for this. As stated above, the first is that the Arctic region contains large amounts of untapped energy and natural resource reserves, which are of particular interest to states with rapidly growing economies and heavy dependence on imported energy and natural resources.[28] The second is that with the melting and decline of the ice sheet, new sea lines connecting Asia and Europe will become available for navigation in the coming decades. According to estimates, melting ice will allow all five Arctic coastal states, in particular, Greenland (+28% by baseline), Canada (+19%), Russia (+16%), and the U.S. (+15%), to facilitate maritime access to their existing exclusive economic zones. This, on the one hand, will increase the importance of the Arctic region for states to shape the rules of transport and shipping in the region, and on the other hand, it will exacerbate the interests and claims related to disputes over land and sea space in the Arctic region that are still unresolved.[29]

The U.S. Energy Information Administration (EIA) report prepared in late 2009 and the U.S. Geological Survey Report of 2008 presented a mixed analysis of Arctic Ocean energy resources. The report covers good and bad scenarios for oil and gas development in the Arctic region in this context. The good news is that the region is estimated to have about 22 percent of the world's energy resources. In this regard, there are about 90 billion barrels of oil reserves in the region, or 13 percent of the world's untapped oil, and about 30 percent of the total natural gas reserves. Vast amounts of mineral resources are available in the area, including rare earth elements, iron ore, and nickel. Moreover, with the fact that climate change has made the region accessible and emerging new shipping routes that were once considered inaccessible, the

[27] Shebonti Ray Dadwal, "Arctic: The Next Great Game in Energy Geopolitics?," *Strategic Analysis* 38, no. 6 (2014): 812.
[28] Camilla T. N. Sørensen, "Changing Geopolitical Realities in The Arctic Region: Possibilities and Challenges for Relations Between Denmark and China," *Newsletter for Center for Polar and Oceanic Studies* 3, no. 2 (2014): 1, https://pure.fak.dk/files/7289274/Tongji_article._Arctic_region..pdf.
[29] Sørensen, "Changing Geopolitical Realities in The Arctic Region: Possibilities and Challenges for Relations Between Denmark and China," 1; Gerald E. Connolly, "NATO and Security in the Arctic," *NATO*, 2017, https://www.nato-pa.int/download-file?filename=%2Fsites%2Fdefault%2Ffiles%2F2017-11%2F2017%20-%20172%20PCTR%2017%20E%20rev.1%20fin%20-%20NATO%20AND%20SECURITY%20IN%20THE%20ARCTIC.pdf.

possibility of commercial exploitation of the Arctic's resources have also become inevitable. Additionally, the relative political stability of the region, increasing global energy demand and low energy supply alternatives, and most importantly, high energy prices are the factors that make the Arctic even more attractive.[30]

On the other hand, the first bad news is that the source composition of the Arctic consists mainly of natural gas and liquid natural gas, which is much more expensive to transport over long distances than oil. The second is that oil and gas resources in the Arctic are much more expensive, risky, and will take a longer time to develop than similar deposits found elsewhere in the world. Third, sovereignty claims in the region conflict with economic sovereignty claims related to oil and natural gas resources, there is a risk that the development of these resources will be disrupted or delayed for a considerable time. And fourth, protecting the Arctic natural environment is too costly. It is claimed that the high cost of developing oil and natural gas resources in the Arctic and the long delivery times of these resources would, on the one hand, mitigate the severity of sovereignty claims between the states of the region, and on the other hand, reduce the financial appetite for developing these resources.[31]

However, some analysts claim that several factors have brought the Arctic back on the political agenda today. Such as shrinking ice sheets that facilitate access to resources and potential shipping routes, and the approval of the United Nations Convention on the Law of the Sea (UNCLOS), which allows countries to promote their sovereign rights to collect resources in the seas thanks to technological advances that make it easier to extract resources from the deep seas. This can transform the Arctic geopolitics from military security concerns to the division of natural resources and bring to the forefront the question of determining the limits of the authority to exercise sovereign rights over resources.[32]

