COMMENTARY

Climate Change and the Great Power Rivalry in the Arctic

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ABSTRACT *The world politics of the 2020s seems to consist of two realities: People are concerned about an ecological catastrophe, as pollution kills millions and climate change threatens societies. The focus of this article is to discuss climate change, and state politics in the Arctic in the context of the two realities. Behind this is the assumption that climate change mitigation is a challenge to state politics and national security. The commentary assumes that, although in world politics, there is a new (East-West) great power rivalry with its related conflicts, no armed conflicts appear in the Arctic, but environmental degradation and rapid climate change still threaten the people. The study firstly analyses how environmental issues came onto the political agenda of States, in particular, that of the Arctic states; secondly, it discusses huge investment packages and great power rivalry as substitutes for climate change mitigation, revealing the political inability of states; thirdly, it examines the Arctic from the point of view of functional cooperation on environmental protection, and that on science; and finally, it concludes what has possibly gone wrong in state politics related to the environment, and could be taken as the biggest challenge.*

Keywords: Climate Change, Environment, Great Power Rivalry, Functional Cooperation, The Arctic

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Since the early 21st century, the Modern Project has been replaced by the Global Age, where the present is 'reality in flux,' as globalization, including the globalized Arctic, "offers both economic competition and cosmopolitanism as an alternative to the historical construction of the American hyphenated identity."[1] As a part of that reality, the main message of the 2021 UN Climate Change Report,[2] as an awakening call, reflects the crossing of several 'planetary boundaries.' A global ecological catastrophe –pollution, loss of biodiversity, climate change, and related impacts combined– puts the existence of human life in danger. Buzan and Hansen foresaw and warned that global warming and the possibility of a rampant and virulent epidemic are "the two most likely environmental wild cards."[3] Indeed, in addition to an ecological catastrophe, the world was hit by the COVID-19 pandemic as an invisible enemy causing terror among citizens and threatening our modern societies. The pandemic is far from over, as there are still infections with new waves and mutations, deaths, as well as slowness in distributing vaccinations globally.

Despite this, and that there is scientific evidence and advanced technology to demonstrate environmental degradation, states, in particular, great powers –i.e., their leaders, elites, and governments– (in G7 Summits), on the one hand, concentrate on huge infrastructure investments (e.g., the U.S. Global Infra Plan "Build Back Better World," the EU's investment package for economic recovering, infrastructure and new environmental technology) as a part of the COVID-19 exit strategy. On the other hand, they are involved in great power rivalry, trade wars, bloc building (e.g., NATO enlargement, AUKUS), as well as creating new conflicts and wars (e.g., the Ukrainian war) instead of trying to prevent them.

The world politics of the 2020s seems to consist of two realities: People are concerned about an ecological catastrophe –pollution killing millions annually and climate change threatening societies– in contrast, states and their elites concentrate on other issues as substitutes for environmental protection and climate change mitigation. They both are global by nature and affect the Arctic region, too. When talking about their interrelations and reflections on Arctic security and geopolitics, it is needed holistically to analyze the state of world politics, as the Arctic is globalized, and the globalized Arctic has worldwide implications.[4]

This commentary assumes that, although in world politics there is a new (East-West) great power rivalry and the related conflicts, there are not, yet, striking changes in Arctic security: Neither armed conflict nor war appears, nor changes concerning environmental degradation, like pollution, loss of biodiversity, rapid climate change still affect the region and threaten its peoples. Alas, there are changes in Arctic geopolitics as first-time pan-Arctic cooperation, in particular in the context of the Arctic Council, has been temporar-

ily 'paused' by seven Arctic states, except Russia, which has the Council's chairmanship (in 2021-2023). Also, the traffic on the Northern Sea Route, along the Russian Arctic coast, to transport LNG from the Yamal Peninsula –one of the main economic activities of the Arctic– is mostly between the Russian Arctic and East Asia, less so between Russia and Europe or North America. These changes are becoming the biggest challenges to the high geopolitical stability of and pan-Arctic cooperation in the region.

