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# 7 EARLY WARNING SIGNS OF ISOLATIONISM: A CONFLICT AROUND SOVIET-GERMAN STUDIES OF THE BARENTS SEA, 1926–1927

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## Introduction

As Russia, along with Russian science, is rapidly moving towards growing isolation, particularly after February 2022, it is important to look at how, during the earlier periods of Russian/Soviet history, the isolation in science developed and worked and with what it was associated. This is important not because we can "learn from mistakes" – history rarely teaches anything directly, it only informs and helps us draw parallels – but for the opportunity to view certain contemporary processes as a part of a more general picture. Despite a danger of "normalizing" the abnormal situation in which the Russian scientific community finds itself today in connection with the war, the deep perspective that history gives us helps build a longer-term vision (*longue durée*). It can be useful not only for reflecting on the present but for a tentative look into the future. If the isolationism starts somewhere, it apparently must end, at least partially. We need to examine its trajectories consistently and in detail.

An important feature of the Russian/Soviet scientific community known from the past is that it can fuel this process of isolation "from within." In that case isolation may not fully correlate in time with the pressure from the authorities, but it might preceded it. Insecurity in one's strengths, in one's ability to match scientific competition and to produce results that are in demand at the global level, can lead to certain individual strategies and set of actions. It may seem more attractive to be the "first" in one's country of origin than 'one hundred and twenty-first' in a larger world. The flip side of such a vision is that international scholarly cooperation is commonly viewed as an asymmetric interaction, in which the stronger side gains all advantages and the weaker side is doomed to be exploited.

As argued below, during the 1920s it was not so much the Soviet authorities, but rather the Soviet scientists themselves (or a vocal portion of them), who opposed international cooperation. Their actions, beginning with the change in publication policy (i.e. publishing less and less in international journals and the foundation of national journals), were examined almost twenty years ago by Alexandrov (1996). Using examples from different scholarly disciplines, Alexandrov showed that the growth of isolationists' values and attitudes among Soviet scientists in the 1920s preceded the public campaigns introduced by the authorities. Of course, the full-scale

autarky of the country along with the development of Soviet "patriotism" in science would not be possible without the willing contribution of the Soviet political elite. But it is also true that without the support of a significant part of the Soviet scientific community, these campaigns would not have been possible.

In this chapter, I describe in detail one case in the history of Russian/Soviet scholarly "isolationism" – a conflict among Soviet scientists in the 1920s over the advantages or disadvantages of international cooperation in the studies of the Arctic Ocean. This conflict started in 1926, when German oceanographers showed their interest in collaboratively researching the Barents Sea, which had been predominantly studied by Russian/Soviet scientists for several decades. I analyze the rhetoric of both supporters and opponents of the international cooperation and show the preferences for secrecy and exclusion of foreign colleagues that existed among certain groups of scientists, even before such were adopted by the authorities for a mandatory implementation.

The increased confidentiality, even strict secrecy of the Soviet Arctic research during the Cold War, especially from its beginning and until the mid-late 1950s, is common knowledge (Doel at al. 2014). The official requirements of secrecy did not allow Soviet scientists to publish the results of their studies, and international contacts with foreign scholars were minimized. Isolationism was typical in the 1930s, at least for the second portion of that decade. However, in 1934, visits by foreign Arctic researchers to the Soviet Union, as well as trips by Soviet scientists abroad, were still possible (Lajus and Sorlin 2014). The last major international scientific event of this era was the International Geological Congress held in Moscow in 1937, which also included in its program an excursion to the Soviet Arctic, to Novaya Zemlya. The description of the excursion was published in English, and several foreign scientists took part in it (International… 1937). But such an event was already an exception, and many international meetings planned for those years were canceled (Krementsov 2005).

To better understand how the scientific community moved towards isolationism, it is important to look into the earlier period, when co-authored publications and even joint research in the Arctic waters were still possible. In the 1920s the attitude of the Soviet scientific community towards international cooperation was already quite contradictory. Soviet scientists, concerned with the creation and strengthening of new scientific disciplines and duly establishing various state research institutions, did not understand, or did not want to see, that isolationism would not only lead to a decline in the level of scholarly productivity, but would deprive scientists of necessary independence from the Soviet authorities. Perhaps, they were drawn to a certain illusion that they, the scientists, could successfully use the authorities to develop their research, and not the other way around. In fact, the creation of new Soviet research institutions was accompanied by the build-up of a hierarchy that, in the situation of growing isolationism, also led to an increase in authoritarianism in science itself. It became increasingly difficult for a scientific community of this kind, including its

new leaders, to fit into the spirit of international cooperation, so that it eventually started to be rejected, using governmental, patriotic, and sometimes openly nationalist rhetoric.