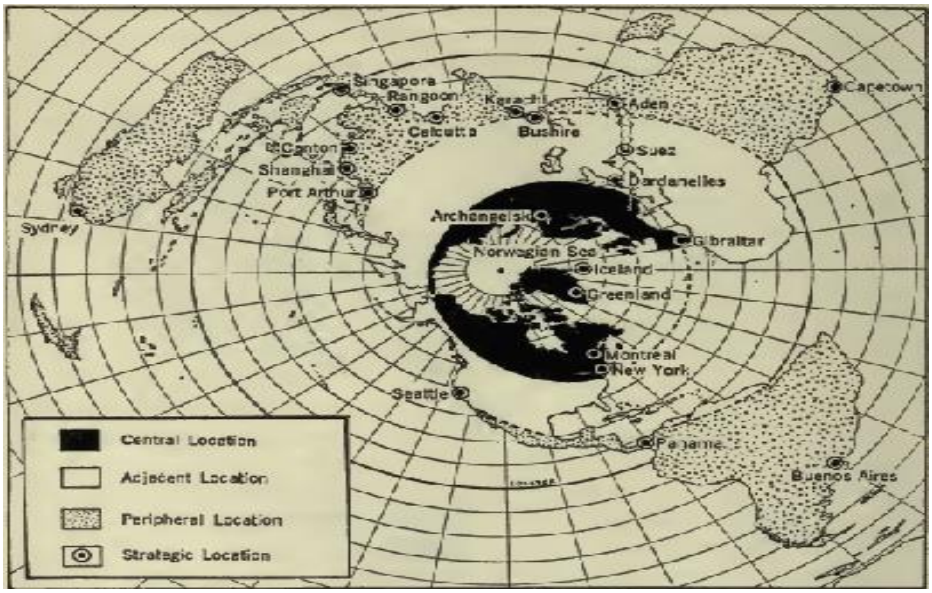
3.2. The Importance of the Arctic in the Framework of the Air Power Theory

In his work called *Human Geography in the Air Age*, which he penned in 1942, George T. Renner, a geography professor, first pointed out that the Arctic is the center of the world map. He stated that the small circle that exists when it is slightly away from the pole's perimeter

[30] Dadwal, "Arctic: The Next Great Game in Energy Geopolitics?," 814.
[31] Chapman, *Geopolitics: A Guide to the Issues*, 56-57.
[32] Jeppe Strandsbjerg, "Cartography and Geopolitics in the Arctic Region," *DIIS Working Paper*, no. 20 (2010): 8.

is the Arctic Circle, and the larger circle that is farther away is the Tropic of Cancer. He pointed out that even further away, the equator forms a larger circle, and outside of this, there is a larger circle, the Tropic of Capricorn. He noted that the outer edge of the map is the South Pole.[33] Stating that this new world is not hemispheric, but monospheric, Renner claimed that most of the world land in question is clustered around the "World Mediterranean". Renner described this small but crucial central water body as the "Arctic Ocean". He suggested that the Earth indeed had a polar-centered appearance, noting that the Earth radiates outwards from this global basin like the points of a star.[34]

Figure 2[35]



Renner claimed that when the world map was carefully examined, some points with a completely different strategic position could be seen, and described Iceland and Greenland as places close to the center of the map. He also suggested that these areas, which are currently undeveloped, have the potential to become the focus of air traffic between Eurasia and America as we enter the "Air Age". He noted at this point that the locations of these two regions are potentially highly strategic.[36]

[33] George T. Renner, *Human Geography in the Air Age* (New York: The Macmillan Company, 1942), 21.
[34] Renner, *Human Geography in the Air Age*, 22.
[35] Renner, *Human Geography in the Air Age*, 42.
[36] Renner, *Human Geography in the Air Age*, 42

Also, Renner noted that the Arctic ice sheet is no longer a barren and impenetrable zone for aviators, who see it as a huge available landing area on the main highway between Eurasia and America. He stated that even the most distant tribes or nations would have the opportunity to contact the flow of world events through aircraft.[37]

