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Omnia Mea Mecum Porto*: Science Diplomacy Realm Of The Russian Arctic[1]

Omnia mea mecum porto (Latin: "All that is mine I carry with me")

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Abstract

The current situation of the Western exclusion strategies of Russian science builds up the complex of emerging controversies in the face of the Arctic research community and the future sustainable development of the region. The recent sixth assessment report of the IPCC (Intergovernmental Panel on Climate Change) from 2023 states that decisions being made in this decade may affect the Earth for millennia. This requires the urgency of political decisions and the importance of a balanced approach to the inclusive scientific dialogue especially in the Arctic region to avoid misinterpretations of observation and monitoring of rapid changes, and thus, the timely and prompt response. Even though some Western scientists are advocating different coping strategies to continue the science dialogue, little has been done formally to overcome the general atmosphere of cautious and fearful communication. This paper discusses the current trends through a situational analysis of the established practices of international scientific dialog in the Arctic in the current period by means of an inclusive observation method through the dialectical principles of science diplomacy. The emerging controversies in science presume that future scenarios of the holistic science dialogue will not reduce the tensions of the international geopolitical situation through scientific integration and science diplomacy, but on the contrary, the renewal and strengthening any scientific dialog will only be based on political decisions and through the lenses of the existing political discourse.

Keywords: Science Diplomacy, Geopolitical Crisis, Russian-Western Science Divide, Russian Science Exclusion

Omnia Mea Mecum Porto*: Rus Arktik Bölgesinde Bilim Diplomasisi Alanı

Omnia mea mecum porto (benim olan her şeyi kendimde taşıyorum)

Özet

Batılı ülkelerin Rus bilimini dışlama stratejilerinin mevcut durumu, Arktik araştırma topluluğu ve bölgenin gelecekteki sürdürülebilir kalkınması karşısında ortaya çıkan karmaşık bir çelişkiler bütünü oluşturmaktadır. 2023 tarihli IPCC'nin (Hükümetlerarası İklim Değişikliği Paneli) altıncı değerlendirme raporu, bu on yılda alınacak kararların Dünya'yı bin yıllar boyunca etkileyebileceğini belirtmektedir. Bu, siyasi kararların aciliyetini ve özellikle Arktik bölgesinde kapsayıcı bilimsel diyaloğa dengeli bir yaklaşımın önemini, hızlı değişikliklerin gözlemlenmesi ve izlenmesinin yanlış yorumlanmasını ve dolayısıyla zamanında ve hızlı tepkiyi gerektirir. Her ne kadar bazı Batılı bilim insanları bilimsel diyaloğu sürdürmeye yönelik çeşitli başa çıkma stratejilerini savunsa da, temkinli ve çekingen bir iletişim ortamını aşmak için resmi olarak çok az şey yapılmıştır. Bu makale, mevcut dönemde Arktik'te kurulu uluslararası bilimsel diyaloğun yerleşik uygulamalarının durum analizi yoluyla mevcut eğilimleri, bilim diplomasisinin diyalektik ilkeleri üzerinden kapsayıcı bir gözlem yöntemi ile ele almaktadır. Bilimde ortaya çıkan bu çelişkiler, gelecekteki bütünsel bilim diyaloğu senaryolarının, bilimsel entegrasyon ve bilim diplomasisi aracılığıyla uluslararası jeopolitik durumdaki gerilimi azaltmayacağını, aksine, herhangi bir bilimsel diyaloğun yenilenmesi ve güçlendirilmesinin yalnızca siyasi kararlara ve mevcut siyasi söylemler çerçevesinde gerçekleşeceğini öngörmektedir.

Anahtar Kelimeler: Bilim Diplomasisi, Jeopolitik Kriz, Rusya-Batı Bilim Ayrımı, Rus Biliminin Dışlanması

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1. Introduction

The highly politicized and polarized current situation of the Arctic science has been discussed in recent years by a number of political, social, and human scientists, as well as natural scientists who are not always involved in the science administrative discourses. The intricacy of interrelated problems encompassing intellectual, instrumental, technical, logistical, financial, administrative, and legal aspects of the entire scientific process is reflected in Arctic science, as it is in other scientific domains. A process that was formerly more or less refined is now significantly distorted.