## Meeting in the Arctic: Formal plans and informal contacts in 1926

The rapprochement with Germany, which, like the USSR, was politically and diplomatically isolated after World War I, was a feature of the Soviet international policy in the 1920s. This included the realm of science (Kolchinsky 2001). The celebration of the 200th anniversary of the (Russian) Academy of Sciences in 1925 that many German scholars attended contributed to the deepening of contacts and the emergence of numerous joint projects (Sorokina 2005). In the following three years, a series of joint expeditions was organized across the territory of the USSR.

Organization of joint research in the field of marine environment became possible after the signing of the Soviet-German trade agreement on 12 October 1925. It included Section IV "Agreement on Navigation" Article N. 13, according to which "the contracting parties shall "undertake joint scientific research of the biology of useful fishes in the waters adjacent to the northern shores of the USSR." (Knipowitsch 1929: 355). To implement this agreement, an Interdepartmental Meeting was held at the People's Commissariat for Foreign Affairs of the USSR on 24 February 1926, that entrusted the organization of joint research to the Commissariat (Ministry) for Agriculture, which at that time oversaw fisheries.

Preliminary negotiations with German scientists interested in joint studies of the Barents Sea were to be conducted by Nikolai M. Knipowitsch (1862–1939).[1] He was the most renowned specialist in fisheries and oceanography of the Barents Sea and had pioneered its research back in 1897–1902, when he headed the Murman[2] Scientific-Fisheries Expedition. The latter was put in charge of coordinating its research with the program of the International Council for the Exploration of the Sea (ICES) (Hjort 1939; Lajus 2002, 2018). In the spring of 1926, Knipowitsch was preparing to go abroad with the task of restoring scientific ties with marine research institutions and scholars in Europe, and especially in Germany. A key objective was to clarify the possibility of renewed Soviet participation in ICES, which was cancelled after the Bolshevik revolution of 1917.

Knipowitsch's rise as a scientist was inseparably linked to the expansion of international scientific cooperation, the development of methods of marine research, and

1 The German spelling of the name, Knipowitsch, is used here; Knipowitsch used it himself for all his non-Russian publications. In modern literature in English, the name is usually spelled "Knipovich."

2 The name of the expedition originated from the geographical name of the Russian part of the Barents Sea coast – the Murman Coast.

the circulation of knowledge about the physical environment of the ocean, marine organisms, and fishing practices. Marine research, like many other biological and geographical studies of that time (e.g., meteorology), whose development was largely driven by the need to develop agriculture, was aimed at solving practical tasks. "Fish, winds and currents know no boundaries" – this expression became a kind of motto of the ICES. The Council was organized in the wake of the growing concern among scientists and authorities of the northern European nations about the need to develop and regulate marine fisheries. There was confidence that large-scale research necessary for this development could only be organized through the joint efforts of scientists from many countries. Founding members of ICES in 1902 included Belgium, Great Britain, Germany, the Netherlands, Denmark, Sweden, Norway (then part of Sweden) and Russia with Finland (as a part of Russian Empire but an independent member of ICES) (Rozwadowski 2002).

Knipowitsch participated in the foundation of ICES and served as Russia's representative, and in 1913–1914 as one of its vice-presidents. After the 1917 revolution, Russia lost its membership in ICES, due to the Bolshevik authorities confiscating Russian membership fees accumulated in one of the banks in Russia during the war years (1914–1918). Returning to ICES was Knipowitsch's cherished dream. He made great efforts to do so and even tried to use his personal acquaintance with Vladimir I. Lenin, the head of the new Soviet Government. These connections were built in the pre-revolutionary era, as Knipowitsch was one of the early members of the Bolshevik party.

However, in 1926 the Soviet Union's return to ICES reached a deadlock, because the Soviet government refused to reimburse the fees for the past years (Smed 2003). Thus, Knipowitsch's international trip lost its rationale and was eventually cancelled.[3] In contrast, Germany, which had also lost its place in the ICES during the WWI, managed to return to it that same year (Rozwadowski 2002: 75). Thus, the initiative to organize a joint research of the Barents Sea with the Soviet scientists passed into the hands of Germans.