He pointed out that, by looking further away, the opposite coast of the Arctic Ocean to the North could be seen as a New World Mediterranean, which is North America. And looking westward, he stated, the Atlantic Ocean has turned into a North Atlantic Sea, whose southern and northern ends are almost closed by the angle of the Brazilian Bulge and the Icelandic Peninsula, which stretches eastward from Greenland. At this point, he noted that traveling along the Atlantic Sea or the Pole Mediterranean today is no more difficult than traveling along the European Mediterranean in 1914.[38]

Renner stated that Eurasia (i.e., Europe and Asia) is indicated as a giant semicircle curved around the Arctic Mediterranean on any Arctic-centered map, noting Greenland and Iceland, which have two bulges with North America, almost complete the circle. Furthermore, like other geopoliticians, he also claimed that the center of gravity of the world lies in large areas of Russia, Siberia, Turkestan, and Western China. He asserted that these lands constituted an Earth center, or Heartland, that could barely be approached from land and inaccessible by ship, but was at a central position in an air-focused world. He noted that whoever holds this region would also take a dominant position in world affairs in the future. He claimed that Western Europe, Mediterranean Europe, the Near East, India, Southeast Asia, and the East form a "fringe region" of absolutely secondary importance concerning this central core.[39]

Renner suggested that a second, but smaller, center along the Arctic Mediterranean covered much of Canada and the U.S. He pointed out that this center has a fringe region consisting of Alaska, British Columbia, the American Far West, the Gulf, and the Atlantic Coast States, Maritime Canada, and Newfoundland. Thus, he claimed that this new geographical situation depicted a central area embracing two central regions connected by a polar Mediterranean. Within this general regional framework, Renner pointed out that there are other areas with strategic positions, and also noted that the positional strategy which should be taken

[37] Renner, *Human Geography in the Air Age*, 147.
[38] Renner, *Human Geography in the Air Age*, 151-152.
[39] Renner, *Human Geography in the Air Age*, 152.

into account is one measured based on airlines. From this point of view, he suggested that Greenland suddenly came to the fore as a world focal point, while the English Channel, North Sea, and American coastal cities stayed in the background.[40]

Stating that the Air Age's influence was already felt in all these strategic locations, Renner claimed that the second group, that is, the commercial-military corridors, lost most of their military and maritime values during the Second World War. He pointed out that aircraft brought six highly strategic intermediate zones into the forefront. And two of them are directly related to the Arctic.[41] The first one is the Norwegian Sea-Iceland-Greenland-Labrador corridor connecting Europe to North America; the second is the Chuckchen Peninsula-Bering Sea-Alaska corridor connecting East Asia and North America. Renner claimed that the modern-day war and commercial competition strategy could be explained within the framework of air control over these corridors.[42]

At this point, Renner suggested that when the Air Age fully developed, trade from Eurasia to America, and the opposite direction, would most likely pass through Greenland, the Franklin Archipelago, and the Arctic Sea. When that day came, he claimed that wars were likely to be waged for possession of the Arctic Mediterranean, whose borders he had drawn, largely coinciding with the Arctic region.[43]

In fact, Douhet, one of the first theorists of the understanding of air power, stressed, albeit indirectly, the importance of the Arctic region, pointing to the element of allowing warring forces to access the enemy in the shortest possible way, which he introduced it as one of the superior aspects of air power.[44] Besides, Spykman, creator of the theory of Rimland, pointed out that the map of the Arctic shows how close the continents in the North are to each other, and the continents in the south are conversely far away. Spykman noted that the geographically close relationship between North America and Eurasia, stemming from the proximity of continents, is dynamic and forms world policy's main parameters. At this point,

[40] Renner, *Human Geography in the Air Age*, 152-153.
[41] The rest of the strategic lines are as follows, the third is the American "Mediterranean" connecting the North and South America; the fourth is the Dakar Strait connecting Africa and South America; the fifth is the Indo-Malayan "Mediterranean" connecting Asia and Australia; and the sixth is the Mediterranean-Near East corridor connecting Europe, Africa, and South Asia.
[42] Renner, *Human Geography in the Air Age*, 154.
[43] Renner, *Human Geography in the Air Age*, 206-207.
[44] Douhet, *The Command of The Air*, 7-10.