The focus of this commentary is to discuss climate change (mitigation), representing environmental issues, and state politics in the Arctic, in particular in the context of the two realities of world politics. The commentary does not speculate what future security threats and risks might develop in the region due to the new (East-West) great power rivalry, as they are hypothetical. Behind this is the assumption that climate change has been heavily politicized in world politics, in particular in the Arctic context, and that climate change mitigation is a challenge to state politics and national security, including those of great powers. States are failing in the most important task to secure the everyday life of their citizens, in large part due to the narrow national, unilateral, competitive security policies of the military.[5]

All this indicates, even manifests, that there is an urgent need to go beyond the unified state system and to do globally what earlier was done nationally, based on the idea of 'Functionalism.'[6] The Arctic region, with rich natural resources and geopolitical stability based on constructive cooperation (e.g., Reykjavik Declaration 2021),[7] is one of the best cases to study the divergence of the two realities. The article starts by analyzing how environmental issues came onto the political agenda of states, in particular, that of the Arctic states. Secondly, it discusses huge investment packages and great power rivalry as substitutes for climate change mitigation, revealing the political inability to face new security challenges. Thirdly, the article examines the Arctic from the point of view of functional cooperation in environmental protection and that of science. Finally, it briefly concludes by considering what has possibly gone wrong in state politics related to the environment.

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Environment and Climate in the Political Agenda of States

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politics.' In the 1960s, people and civil societies became concerned about the state of the environment –air, land, water, fauna, and flora– due to pollution (radioactivity and distribution of man-made chemical compounds) and 'environmental awakening' as a peoples' movement started.[8] The first UN Conference on the Human Environment (in 1972 in Stockholm) gathered state representatives for the first time to discuss the environment; interestingly, global warming was not explicitly discussed at the conference.[9] It was followed by several UN reports combining the environment and development with war and peace. On the global agenda, a concern for atmospheric pollution was growing "as scientific evidence mounted on the scope and consequences of acid rain, … and a trend toward global warming,"[10] which led to negotiations to limit climate change by addressing acid rain such as the Arctic haze. Concerning the Arctic ecosystem, it was "anthropogenic pollutants originating in the heavily industrialized, mid-latitude regions of Eurasia which are transported in the Arctic region,[11] in particular radioactive leakages (from Chornobyl and nuclear submarine accidents in the northern seas) that awoke protests from Arctic Indigenous peoples and other local residents. 'Nuclear safety' became the trigger for an 'environment awakening' and related movements in the European Arctic and North Atlantic area.[12] This encouraged researchers to study the impacts of human activities on the environment and pushed governments to act, and soon environmental issues came on the political agenda of the Arctic states.[13] Already, before the signing of the Arctic Environmental Protection Strategy (AEPS) by the eight Arctic states (in 1991) and the Arctic military environmental cooperation between Norway, Russia, and the U.S. (in 1996), the Polar Bear Treaty, to protect polar bears and their habitats, was agreed (in 1973) by the coastal states of the Arctic Ocean. As a global phenomenon, global warming was discovered scientifically, though secretly, by the two Arctic major (nuclear weapon) powers circa 70 years ago: "climate change became a U.S. national security concern even before the Cold War became hot."[14] The Soviet scientists concluded in the 1970s that "future warming will probably reduce precipitation over some regions with insufficient moisture in the middle latitudes and that the higher temperature will diminish the area of polar sea ice."[15] At the end of the Cold War, the environmental awakening was strengthened by better consciousness and by larger activities to tackle environmental degradation. There was enthusiasm toward 'greening' of the world, and environmental issues were

A map of the states found within the Artic circle.

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taken onto states' political agendas as fields of 'low' politics –here, the UN Human Development Programme (1994) launched the concept of 'Human security,' which was an important step.[16] There was also skepticism about states' ability to make paradigm shifts; for example, the former Soviet foreign minister Shevardnadze doubted whether states were able to manage global environmental issues.[17] Environmental issues with growing concern were now on the political agenda of states, and due to global warming, there were larger activities, more meetings, and declarations with new goals. Climate change became interpreted as a relevant factor of security by the UN Security Council in 2007.[18] The Paris Agreement was negotiated and adopted by 196 States under the auspices of the United Nations Framework Convention on Climate Change (UNFCCC) at COP21 (in December 2015) and entered into force a year later. According to the agreement, which is constantly referred to by scholars and scientists, policy-makers, and media, the signatories agreed to "holding the increase in the global average temperature to well below 2 degrees C above pre-industrial levels" even to limit the increase to 1.5°C, and that greenhouse gas emission neutrality (net-zero) should be achieved globally by 2050.[19] Climate change is recognized as affecting the financial system through "transition risks" from dirty sectors to cleaner ones, by natural hazards, shortages of energy and supplies, and exposure to wider

economic damage. Consequently, the shift in energy production markets from conventional energy sources to renewable ones is growing fast. Despite all this, there are hindrances and obstacles, such as shortages in supply chains, environmental impacts of mining the needed minerals, as well as lack of investment. The situation is becoming worse due to floods, droughts, wildfires, extreme weather, pandemic, and other related and cumulative uncertainties combined. This is particularly why most of the signatories hesitate on most important actions: to tackle climate change, if they really try to reach carbon neutrality:, instead, they maintain the fossil-fuel economy but also define substitutes. Here the Arctic will face severe circumstances by playing as an environmental linchpin and workshop for multidisciplinary research, as well as its people as frontline victims of climate change.