The geopolitical Russia-Ukraine crisis, which brought about a variety of reactions in many spheres of people's lives, including science, has drastically altered the situation. A polycrisis like this compels the scientific community to synthesize historical lessons and consider potential future developments. Currently, there is no need to assess the gaps that might arise in the future as a result of persistent geopolitical conflicts or to characterize the current state of affairs. Numerous authors (Andreeva, et al., 2024; Büntgen, et al., 2023; López-Blanco, et al., 2024; Schuur, et al., 2024; Zaika, et al., 2023) have previously offered their opinions on this reality. However, one can appreciate, and many concur on the perspective regarding how such modifications to the Arctic science discourse may have an impact on future generations who are already facing environmental difficulties.

Excluding Russian science from the international fora influence the ability to adequately describe conditions across the Arctic, thus biasing the view on Arctic change (López-Blanco, et al., 2024). Understanding the gaps and biases is a prerequisite to, at least to some extent, consider and address them, and thereby improve the ability to make credible predictions despite imperfect coverage.

The current historical period in which the Arctic research community functions needs to be carefully observed and recoded to take into account the perspectives of many process participants and to satisfy the requirements of historiographic evaluations. In light of the fact that there are very few publications from the Cold War era discussing the capacity for science communication and connections, these kinds of self-reflections, commentaries, and situational analyses from various perspectives will be extremely important for the future growth of the discourse surrounding science diplomacy. However, the science community is still affected by the Cold War era today in terms of lost data and scientific findings that have been forgotten over time.

The state of geopolitics, in general, has provided a fertile ground for speculative views and visions as well as a fresh wave of study ideas and studies that are seeking new techniques, ways, and reasons through the production of socially relevant cognitive growth. While not all of them will be examined in this work, some will be highlighted in order to show the kinds of obstacles that might eventually cause the situation to decelerate.

This paper presents a situational analysis of the established practices of international scientific dialog in the Arctic during the current period by means of an inclusive observation approach based on the dialectical principles of science diplomacy. The manuscript is attempting to answer the question whether the Arctic scientific collaborations especially in the Russian-Western track can avoid engagement with political disputes in the face of rapid environmental changes? **Four main observations (*emerging controversies*)** will be outlined below to address the situation through the Russian scientific lenses. The following controversies represent the complex of multiscale factors, stressors and triggers that are interconnected and dependent on one another and will only continue to develop in the near future.

2. International Ground of The Russian Arctic

Out of all the Arctic states that are part of the international discourse, the Russian Arctic is the largest. It is the territory with the densest population of Arctic people, the ancestral home of many indigenous peoples and Northerners, and the region with the greatest diversity of habitats, ecoregions, and plant and animal species. It is home to extensive frozen landscapes, the longest coastal stretch of the North Sea Route, and substantial natural resource deposits. The Russian Arctic has historically served as a backdrop for

explorations, discoveries, and valiant, noteworthy campaigns. These days, Western narratives suggest readers to overlook these details and consider the Russian Arctic as the elephant in the room.

Prior to 2022, nearly every international, global, and regional platform and cooperative organization pertaining to Arctic issues included Russian scientists, actors, observers and representatives, numbering over 130 entities according to a recent inventory assessment (Zaika, et al., 2023). In the past, Russian scientists and the state has actively participated in and co-founded a number of Arctic collaborative organizations and initiatives, including the Barents Euro-Arctic Council, the Arctic Council, and the International Arctic Science Committee. Russia has successfully engaged in the European Union's cross-border cooperation programs, which have contributed to the development of the distinctive transborder multinational spaces of shared values, trust, and hope, due to its good neighborly nature (Sebentsov, 2020). One of the key factors that contributed to the rise in these activities was science diplomacy, which involved the scientific community and provided recommendations as a foundation for decision-making about matters crucial to Arctic life (Zaika, 2019). These were the triumphs of successful regional cooperation.