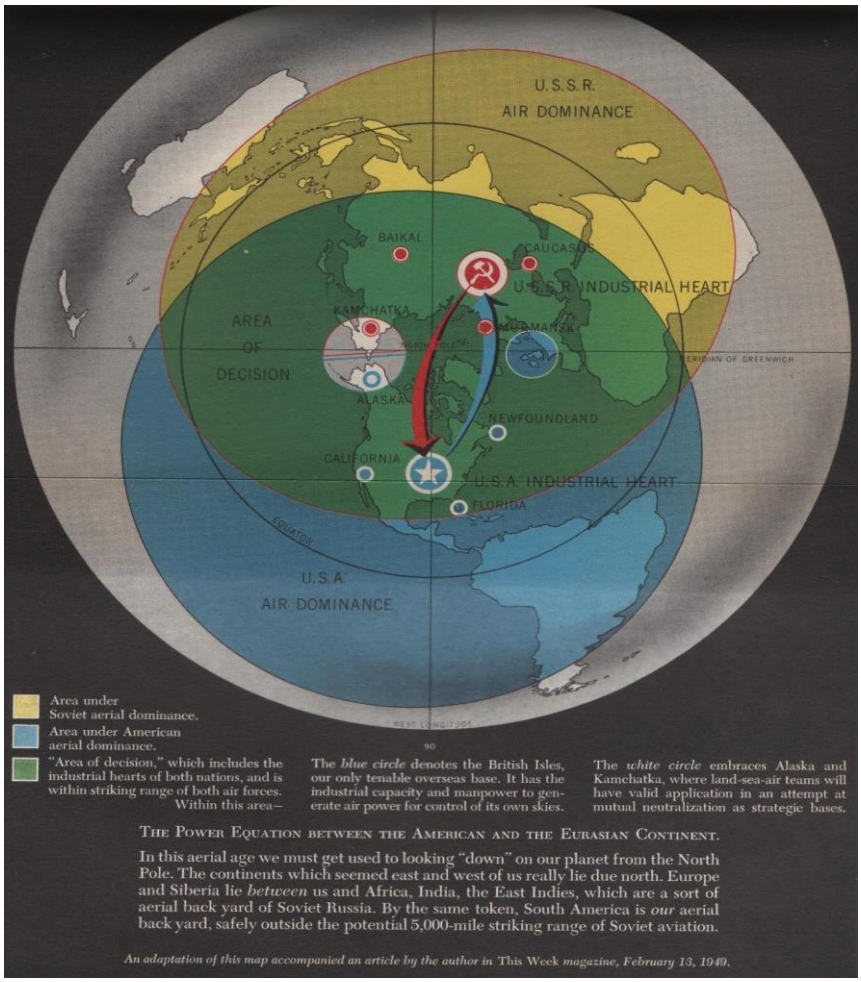
he asserted that the main message on this polar map is the organic relationship between North America and Eurasia. He tried to state that we believe that the Pacific Ocean plays a great role in separating East Asia from the west coast of North America. However, he claimed that the polar route showed that this distance was only a matter of flying to Alaska in the North, from there to the south, down along the Far East of Russia, and from there to the Temperate Zone of Japan, Korea, and China. At this point, Spykman stated that the Arctic, especially if it melts, would give new and vital meaning to naval power and especially air power in the coming decades.[45]

Considered the mastermind of the theory of air power, Seversky stated that as a result of the perception of geography, Americans were pushed to think that Asia was located in the west and Europe was situated in the east. Nevertheless, during the period he called the "Air Age", he pointed out that it was necessary to look at the world the Arctic. And from this point of view, he also noted that compass directions changed dramatically. He claimed that this new "polar projection" replaced the older Mercator projection.[46] At this point, he stated that this new "polar projection" should be made standard teaching in schools in order to remove outdated geographical concepts from students' minds. He also claimed that defense and security plans, shaped by old geographical perceptions, had become entirely obsolete.[47]

Seversky noted that the continents situated in our east and west appear to extend northward, mainly when viewed from the Arctic. He noted that Europe and Siberia are located between America and Africa, Sudan, India, Indochina, East India, and Northern Australia. He argued that if it fell into the hands of the enemy, this dual continent was a barrier that prevented U.S. aerial access to areas that were a kind of aerial backyard of Soviet Russia, the dominant air power of Eurasia.[48]