Why did German scientists need to study the oceanography and fish stocks of the Barents Sea, located far from German shores? Germany during those years rapidly increased the scale of its marine fisheries. The Barents Sea was one of the most productive northern seas, the trawling fisheries were quickly being developed by several European states, primarily of Great Britain, and it was important for Germany to participate in the use of its rich resources. To increase fish catches, it was necessary to know the characteristics and the distribution of different fish species in different seasons, which itself depended on a better understanding of the oceanographic conditions in the sea, such as currents and bathymetry.

On 22 June 1926 the USSR People's Commissariat for Foreign Affairs received a note with an attached program of surveys that Germany planned to carry out in in

3 St. Petersburg branch of the Archive of the Russian Academy of Sciences (further PFA RAN), coll. 731, inv. 1, f. 153, l. 117.

the Barents Sea in August-September from the research vessel *Zieten*, which belonged to the German Maritime Observatory (*Deutsche Seewarte*) in Hamburg. The program was then forwarded to the People's Commissariat for Agriculture of the Russian Federation. Citing the impossibility to conduct a meeting in the summertime due to the absence of specialists, it decided to send Moscow-based inchthyologist Sergey Averintsev, with an assistant, to participate in the voyage of the *Zieten*.[4] The leaders of the People's Commissariat for Agriculture informed the People's Commissariat for Education of the Russian Federation about the upcoming visit of the German scientists to the Murman Biological Station. That station, which functioned under the jurisdiction of the Comissariat for Education, located since 1899 in the Kola Bay of the Barents Sea (in the town of Alexandrovsk, from 1931, the settlement of Poliarny, 30 km outside the city of Murmansk), was proposed as a possible meeting place for Soviet and German scientists working along the shores of the Barents Sea.

Sergey V. Averintsev (1875–1957)[5] headed the Laboratory of Ichthyology in the Institute for Fisheries in Moscow from 1922 to 1929. He knew the Barents Sea very well; from 1904 to 1908 he was the director of the Murman Biological Station. In 1918 –1920, he served as a specialist in fisheries to the Temporary Government of the Northern Region in Arkhangelsk, which was independent from the Bolshevik government that had taken power in most of the Russian Empire in 1917, taking part in fisheries observations in the Barents Sea from onboard of a trawler. These studies were crucially important in the next decade (1920s) as the foundation of the Soviet trawling fisheries (Lajus 2005, 2011). The choice to send Averintsev to meet with German researchers was also based on his very strong international connections in many countries, including Germany. As a young scientist, he had had an internship at the University of Heidelberg and like most Soviet scientists of that generation was fluent in German.

In August 1926, Averintsev left Moscow for the Murman Biological Station. As it turned out later, the German scientists had not received any official response to their program. Thus, without any hope for a meeting with Soviet colleagues, they conducted oceanographic surveys in the Barents Sea independently. Without entering Soviet territorial waters, they collected oceanographic data along the standard ocean transect, the so-called Kola Meridian (33°30'E).

This transect had been established by the Murman Scientific-Fisheries Expedition of 1898–1908 and had been adopted as a standard by the ICES. Sampling along this transect was conducted regularly in 1900–1906. The Murman Biological Station resumed sampling along it in 1921, although such was only possible thanks to the support of the Soviet Navy, as the scientists did not have a proper vessel. To emphasize the significance of this research to their military patrons, scientists at that time used rhetoric about the importance of international connections. The voyages continued

4 Russian State Archive of Economy (further RGAE) coll. 478, inv. 7, f. 3579, l. 1906.

5 We use the modern English spelling of his name here; in his foreign publications during his lifetime, the name was spelled as "Awerintzew," according to the German transliteration.

to be called "international," and it was believed that such "international" voyages had important state significance. This term was used even though Russia was no longer a member of the ICES. Since Soviet scientists, led by Knipowitsch, hoped that Soviet Russia would eventually return to ICES, they decided in 1921 to resume voyages along the Kola Meridian on their own initiative, much like Knipowitsch had started regular sampling voyages under the ICES's program even before its formal organization in 1902. With the assistance from the Navy and with some gaps, the sampling had continued during the first half of the 1920s. From a scientific point of view, these data were of immense value to the international scientific community, as they clearly indicated the onset of warming in the European section of the Arctic, particularly in the Arctic Ocean.