Since science diplomacy discourse has been actively growing starting the 2010s, the research community has been able to adapt to these kinds of changes by reflecting on them and using self-research as a vehicle. The scientific community is now able to actively participate in the process as well as examine the various changes that have occurred in the various tiers of international research cooperation. Recent years have seen the development and implementation of new projects and efforts related to the discourse of international science collaborations and diplomacy, and many international science fora now feature panels and sections devoted to the discussions on the state of affairs. One may anticipate an increase in the publications connected to the history of Arctic science collaborations and reviews of outgoing, incoming and newly emerging institutions and entities of cooperation.

Concurrently, the Russian Arctic and its residents and inhabitants, having been left out of Arctic science discussions at the Western track, and are pursuing their own scientific agenda and investigating new collaborative institutions and geographies based on prior experiences. Thus, as of 29.02.2024, the Russian Federation's revised Science and Technical Development Strategy includes the Russian Arctic, issues of climate change, science diplomacy, and new international collaboration platforms. The Russian Chairmanship in BRICS has increased the opportunity for Russian scientists to forge new paths, connect with world science, and contribute to discussions and science planning of global importance. Russia hosts many significant BRICS fora in 2024 (https://brics-russia2024.ru/en/calendar/). The Russian Arctic science community is extremely adaptable and after passing through the emotional horizons of the current situation, is in the process of establishing a new cooperative environment.

3.Empirical Positioning

The Arctic region has always been considered a holistic region with a planetary role. As the geopolitical landscape changes, the circumpolar cooperation space that spans the Arctic is becoming more constrained. International science cooperation discourses at the region's expert scene have already declared the divided Arctic, the deglobalization of science (Rees, et al., 2024), and the Arctic disconnected area (Huntington, et al., 2022). Such discourses also include differentiation of geographical tracks that distinct the region by bifurcating into a 'Russian-Asian' and a 'Western' sphere (Andreeva, et al., 2024), Western-Russian divide, isolation of Russian science from the western, western isolation of Russia's scholars (López-Blanco, et al., 2024), profound asymmetries between the Russian and non-Russian parts of the Arctic (Rees, et al., 2024), the process of disengagement of the Russian Arctic (Øvretveit, 2023), and others are also discussed. It is important to recognize that the majority of the authors and experts advocating for the dialogue renewal, have made a significant contribution to their science career as a result of the obtained Russian Arctic data and research outcomes.

The science as a holistic form of social consciousness, the systematic knowledge is currently being questioned about its Arctic (Arcticness), Russian (Russiasness), Western (Westerness), and Asian (Asianness) identities. Furthermore, the scholar-to-scholar decision has been conveyed to propose an

acceptable solution to the current issue or to pretend to address it. It partly is the current *modus operandi* (a particular way of doing something) for Russian counterpart in western "*unfriendly*" geographies, but it is only the situational solution which will not bring the strong ties in a long run as those which has been exampled in global initiatives such as International Polar Year (IPY), World Climate Research Programme (WCRP), Intergovernmental Panel on Climate Change (IPCC), and many more, all of which have been in place for more than 30, 60, or even 150+ years. This raises a number of concerns about the way science is operated: although the enthusiasm for science amongst friends may endure for a few years and during some field trips, the following discoveries will need significant funding in order to carry out the experimental portion, conduct the more extensive field trips, or make the above-mentioned friendly findings publicized. The scientific paradigm is dynamic and ever-expanding, rather than static.

Although financial and legal choices are decided in offices and cabinets, operational procedures are carried out in the Arctic region itself, where access is difficult. Friendly scholar-to-scholar research cannot provide a strong foundation to the ownership of data, intellectual property and monitoring practices maintained by the institution rather than researcher oneself. The permafrost, ice, climate, and biodiversity data observing networks will undoubtedly be impacted by this situation (Büntgen, et al., 2023; López-Blanco, et al., 2024; Schuur, et al., 2024; Huntington, et al., 2022). This will also significantly reduce the likelihood of obtaining the accurate picture of ongoing changes and add even more biases to the findings and interpretations of Arctic research.