All in all, environmental issues have been transferred from a field of 'low politics' onto the political agenda of states as humankind lives in the middle of multiple global crises. The environment –the material basis for human existence which is put into danger due to human activities– has become de facto the most important field of 'high politics.'[20] Logically thinking, the ecological catastrophe could and should be an even bigger reason to not only study but to find solutions to the climate crisis. The next step could be that states apply 'comprehensive security'[21] as the basic principle to define national security and interpret climate change mitigation together with sustainability –globally and locally– as the main factors of national security. As well as to recognize people and societies as owners of their daily security.

Great Power Rivalry as Substitute for Climate Change Mitigation

The other reality of world politics is materialized by huge infrastructure investment packages, which are said to be allocated to 'New Green Deal' projects for climate change mitigation by the U.S.-led coalition. They are also meant to challenge China's "One Belt One Road" project, an important part of the U.S.-Sino great power rivalry, as well as a part of the East-West conflict provoked by the eastern enlargement of NATO, Russia's invasion to Ukraine and the related arms race, not to forget continuing warfare in the Middle East, Middle Asia, and Sahelian Africa.

Underlying these issues are, understandingly, the divergence of opinions on ideology and politics/political system, economics, governance, and the related disputes, as well as state-centric politics, military and economic power, alliances/blocs, as well as threats, and enemy profiles. In addition, there is a lack of interest to negotiate on arms control and disarmament agreements, and the procedure of agreeing to disagree by rivals dates from the Cold War. As a reflection of this, mainstream IR/political sciences textbooks concentrate on state politics and discuss surprisingly little about environmental issues

and climate change.[22] Furthermore, there are a few articles on ecological modernization, which could be considered as industrial restructuring leading to an environmentally sound economy and the development of institutional capacity for an effective environmental policy.[23] On the other hand, climate change mitigation is a challenge to state politics and national security, as "the fragmented system of unified states has become a fundamental obstacle to the effective and equitable management of… the global environment in particular."[24]

Before the pandemic exit strategy, the ambitious goals of the Paris Agreement were taken as a given mission by numerous governmental statements. State leaders pledged, before and at the COP26 Summit in November 2021, to cut greenhouse-gas emissions dramatically and reach net-zero in the future (e.g., by 2030/2035/2050/2070), promising "to push those technologies as hard as possible –both to battle rising temperatures and… advance their countries' role in a green economy,"[25] as well as to end deforestation by 2030. It is not, however, obvious if the parties will keep the pledges, agree to cooperate on tackling climate change due to the hegemony competition, or whether the current global crisis is connected to rapid global warming. Already at the final end of the COP26 negotiations, governmental delegations of the parties did not promise to 'phase out' coal, and rich countries also fell short of their pledge to provide $100 billion a year in climate finance to developing nations. Furthermore, as 'vaccination nationalism' revealed, the G7 failed to act fast to inoculate people in developing countries against the pandemic.

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However, despite environmental issues coming onto the political agenda of states, and international agreements on the global environment, such as Paris 2015, the situation does not look promising from the point of view of the Arctic ecosystem, either to mean environmental protection, maintenance of biodiversity, or climate change mitigation. Despite multiply global crises, the Arctic states, as well as great powers, have neither applied a more holistic understanding of the environmental point of view in their politics nor coordinated international programs and activities for more strict environmental regulations on the utilization of Arctic resources. This kind of hesitation is also seen by the Arctic States, not due to the recent great power rivalry but due to the Arctic ambivalence or paradox between climate change mitigation and economic activities.

When taking into consideration the main aim of the unified state system,

This focus on international (functional) cooperation is also seen in the priorities of recent national policies/ strategies of the Arctic States and the Observer States of the Arctic Council

it is not surprising that states are failing in their most important task. This is due to, among others, the Modern Project, which depended on an expansion of a state using colonialism, capitalism, imperialism, violence, and warfare, as well as maintaining economic growth and promoting science and technology based on faith in development and progress.[26] It also included states' responsibility to secure the everyday life of citizens, and maintain the welfare state, less so to protect nature and the environment. This meant that states were, first of all, in charge of national (universal, competitive, military) security and national borders, as the core of state sovereignty. This is supported by the security-political elite (of each state), who has adopted an idea of superior, even exclusive, expertise, quality, and the consequent authority on national defense and security policy; most of them have been trained in special courses for elites run by military organizations. Though less meaningful, this is also supported by the mainstream IR theories, which emphasize a unified state as the most important international actor and interpret the nature of the international system as determined to be anarchy.[27]

Alas, in this situation of world politics, it would make sense to (re) think about the importance of the environment, the value of mutually beneficial functional cooperation on environmental protection, and that on science. Here the Arctic has the potential to play a special role.