[45] Kaplan, *The Revenge of Geography*, 16-17; Lambeth, "Air power, Space Power and Geography", 101.
[46] The most important map projection system for sea and air navigation is the Mercator Projection Coordinate System. The actual name of the Mercator, the finder of this system, is Gerhard Kramer. The first map bearing his own name and known today was made in 1538. The most important aspect of the Mercator map from a maritime point of view is that it is the basis of today's naval maps. So it is the first map to represent meridians with parallel and evenly spaced lines and parallel lines whose distances between them increase as the latitude circles move towards the poles. Please see İslam Erokan, "Merkator Projeksiyonu," *Harita Dergisi* 26, no. 61 (1960): 5, https://www.harita.gov.tr/images/dergi/makaleler/70fcb77e6349f44.pdf.
[47] Seversky, Air Power*: Key to Survival*, 307.
[48] Seversky, Air Power*: Key to Survival*, 307.

Figure 3[49]



Stating that the above map graphically represents the balance of power between America and Eurasian continents, Seversky noted that this area corresponds to a strike range of 5,000 miles. He noted that access to North America is fixed between four edge regions, identifying these as Alaska, Newfoundland, California, and Florida, and stating that this area corresponds almost to a square. According to Seversky, the global area dominated by the U.S. Air Force, with a strike radius of five thousand miles moving from these outposts, forms a wide circle (the area painted in blue). He pointed out that the area of the USSR, whose borders were drawn with edge regions Murmansk, the Caucasus, Kamachatya, and Baikal, was slightly longer than the U.S. Pointing out that the field, which was equivalent to the area in which the existing Soviet air forces operating moving from the neighborhood, could be represented by an ellipse (yellow-painted area), Seversky suggested that theoretically, the Soviets could destroy

[49] Seversky, Air Power*: Key to Survival*, 312.

any target in this area. On the other hand, Seversky claimed that the green area where the U.S. circle and the Russian ellipse overlap, which he described as an unmanned zone as airspace, is where the struggle for dominance of the entire air ocean would put in place. Besides, since the industrially important regions of the U.S. and Soviets were also located in this area, Seversky claimed that this region would be a battlefield that he called a "Decision Area", noting that the Air Forces of both nations were also located in the access area.[50]

Bringing significant innovations to the geopolitical focus and moving the axis field to the Arctic region where the airways intersect, Seversky put forward the determinant of air superiority to be achieved in the "Decision Area", where both nation's domination zones overlapped.[51] At this point, Seversky claimed that polar projection should be used to improve global U.S. Air Control, which extends to a 6,000-mile attack radius and a 3,000-mile defense radius, controlled from the heartland, which he considered an impregnable Superfortress.[52]

During the Cold War, the Arctic region was an area of military rivalry between the U.S. and the Soviet Union, in which nuclear-powered submarines, long-range bomber aircraft, and tactical fighter aircraft were deployed. Following the end of the Cold War and the collapse of the Soviet Union in December 1991, the collapse of many components of the Russian military structure significantly reduced this competition, resulting in less emphasis on the Arctic region in post-Cold War U.S. military planning.[53]

Since the end of the Cold War, the Arctic has been mostly characterized as a cooperation zone consisting of eight states: Canada, Denmark (via Greenland), Finland, Iceland, Norway, Sweden, the Russian Federation, and the U.S. However, the potential for possible economic gains brought by newly available Arctic resources could threaten peace in the region, causing a war for Arctic hegemony.[54]

Since 2008, Russia has adopted a series of strategy documents outlining plans that call for bolstering the country's military capabilities in the Arctic. Russia established a new Arctic

[50] Seversky, Air Power*: Key to Survival*, 308.
[51] Ahmet Davutoğlu, *Stratejik Derinlik*, 95th. edition (İstanbul: Küre Yayınları, 2014), 107.
[52] Chapman, *Geopolitics: A Guide to the Issues*, 22-23.
[53] O'Rourke et al., "Changes in the Arctic: Background and Issues for Congress," 36.
[54] Christopher Tremoglie, "Arctic Geopolitics Reconsidered: Pathways to Conflict and Cooperation," *CUREJ: College Undergraduate Research Electronic Journal, University of Pennsylvania*, (June 2020): 3, https://repository.upenn.edu/curej/250.