The most important point of the overall process is people of the Arctic – indigenous people, local population, all of them also comprise the science community by being the local Arctic *in situ* (in place) scientists, they work alongside visiting researchers to form the scientific community. While some experts advocate for peer-to-peer connections as a coping mechanism in the current period of change, these strategies are ineffective. In contrast, the Russian research community is actively being excluded from most international Arctic science fora, particularly from international organizations that serve as platforms for determining scientific priorities and future directions. This implies that those who are scientists and Arctic residents from the region that is the largest in terms of geography are not included in the planning and developing processes and debating strategies within so-called inclusive practices. This circumstance will also have a long-lasting multiplicative effect towards the changing generations of scientists and intergenerational continuity of knowledge. They currently find themselves in an atmosphere where they are insecure at most fora or while publicizing due to social and scientific ostracism.

4. Securitization of The Science Realm

The manifestation of narratives and their connotations are being one of the prominent issues at present. The entire range of declared mentions can be found in various research notes, articles, commentaries, and other publications. These include "*the Russian invasion of Ukraine, Russian attack on Ukraine, military invasion of Ukraine, full-scale invasion of Ukraine, Russian war against Ukraine, and aggressive actions by an Arctic member state*", among other things (Büntgen, et al., 2023; López-Blanco, et al., 2024; Schuur, et al., 2024; Huntington, et al., 2022; Øvretveit, 2023; Andreeva, et al., 2024). Although one may endorse a certain narrative, these depictions of the crises may be at odds with those that the state actors have formally regulated – the term "*special military operation*" is used in official Russian discourse. This situation produces the secure space for one part of the science community by placing the unsecure compulsion to the other. Such matter leads away from the emerging solutions of scientific problems by placing the science, particularly in the Western track, in the status of the goddess of justice, Themis. In addition, the Russian scientific community is forced to strike a balance between Charybdis and Scylla in light of potential threats from either side.

To avoid such a matter, Russian science is increasing partnerships with China and other countries not classed as 'unfriendly' (Rees, et al., 2024). Some authors at the western side declare that the result is that e.g., invitations from Russian colleagues to collaborate are being declined by western scientists out of fear for security threats, repercussions or stigmas (Øvretveit, 2023). On the Russian end, the situation is the

same.

The term "*diplomacy of coercion*" is used more frequently in political narratives, but it also finds use in the scientific realm in 2022 (Vetrenko, 2022). Examples of this include the creation and maintenance of institutional barriers that are logistical and technical in nature, the restriction of scientists' mobility due to forced economic constraints, and the popularization of the concept of the "independent, individual researcher" in the practice of the Russian scientific community. In Russian science, the concept of an "independent researcher" is non-traditional. Due to the development of labeling and a selective approach to cooperative groups, such as "dependent" Russian scientists (associated with Russian research organizations), independent Russian scientists, and Russian scientists with international affiliation, this phenomenon has the potential to create conflictogenic situations. In addition to slowing down the effectiveness of already-existing institutions of cooperation and moving away from a balanced Arctic dialog in the scientific realm, these and other examples serve as a vivid manifestation of the elements of "rivalry and competition" in the Arctic international scientific dialog. These factors also have an impact on environmental issues and the safety of life in the region for the nations and peoples that inhabit the Arctic space (Zaika, et al., 2023).

Arctic narratives have been actively shifting over time, transforming from stories of catastrophe, competition, and disaster—like the heroic eras of exploration and conquest, the colonial past in the region—to stories of positive cooperation and triumph, like the inclusion of indigenous peoples in the dialogue, international human rights norms, and—until recently—the Arctic Council as a productive forum for cooperation. Discourse weariness is frequently created by the imbalance and predominance of a certain catastrophic or heroic connotations and overtones often leads to the formation of *discourse fatigue*, which shapes new agendas and discussions (Sellheim, et al., 2019). The discourse of "excluding Russian Arctic actors" is not a new phenomenon; it has existed for decades across centuries. The current crisis, in conjunction with the discourse, has resulted in a new discourse fatigue that compels the Russian scientific community to develop its own coping strategies, bypassing Western colleagues and Western-led international scientific institutions.