The Arctic from the Point of View of Functional Cooperation

In humankind's history, there are a few competing discourses and practices on the development of societies: according to the world system analysis, the globe is becoming one social system due to integration and globalization. Alternative development theories value peripheries with a meaningful future, such as the Arctic region, by having posited principal orientations of self-reliance, eco-development, and basic needs, such as cooperation on environmental issues.[28] Indeed, despite which discourse or practice to choose, for people, 'cooperation' is an immaterial basis for human existence, and among different practices of cooperation, 'functional cooperation' is the most efficient way. To cooperate in the fields of low politics, without a need to be integrated deeper or build a bloc, and at the same time to build confidence between former rivals.[29] Furthermore, being narrowed and with flexibility is a way to (re)define common interests and interpret them as mutually beneficial.[30]

Climate activists participate in a protest action in Glasgow on November 12, 2021, during the COP26 meeting.

BEN STANSALL / AFP via Getty Images

The efficiency of functional (international) cooperation has been shown in a few cases in the Arctic context. Firstly, cooperation on environmental protection (e.g., AEPS), and that science (e.g., Agreement on Arctic scientific cooperation in 2018), have been the most important field when facing global existential problems. Secondly, it is a practical means for building trust between the former rivals of the Cold War (the Soviet Union and the U.S.), and confidence-building measures were important in nuclear arms control and disarmament between these two major nuclear weapons powers. Thirdly, as a concrete outcome, there is an exceptional nature of high stability of Arctic geopolitics, which was the ultimate aim of the Arctic states, including the Russian Federation (originally the Soviet Union) and the U.S., to cooperate on environmental protection, not protection per se. This is indicated and revealed by increased economic activities in the region, which have been accelerated by the Arctic states because of the rapidly advanced climate change, in particular Norway and Russia, and the Arctic Council observer states, including China.

This focus on international (functional) cooperation is also seen in the priorities of recent national policies/strategies of the Arctic States and the Observer States of the Arctic Council. A holistic Arctic policies analysis,[31] based on 56 coded policy documents (from 1998 to 2019), examined and analyzed policy priorities using 14 indicators, including international cooperation, environmental protection, pollution, and climate change. The most-quoted indicators of the Arctic states' policies are governance,

environmental protection (including pollution and climate change), economy, and international cooperation. Economic activities and trade are explicitly emphasized and prioritized, although fields are fragmented, and transportation and shipping, mining, and tourism are emphasized. A striking similarity is that climate change is defined as the major research driver, while pollution is rarely mentioned. Interestingly, there are no big differences between Russia and the U.S. and the rest of the Arctic states. Although research is emphasized, education is neglected and mostly as attainment for economic reasons. Correspondingly, the most-quoted indicators of the observer states (France, Germany, Italy, Japan, Netherlands, People's Republic of China (PRC), Republic of Korea (ROK), Spain, and United Kingdom had adopted an Arctic policy by then) are science and education, international cooperation, economy, environmental protection (including pollution and climate change). International cooperation is emphasized by all, except the Netherlands; Environmental protection by France, Germany, Italy, PRC, and the UK with no big differences between China and the other observers; Economy by France, PRC, ROK, UK; and science and education by the Netherlands, ROK, Spain.

As a conclusion, the environment is not put as the most important priority of further development by states, with economic activities being ranked first, and climate change mitigation is hesitance. This is also shown by the new and emerging trends of Arctic governance and geopolitics based on these policies. Among them is 'ambivalence or paradox of Arctic development,' "whenever a balance is sought between environmental protection and climate change vis-à-vis an increase in (new) economic activities for Arctic (regional) development," much due to 'political inability' to make the hard decisions.[32] In particular, as oil and gas, as well as coal, seem to be difficult to "be replaced as the backbone of industrial society."[33] Furthermore, cross-border cooperation on environmental protection between the Arctic states, as well as between them and non-Arctic states, is a masterpiece of functional cooperation. This is also supported by non-state Arctic actors, in particular, the Inuit and the Saami as indigenous peoples, who live within the territories of several Arctic states and greatly value environmental protection. Cooperation is also a basis for high geopolitical stability, which has been surprisingly resilient, as maintained despite a few challenges, such as the interpretation of the Russian expedition to place a flag on the sea bed at the North Pole (in 2007) as a provocation, the Ilulissat Ministerial meeting by five littoral states (in 2008), the Russian annexation of Crimea (in 2014) and the related Western sanctions.