Joint Strategic Command in Severomorsk (home to the Northern Fleet of the Russian Navy), reactivated and modernized its Arctic military bases, which were decommissioned at the end of the Cold War, assigned new forces to these bases, and increased its exercises and training operations in the Arctic region.[55] In addition, Russian islands such as Novaya Zemlya, Franz Josef Land, or Cape Schmidt are home to air defense forces groups, which have been merged under the Joint Strategic Command (the Joint Strategic Command) since 2014. Russia's air capabilities have been significantly strengthened by the opening of 14 new military airports, as well as the development of radar and ground guidance systems. Russia has also reactivated 13 military airports across the Arctic and conducted amphibious landing operations through paratrooper exercises along the Northern Sea Route.[56]

In recent years, the return of great power competition and the significant increase in Russian military capabilities and operations in the Arctic have caused concern among the U.S. authorities. Therefore, the Arctic has once again become a region of military tension and competition, and U.S. military planning has begun to focus again on the Arctic region.[57]

In this context, in June 2019, the Department of Defense submitted its Arctic Strategy Report to Congress. This strategy was an update of the 2016 Department of Defense Arctic Strategy. Considering Alaska's proximity to Russia, it can be stated that the region occupies an important place in U.S national security and foreign policy. The 2019 report outlines the Department of Defense's strategic approach to protecting U.S. national security interests in the Arctic in an age of strategic competition.[58] In addition to the Ministry of Defense as a whole, the Navy, Air Force, and Coast Guard have also published strategy documents that focus on the Arctic region in recent years. Besides, all mentioned U.S. military force groups, in cooperation with NATO allies, have been carrying out an increasing number of military exercises and training operations[59] in the region.[60] It is very remarkable that the NATO exercise called *Trident*

[55] O'Rourke et al., "Changes in the Arctic: Background and Issues for Congress," 36.
[56] Connolly, "NATO and Security in the Arctic."
[57] O'Rourke et al., "Changes in the Arctic: Background and Issues for Congress," 35-36.
[58] Tremoglie, "Arctic Geopolitics Reconsidered: Pathways to Conflict and Cooperation," 14-15.
[59] The main reasons for these operations are listed as; preparing U.S. forces for operational conditions in the region, restoring Arctic-specific combat skills lost mainly in the post-Cold War era, improving interoperability with allied forces in the region, identifying military capability shortcomings in the Arctic region, testing its equipment performance in Arctic conditions, and sending messages of determination to Russia regarding the Arctic region. Please see O'Rourke et al., "Changes in the Arctic: Background and Issues for Congress," 37.
[60] O'Rourke et al., "Changes in the Arctic: Background and Issues for Congress," 37.

Junction 18, which took place in Norway and adjacent waters of the Baltic Norwegian Seas between October 25 and November 7, 2018, with the participation of all 29 NATO members, as well as Sweden and Finland. This exercise, described as the largest NATO exercise since the Cold War, had a strong Arctic orientation, including the first deployment of a U.S. Navy aircraft carrier in the Arctic Circle since 1991.[61]

Within the U.S. military, the Air Force is the unit with the most extensive presence in the Arctic region, with its assets in both Alaska and Greenland. As the Arctic region's climate has changed, new routes for transport have been opened, and new resources have been discovered. This has created new opportunities on one hand but also created new security challenges on the other. To utilize these opportunities and overcome the challenges, the U.S. Air Force seems to be focusing on preparations for its operations in the Arctic region. Alaska's Air National Guard and Air Force Reserve have decided to increase their special exercises and training to prepare for air and ground missions in the Arctic region. Pointing out that the most critical mission performed in the region is the missile warning system, the U.S. officials stated that the Arctic is the front line of this mission. It is also noted that this mission was carried out by field experts assigned to Thule Air Base in Thule,[62] Greenland in the North of the Arctic region, and similar missions were conducted at Clear Air Force Station in Alaska.[63]