The concept of complexity, interconnectedness, and organizational connectivity forms the basis of the broad multilevel architecture of international cooperation in the Arctic. Political, economic, scientific, and social institutions of interaction extend their competencies and expertise on a given issue to the boundaries of interaction with other entities of relevant interest. In the face of dynamic external circumstances, such as the ongoing geopolitical crises or the Cold War era, the multi-level and multi-format architecture of international collaboration is always evolving. In the newly created conditions, institutions (global, international, national, regional organizations), mechanisms (programs, initiatives), and pillars (people) exhibit varying degrees of flexibility.

The geopolitical context of 2022 has given rise to a confrontational nature in international Arctic scientific cooperation, as problems of rivalry and national interests have grown prevalent in many discussions at different levels. For example, there has been an active semantization of rhetoric and the subsequent declaration of the position of different Arctic science organizations on issues that are not within the scope of priorities and values of the institutions of cooperation and their members - for example, on issues of the current geopolitical crisis (official statements of IASC, ASSW, UArctic, etc. published in 2022), which has led in some areas and geographies of cooperation to a policy of isolationism of the Russian scientific community.

Such a position is not unique, as the Arctic issue is mostly driven by the Western community, and Western researchers, specialists, and secretariat staff predominate in all international organizations with a specialized focus on the Arctic. These are very important points that cause the functioning of international organizations to be biased, which results in the asymmetry in decision-making at the organizational level. This refers to *organizational hypocrisy* which can occasionally have either beneficial or harmful impacts both within and outside of the company (Brunsson, 1993). Every organization, regardless of size, exhibits organizational hypocrisy anytime decisions and actions are at odds with previously expressed goals,

principles, or performance standards. Given the existing circumstances, organizational hypocrisy is dominant.

The current geopolitical crisis has created an opening for theoretical scientific discourse within the concepts of "national interests = rivalry, competition" and "global interests = cooperation" to discuss strategic directions for continued balanced development, not only in the Arctic region but also in the international and global sphere, where institutions of cooperation have high decision-making flexibility and are more resistant to outside influence on local issues (Berkman, 2020; Rüffin, et al., 2022). In the current environment, international initiatives and organizations might function as one of the active integration mechanisms. However, the *contradiction* side of this triangle is also introduced by the previously indicated circumstance.

5.Cooperation-Competition-Contradiction Triangle

The relationship between cooperation and competition needs to be complemented by a third party, contradiction, as the developing history of science diplomacy, particularly in the present, demonstrates. This adds a triangle to the interaction, with each corner having a tendency to switch.

Considering the emerging controversies discussed in this paper, cooperation represents the win-win scenario, competition is leading to a weak and strong position, while contradiction results in a weak position for all parties per se and will not bring any substantial result to the global science reflections. And even a global disaster such as climate change might not bring any relief. Contradiction is taking place when all the parties to the international science process are in the contraposition, to maintain their own course and to separate the tracks that are meant to lead to a common shared future. It looks especially threatening, taking into account the rapidly changing climate, which is part of the catastrophic/disaster discourse because of the globality, scale, and speed of the ongoing changes. This disaster-related science diplomacy maxim can resolve contradictions and restore some peace to the margins of scientific conflict situations, particularly in the Arctic context.

Some authors have already noticed the benefits and disadvantages of science diplomacy and disaster diplomacy in various contexts and studies (Kelman, 2012; Kontar, et al., 2018). However, one of the most significant distinctions between science diplomacy and disaster diplomacy is the latter’s systematic framework.

Disaster-related science diplomacy (“disaster diplomacy”)—an emerging and powerful theme within science diplomacy—is an approach to enhance disaster resilience while simultaneously reducing conflicts and fostering cooperation between states where relations might otherwise be strained. Effective disaster diplomacy combines official conflict-resolution efforts led by governments with peer-to-peer exchanges between scientists and nonacademic disaster experts, such as practitioners and local knowledge holders (Kontar, et al., 2018).