The latest of them, the decision of seven Arctic states to pause the Arctic Council activities due to the new (East-West) great power rivalry, is not yet, threatening Arctic stability and security. It has, however, temporarily stopped international scientific

cooperation on the Arctic ecosystem and climate at a time when among the new and emerging trends due to climate change is, in fact, 'focus on science.'

Conclusions

This article discussed climate change (mitigation), major environmental issues, state politics in the Arctic, and world politics, in particular in the context of great power rivalry. It shows that climate change mitigation, which is heavily politicized in the Arctic, is a challenge to state politics and national security, as well as to great powers. Therefore, we face today a triple global crisis of ecological catastrophe –mass extinctions of species in nature, pollution, rapid global warming combined, pandemic and the related economic and supply problems, and a new (East-West) great power rivalry with its related conflicts. The Arctic plays here as an environmental linchpin for multidisciplinary research and a victim for its people. Alas, the environment, i.e., the current environmental crisis, "serves as a signifier for everything which had gone wrong in society."[34]

What has possibly gone wrong (in state politics) is that states are failing to secure the daily life of their citizens, as the fragmented system of unified states is not capable of efficiently managing the global environmental problems. Underlying this is the narrow approach to national security, guaranteed by the military and determined by the national security-political elite. By defining national security as the ultimate aim of a state, the elite does not consider that there is an 'ultimate price' that will be accepted to be paid (locally, regionally, nationally, globally) if global warming continues and if the hard decisions will be postponed.

Arctic cooperation has been done inter-regionally and globally, what earlier was done nationally, and therefore could be interpreted as an example in world politics if the Arctic states and great powers value it highly enough

Interestingly, a striking similarity is that climate change and exploratory research are defined as the major research drivers by the Arctic states, and there are no big differences in this respect between the Arctic states. When it comes to environmental protection, there are no big differences between China and the rest of the observer states. From the point of view of climate change mitigation and Arctic paradox with 'political inability' has been the most severe obstacle for mitigation, as economic activities are being prioritized over the environment and hard decisions on mitigation postponed. Now the reflections of the (new) great power rivalry are seen in Arctic geopolitics, as pan-Arctic cooperation is being

For the first time, tough sea ice off the North coast of Greenland breaks apart due to warming temperatures.

'paused' by seven Arctic states. This is a challenge for the region, as well as the international community, as it affects longer-run studies on the environment and climate, as well as cooperation on environmental protection.

Despite digitalization, advanced technology, and great power rivalry, the undesirable truth is that the environment is the material basis for human existence, which is in danger due to human activities, and "the environment cannot be isolated within a specific policy field," as it is within society.[35] Therefore, states are expected to be active in multidimensional –institutional or functional– cross-border cooperation for environmental protection, climate change mitigation, and increased knowledge of the environment. If so, it would give the legitimacy for citizens (in a democracy) to make the hard decisions concerning everyday security instead of being prisoners of 'political inability.'

Finally, in world politics, there is an urgent need to go beyond the unified state system and to do globally, in a planetary scope, what earlier was done nationally, but this is not really happening. Functional cooperation on environmental protection, and that on science, was the main means to decrease military tension and the Cold War great power rivalry (between East and West) and increase political stability. Correspondingly, the ultimate aim of the Arctic states, including the Soviet Union (under the Gorbachev Administration) and the U.S., was to build trust between the major rivals of the Cold War. It is difficult to think or imagine more concrete evidence of the influence and importance of functional cooperation than the high geopolitical

stability of the Arctic based on constructive cooperation. However, as with any man-made institution, it is fragile.

All in all, the post-Cold War Arctic is an interesting case to highlight the importance of the environment and a reminder that high geopolitical stability and mutually beneficial common interests are both outcomes of, and preconditions for, successful cooperation. From its modest point of view, Arctic cooperation has been done inter-regionally and globally, what earlier was done nationally, and therefore could be interpreted as an example in world politics if the Arctic states and great powers value it highly enough. The new (East-West) great power rivalry is so far the biggest challenge to the achieved high geopolitical stability and continuity of functional cooperation.

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