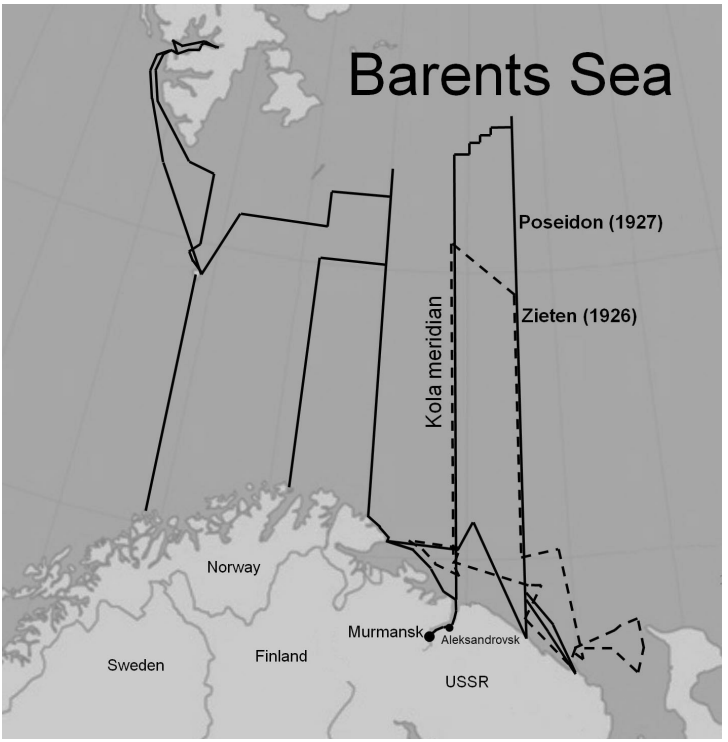


Fig. 1 Map of the routes of German research vessels *Zieten* and *Poseidon* which carried out hydrographic surveys in the Barents Sea in 1926 and 1927.

In 1925, the Murman Biological Station became an independent institution under the jurisdiction of the Commissariat of Education, thanks to the efforts of its director German (Herman) A. Kluge (1871–1956). He managed to separate it from the Lenin-

grad Society of Naturalists at Leningrad University, to which it had belonged since its foundation in 1899. Its budget was very modest, and it did not have a research vessel suitable for sailing in the open waters of the Barents Sea. Because of these limitations, the station was not able to accomplish sampling along the Kola meridian in 1926, which in previous years had been done by the better-funded Society by hiring naval ships for that task. The German scientists apparently were aware of these difficulties from the station's director, who visited the Helgoland Biological Station (Biologische Anstalt Helgoland) in Spring 1926 (Lajus 2013: 129–130).

Having collected oceanographic data along the Kola meridian up to 75°N, the *Zieten* sailed along the parallel eastward to the 38th meridian, and then made a second section along this meridian towards the Russian shore (Fig. 1, map). The scientists also collected hydrological and zoological material around the Kanin Shoal (Kaninskaya banka), one of the most productive fishing areas of the Barents Sea. From there, another transect was made with a series of stations along the Murman shore of the Barents Sea, beyond Soviet territorial waters, after which the *Zieten* headed home. However, upon the ship's arrival at the Norwegian port of Tromsø, the captain received a telegram stating that Soviet scientists were due to arrive in Alexandrovsk on 7 September and advising that the *Zieten* return to Alexandrovsk for a meeting. Interestingly, Averintsev sent the telegram with this information to the director of the German Maritime Observatory in Hamburg independently, without any coordination with the Soviet authorities.[6]

So, on 12 September 1926, the *Zieten* arrived in Alexandrovsk. It carried on board the oceanographer Prof. Bruno Schultz, who represented the German Maritime Observatory, biologist Dr. Alfred Wulff from the Helgoland Biological Station, and his assistant Dr. Schrof, a specialist in fishing methods.[7] From the Soviet side, the interactions were handled by Averintsev and Kluge. These consisted of six meetings, during which Soviet scientists shared with their Germans colleagues the results of the Barents Sea surveys carried out in the previous years by the Murman Station, the Institute of Fisheries (represented by Averintsev), and the Floating Maritime Research Institute, the only Soviet institution that had its own research vessel, the *Persey* ("Perseus"). Meetings were important for determining plans for further joint work. During the meetings, it turned out that the Soviet scientists had not been informed about the additions to the program that their German colleagues transmitted to the People's Commissariat for Foreign Affairs. German scientists, in turn, were unaware of the proposed joint research, written up by Averintsev at the suggestion of the Fisheries Department of the People's Commissariat for Agriculture in spring 1926. Therefore, plans had to be formulated directly during the meetings. It was also necessary to determine the technical capabilities of the partners.