However, we cannot suggest that disaster diplomacy is a prominent factor in conflict resolution. Instead, disaster-related activities often influence peace processes in the short-term—over weeks and months—provided that a non-disaster-related basis already existed for the reconciliation. Disaster-politics interactions have been studied for decades, but usually from a specific political framing, covering a specific geographical area, or from a specific disaster framing (Kelman, 2012). The number of disasters induced by the changing climate is growing and will have the long-term consequences in the near future.

This is a critical decade for people and the planet. Extreme weather, rising temperatures, rising sea levels, and devastating events such as droughts, floods, wildfires, marine warming, ocean acidification, and record lows in sea ice extent are becoming ever more prevalent, affecting ecosystems, economies, and human wellbeing around the world. Many changes are taking shape faster than previously predicted, and as the IPCC 6th Assessment Report made clear, many of the most serious consequences are linked to unprecedented changes in the Arctic and Antarctic (International Arctic Science Committee, 2023).

Disaster, by shattering the existing habits of thought and action, also creates opportunity for rebuilding the governmental systems in a healthier, stronger way. Disaster in this case is taking the role of Occam's razor by reducing the multiple emerging controversies and producing an opportunity for change in relationships among the participants in response to shared risk. Immediate coping strategies at times of disaster and in response to shared risk might have a high diplomatic interest and relevance, and advance constructive relations.

One long-term strategy would be to frame science diplomacy as a process so that it becomes more institutionalized and structured to get the desired effect. Furthermore, the current situation can open the door to opportunities for this possibility. Disasters do not consider geopolitical borders or conflicts. The global scientific community has been studying the effects of climate change for many years, and specifically in the polar regions of the Arctic and Antarctic. These groundbreaking investigations created a wealth of knowledge-based ethical legacies to help the polar science process reach a sustainable future.

6. Burden of Legacies

The Arctic, and particularly its scientific institutions, as flagships of international cooperation, have become particularly relevant in scientific research in the current time of geopolitical turbulence, forming new models and facets of relationships in a very important region of the Earth system, which involves complex, comprehensive ontogenesis within the concept of sustainable development.

The Arctic region is critical to the climate change agenda because it is experiencing the most rapid changes and serves as an indicator of ongoing alterations. The Russian Arctic has historically served as the largest on-the-ground, in situ natural laboratory for observing and monitoring such changes through the established collaboration practices and institutions, as well as signed agreements and policies. The Arctic Council's Agreement on Enhancing International Arctic Scientific Cooperation, signed by all Arctic states at the Fairbanks Ministerial meeting on May 11, 2017, reiterates the urgent need for stronger action to prevent and adapt to climate change. Following the signing of that consensus, numerous international cooperative efforts emerged. These days show no consensus for the future collaborative scenarios.

Climate change forced processes have been studied by world scientific community for many decades. And now the community is approaching the next International Polar Year 2032-33 through the multi-year planning process of the Fourth International Conference on Arctic Research Planning (ICARP IV) that engages Arctic researchers, Indigenous Peoples, policy makers, residents and stakeholders from around the world to collegially discuss the state of Arctic science, the place the Arctic occupies in global affairs and systems. During this process the most urgent knowledge gaps and Arctic research priorities and needs for the next decade will be considered and avenues to address these research needs to navigate towards the next IPY.

Built on the major legacies of the 4th IPY, the 5th IPY is declared to be a crucial new phase in a 150-year-old process. It will provide a vital opportunity to close outstanding major knowledge gaps through targeted attention and globally-coordinated action enabling polar researchers, knowledge holders, rights holders and stakeholders to achieve major breakthroughs in the knowledge required to protect the global environment, develop effective national and local strategies to mitigate and adapt to environmental changes, and accelerate progress towards achieving the UN Sustainable Development Goals(International Arctic Science Committee, 2023).