As can be seen, even the collapse of the bipolar structure with the end of the Cold War has not reduced global competition over the Arctic. The region has become more critical today, primarily because of the opportunities and threats posed by factors such as developing

[61] O'Rourke et al., "Changes in the Arctic: Background and Issues for Congress," 38.
[62] Recent missile threats to the U.S. have the military looking up to its northernmost installation, Thule Air Base, Greenland. It is there that the Air Force monitors the skies for missiles from its Arctic location strategically positioned at the halfway point between Washington, D.C., and Moscow. Thule, pronounced "Two Lee", means in Latin for the northernmost part of the inhabitable world. Thule Air Base is located in Greenland's northwestern corner, in a coastal valley 700 miles north of the Arctic Circle and 950 miles south of the North Pole. Throughout this time, the Army Corps, under extreme arctic weather conditions, has helped the base fulfill this mission by constructing structures including dormitories, an aircraft runway, taxiways and aprons, and even a medical facility. Now the Army Corps is consolidating and modernizing the base. In the early 1950s, the base's main mission was to be an aircraft refueling stop. It was home to 10,000 Airmen, and there were buildings spread throughout the entire base. During the Cold War Era, the base's mission changed; it is now performing missile warning and space surveillance for the United States. Please see JoAnne Castagna, "Things are looking up at Arctic Air Base," *U.S. Air Force*, 2018, https://www.af.mil/News/Article-Display/Article/1417030/things-are-looking-up-at-arctic-air-base/.
[63] C. Todd Lopez, "Air Force Reveals Cold Facts on New Arctic Strategy," *U.S. Dept. Of Defence*, 2020, https://www.defense.gov/Explore/News/Article/Article/2281961/air-force-reveals-cold-facts-on-new-arctic-strategy/.

technology and melting of the ice mass, placing it in the focus of global competition. Thus, the perspective within the air power theory framework, which theoretically brings the region to the center of the Earth, is also vital from the point of view of international politics.

4. Conclusion

Situated in the northernmost part of the world, the Arctic has several advantages and disadvantages stemming from its geographical position. The fact that it is covered with a vast ice mass has historically limited its accessibility and therefore led to it being outside the international power struggle. This region became one of the arenas of the bipolar power struggle, especially in the Cold War period, due to its geopolitical importance, as well as developing technological possibilities, and has begun to show up in the global power struggle. The melting of the ice sheets, triggered by accelerating global warming, can also have a significant impact in this regard. As the end of the Cold War resulted in the collapse of one of the poles, the competition had also significantly diminished over the region.

It can be concluded that one reason why the Arctic remains in the background is long-standing established geographical presumptions which cause us to perceive the world mainly in an east-west direction and thus led international policy to evaluate world affairs with such a geographical perception. This, on the other hand, has caused the Arctic, located at the northern end of the world, to stay at the periphery of international politics. This point of view is also reflected mainly in geopolitical theories, and usually, theories such as Land Power, Rimland, and Sea Power, point to the Eurasian continent and its surrounding areas as the center of the world, complying with the dominant east-west perception.

However, the Air Power Theory has largely altered this perception, suggesting a way of looking at the world from the northernmost, that is, from the direction of the Arctic Circle in which the Arctic lies. This point of view has placed the region, whose energy resources have become accessible because of the meltdown caused by global warming and new transport corridors have been opened, at the heart of the world, in parallel with the increase in its weight in international politics. The increasing importance of the region due to the reasons mentioned above, combined with the Theory of Air Power's vision to view the world from the northernmost, will make the region geographically sit at the center of the world. The region's rising geographical importance with its virgin resources and new transportation routes are likely

to trigger the global geopolitical struggle for the region's control. It is not difficult to guess that the most important actors of this struggle will be the U.S. and Russia, which are in the struggle for global hegemony all over the world and at the same time neighboring the region, as well as China, which wants to rivet its increasing economic power with the political one. In short, according to the Theory of Air Power, the Heartland of the world is the Arctic, and this is the region that a state seeking to be a world power must unquestionably hold or control.

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