6 RGAE coll. 478, inv. 7, f. 3579, l. 33–34.

7 RGAE coll. 478, inv. 7, f. 3579, l. 33.

German scientific vessels were much better equipped than the Soviet ones. Both the *Zieten* and the vessel *Poseidon* were suggested for future joint surveys in the Barents Sea, as they possessed a radio-based direction-finding device and an echo sounder.[8] German scientists introduced their Soviet colleagues to these devices and the research methods they used on the *Zieten*, such as the operation of the echo sounder during a short voyage in the Kola Bay. The availability of modern scientific instruments on the German vessels was a very important incentive for the Soviet scientists to seek closer cooperation with the Germans. Soviet oceanographers did not have an echo sounder for depth sounding; using a regular lead line not only was very labor-intensive but provided inaccurate measures of the depths. Knowing the seabed bathymetry in detail was very important for the proper organization of fishing.

In turn, the German scientists were surprised by the scale of the Soviet research of the Barents Sea, the abundance of material already collected, and the results obtained. They expressed their wish for the earliest-possible publication of these materials in international journals and suggested several German scholarly journals for this purpose.[9] It was decided to develop a detailed program for future joint research, and an agreement was reached on the distribution of future research by areas. The Germans would research the western part of the Barents Sea outside the Soviet territorial waters, while Soviet scientists would cover the area within Soviet territorial waters and the eastern part of the Barents Sea. The parties agreed that the transect along the Kola Meridian would remain the responsibility of the Murman Station. All institutions participating in the joint research should use the standardized tools and methods for processing data. For this, it was proposed that all fishing gear and other marine organism collection tools be manufactured at the Helgoland Biological Station, and that Soviet scientists could go there to analyze the collected materials.[10]

## Is the prestige of "national science" or that "knowledge increases" more important?

For further planning of the joint Soviet-German research in the Barents Sea, an interdepartmental meeting chaired by Knipowitsch was held in Moscow on 24 November 1926, at the People's Commissariat for Agriculture. Representatives of all leading Soviet scientific institutions involved in the studies of the northern seas attended this session.[11] According to Averintsev, the meeting from the very beginning took a turbulent course and deviated from the planned agenda. As a result, he had no opportunity to inform his colleagues about the meeting held that past summer at the Murman

8 RGAE coll. 478, inv. 7, f. 3579, l. 35.
9 RGAE coll. 478, inv. 7, f. 3579, l. 35 rev.
10 RGAE coll. 478, inv. 7, f. 3579, l. 36 rev.
11 RGAE coll. 478, inv. 7, f. 3579, l. 58–59.

Station.[12] It turned out that the leading scientists of the Floating Maritime Research Institute, Alexander Rossolimo (1865–1939) and Lev Zenkevich (1889–1970), who, like Averintsev, were requested to go to Alexandrovsk for negotiations with their German colleagues, had deliberately avoided the trip, shifting all responsibility for the meeting and the agreement to Averintsev and Kluge. These and other circumstances contributed to the decision to consider the summer negotiations not an official procedure, but "of a private nature." Knipowitsch later interpreted this meeting similarly: "The German scientists on the Zieten expected to have a chance to encounter Russian colleagues when entering Alexandrovsk. The matter was delayed, got complicated, and although, in the end, the entry into Alexandrovsk took place, the meeting was just a simple exchange of opinions, as none of the Russian scientists had any authority to negotiate." (Knipowitsch 1929: 356)

However, at the 24 November session a representative of the People's Commissariat for Foreign Affairs pointed out that the decision to call the past negotiations "of a private nature" was hardly appropriate, since the negotiations were initiated by the commissariat.[13] M. I. Latsis, a member of the Collegium of the People's Commissariat for Agriculture, defended Kluge andAverintsev, writing to the head of the Main Body for Supervision of Science (Glavnauka) of the People's Commissariat for Education that the German observations in the Barents Sea were based on Article 13 of the Soviet-German trade agreement, and there was no reason to link this issue to Kluge's visit to the Helgoland Station.[14]