Many international Arctic and polar fora second the IPY legacies by discussing the promotion, engagement, facilitation of joint efforts. They reflect on how to establish the most efficient and resource effective international collaborations, how to secure equal participation for all stakeholders, including Indigenous peoples and local communities and how to prioritize science to fill the most urgent knowledge gaps (Foundation Prince Albert II de Monaco, 2024). They also focus on advocating for collaborative long-term

planning, addressing the fact that international collaboration and sustained planning are indispensable for pinpointing urgent knowledge gaps in polar research.

A further matter of discussion is the recent and current geopolitical landscape in which engagement with Russia and Russian polar researchers is at a minimum. While Russia is a key player in ensuring long-term monitoring of the Arctic system, there is a clear necessity for establishing an ethical and sustainable framework for interactions with Russia and the polar research conducted in the region (Foundation Prince Albert II de Monaco, 2024). However, there is still no (or minimum) Russian scientific community representation at such meetings. It contradicts the primary guiding principles of the continuing planning and preparatory processes, which include ensuring involvement, equal participation for all stakeholders, and prioritization of science – the groundwork of polar research and holistic Arctic dialogue. For instance, the ICARP IV (https://icarp.iasc.info/) process, which is currently in progress and is intended to serve as the foundation for the upcoming IPY5 and is defined as an inclusive procedure, is designed to facilitate a discussion of the priorities of Arctic research from a 10-year perspective among a community of over 250 researchers, 27 international and global organizations, and Arctic-related initiatives. When examining the country-based inclusion of this priority-making and planning process, which serves as the foundation for future budgetary distribution and decision-making for the Arctic region, the following figures are certain and self-explanatory: 85% of participants come from 21 Western track countries (the United States, Canada, the United Kingdom, Sweden, Norway, Italy, Belgium, Poland, the Czech Republic, Finland, France, Iceland, Portugal, Denmark, Greenland, Ireland, Austria, Spain, the Netherlands, Germany, and Switzerland), 13.5% from the South-East track (5 countries - India, China, Korea, Japan, and Turkey), and 1.5% from the formal Russian presence. Indigenous peoples account for approximately 5% of the total discussants.

7. Conclusion

Notably, we should consider future scenarios in terms of strengthening and renewing scientific dialogue through the lenses of the existing political discourse rather than lowering the tension of the international geopolitical situation through scientific integration and the means of science diplomacy.

The current narratives highlight science diplomacy as a potential remedy and solution, but this kind of exceptionalism places too much hope and accountability on the shoulders of the scientific community. This could end up being a heavy burden.

In contrast to the meaning of this expression from Cicero’s time, *Omnia mea mecum porto (*Latin: "All that is mine I carry with me"), it acquires a little inspiring context in our day. Until the political situation is resolved and a new framework of international cooperation is outlined, everyone will carry their knowledge, skills, and spiritual values within themselves, and the Arctic scientific community will remain divided.

Divided at times of global changes, this community may face the dramatic scenarios of future sustainability. When quantifying the exclusion of the Russian Arctic research on the representation of data on carbon fluxes, permafrost thawing, and climate-induced ecosystem change, the Western scientific community anticipates a 25% to 50% loss of data, resulting in gaps and biases in scientific outcomes, decision-making, Arctic residents’ living conditions, and humankind’s sustainability.

The paradox of the situation of a broken dialogue is that it can only be resolved by the *dialogue about the dialogue*. The meta-communication process concerning the possible ways of scientific communication, which will outline the boundaries, options, introduce facilitators and means of mediation, will assist the parties of scientific dialogue in negotiating a resolution. How can we properly process our scientific dialogue for the sustainability of the shared future?

By now while Western counterpart discuss the possibilities on their own, the Russian counterpart seeks further development of parity in international scientific dialog, which requires the strengthening of its own

scientific, innovative, and technological sovereignty, the development of institutions of interregional cooperation between the subjects of the Russian Federation and their mandatory stimulation, and financing for the densification of interregional dialog. A methodical and effective transition out of the uncertain phase will be achieved through the diversification of cooperation institutions, geographies, entities, and regions, as well as by involvement in multi-year global integration efforts.

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