Against the backdrop of emotional exchange of opinions, the leading Soviet hydrobiologist, who had devoted many years to the study of the northern seas, Konstantin M. Deriugin (1878–1938),[15] took a particularly sharp and uncompromising position regarding the possibility of joint research with German scientists. He stated that sampling along the Kola Meridian had important national significance and could not be handed over to foreigners, with their "continuing aspiration to view Russia as a colony."[16] He also presented a resolution of the Interdepartmental Hydrological Commission that claimed that the study of the Barents Sea by German scientists was related to the "impending German concession for the exploitation of (Russian) fisheries."[17] Indeed, the possibility of a foreign concession for the use of the rich fish resources of the Barents Sea was discussed when the Northern State

12 RGAE coll. 478, inv. 7, f. 3579, l. 81.

13 RGAE coll. 478, inv. 7, f. 3579, l. 111.

14 RGAE coll. 478, inv. 7, f. 3579, l. 89.

15 We use the modern English spelling of his name here; in his foreign publications during his lifetime, the name was spelled as "Derjugin," according to the German transliteration.

16 Materials of the discussion are stored in the collection of documents of the Permanent Polar Commission of the Academy of Sciences of the USSR - PFA RAN coll. 75; copies are also available in the State Archive of the Murmansk Region (further GAMO) coll.20, inv.1, f. 43. Cit. is on l. 8.

17 Ibid.

Fishing Trust was organized in 1925, and Averintsev, who participated in these discussions, proposed to grant the concession to Great Britain, not Germany. However, the connection of these discussions with the organization of joint Soviet-German surveys remained unclear, at least in 1926, since the issue of concessions was no longer raised.

Not finding support at the meeting of the People's Commissariat for Agriculture, Deriugin continued his attacks at the meeting of the Polar Commission of the USSR Academy of Sciences that took place in Leningrad two days later. He made a statement that the negotiations at the Murman Station in summer 1926 put Soviet scientists in a disadvantageous position and was in conflict with the interests of several Soviet scientific institutions. He even accused Kluge, who was of German origin and who had visited Germany at the beginning of 1926, of being the one who invited the Germans to the Murman coast. Kluge had already suffered previously for being of German origin: during World War I, he was arrested along with his elderly mother on false charges, and his mother did not survive imprisonment. The fact that Kluge continued to maintain ties with German colleagues had clearly irritated Deriugin, despite the fact that he himself had worked extensively in Germany before World War I. According to Kluge's account, at the meeting at the Institute for the Study of the North, Deriugin said that "everything stated exceeded his worst fears and the irreparable damage was done to national science. The Germans were not only allowed into our waters, but they will take away all the fruits of the labors of Russian scientists […]"[18]

It was clear that Deriugin had a personal dislike for Kluge, and also for Averintsev, who was the head of the Murman Biological Station before Kluge in 1904–1908. Deriugin himself had put a lot of effort into building this station and had serious disagreements with Averintsev and Kluge about how it should operate, which intensified after Kluge managed to separate the station from the jurisdiction of the Society of Naturalists at the Leningrad University and make it an independent scientific institution (Fokin 2010). Despite this, I believe that the new confrontation related to the development of international contacts, which was of fundamental importance to Deriugin, and his aggressive posture and uncompromising attitude could not be explained solely by his personal animosity towards Kluge and Averintsev.

The scandal provoked by Deriugin served as a reason for convening an emergency meeting of the Soviet Polar Commission. It took place on 3 December 1926, and demonstrated significant disagreements among the participants regarding international cooperation in Arctic research.[19] Deriugin insisted on the complete closing of the Soviet Arctic to "foreign eyes" to preserve the primacy of Russian scientists. He also expressed political and military concerns connected with the presence of foreign

18 GAMO coll. 20, inv. 1, f. 4. l. 22–22 rev [*transl. Lajus*].

19 Materials of the discussion are stored in the collection of documents of the Permanent Polar Commission of the Academy of Sciences of the USSR - PFA RAN coll. 75; copies are also available in GAMO coll. 20, inv. 1, f. 43.

research vessels in Soviet Arctic waters. Several members of the commission supported him to varying degrees.

Undoubtedly, the urgency of these issues in the fall of 1926 was enhanced by a decree issued by the Soviet government in April 1926, justifying the USSR's "sectoral" approach to the delimitation of the Arctic territories. This decree declared all land, both discovered and potentially discoverable in the future, located between the northern coast of the Soviet Union and the meridians converging at the North Pole the sovereign territory of the USSR. It suggested the Soviet Union's illusion of ownership not only of the lands but also of all the waters in this sector (i.e., not only those within the 12-mile territorial waters zone), despite that, from a strict legal point, they remained international waters.

Knipowitsch, who consistently advocated for expanding international cooperation, including the country's return to ICES, spoke decisively at the meeting, emphasizing that, in his view, the issue of national "appropriation" of research was fundamentally wrong and that the voyages by foreign research vessels in no way harmed Soviet scientists. He argued that one should not accuse but rather thank the Germans for sampling the section along the Kola Meridian, which otherwise would have remained not sampled. He supported Kluge, calling the accusations made against him by other members of the commission "baseless." In particular, Knipowitsch said that "[…] he [Knipowitsch] does not understand, simply his mind cannot digest such a formulation of the question, that if we ourselves cannot do anything, then let no one do it." [20] In his opinion, a true scientist should be "indifferent to who conducts the research, as long as our knowledge about this part of the sea increases."[21] Thus, while the collection of oceanographic data along the Kola Meridian was equally important to Knipowitsch and Deriugin, *who* collected it was at the center of the conflict.

On 10 December 1926 the Polar Commission of the USSR Academy of Sciences adopted a resolution stating that "the work carried out by Soviet scientists […] in no case can be of an auxiliary nature in relation to the work of German scientists."[22] This statement was used to raise the issue before the authorities about the need to allocate sufficient funds, primarily for the continuation of regular voyages along the Kola Meridian, as well as for the prompt publication of the collected scientific materials. The "undesirability" of foreign research vessels working in Soviet territorial waters was also noted.

On 18 December 1926, a new Commission, appointed by the interdepartmental meeting, gathered in Moscow.[23] It mainly included directors of institutions – Averintsev, Kluge and Deriugin were not invited to this meeting, apparently to avoid another confrontation. The Commission discussed the work plans of Soviet research insti-

20 GAMO coll. 20, inv. 1, f. 4. l. 22–22 rev [*transl. Lajus*].
21 Ibid.
22 RGAE coll. 478, inv. 7, f. 3579, l. 107.
23 RGAE coll. 478, inv. 7, f. 3579, l. 103–106

tutions in the Barents Sea for 1927 and the proposals for 1928. It found these plans coordinated and covering the most important issues related to the study of northern seas and their fish resources. Knipowitsch was tasked with informing German scientists about the general plan of studies by the Soviet institutions.[24]

Analyzing the opposing views on scientific cooperation of the two leading Soviet scientists in the field of marine research – Nikolai Knipowitsch and Konstantin Deriugin – it was clear that their attitude towards cooperation with foreign scientists was largely shaped by what sociologists call habitus – a system of durable, acquired predispositions. Knipowitsch was open to cooperation throughout his entire career, and his position in the international scientific community was more important to him than his position in the internal (domestic) community, where he was at that time a marginal figure, existing at the intersection of several disciplines. It was notable that one of his contemporaries, speaking of the Soviet scientific community, called him "the best zoologist among oceanographers and the best oceanographer among zoologists" (Vodianitskii 1975). His internationalism in the science field was well aligned with the internationalist views of old Bolshevism. Deriugin, to the contrary, was a talented organizer and discipline-builder who consistently made a career within the domestic academic community. Moreover, in pre-revolutionary era, he was politically close to the Constitutional Democratic party, known for its support of a strong Russian state. He became a professor at the St. Petersburg University, had numerous students, organized and headed the Department of Hydrobiology in 1929, and in 1927 was close to becoming the Rector of the Leningrad University (Fokin 2010). International cooperation in research was not at all necessary for his career.

## Finest hour: Joint research in 1927

On 22 December 1926, Knipowitsch traveled to Germany for further negotiations, where he met with Karl Heinrich, the chairman of the German Scientific Commission for Marine Research (*Deutsche wissenschaftliche Kommission für Meeresforschung*), as well as the leading German oceanographers Gerhard Schott and Bruno Schulz and one of the most renowned German ichthyologists, Ernst Ehrenbaum. Knipowitsch also visited the Helgoland Biological Station, where he met with its director Wilhelm Mielck and the patriarch of German ichthyology, Friedrich Heincke.[25] As a result, a plan for joint research in 1927 was developed. The plan was approved by the Interdepartmental Meeting at the People's Commissariat for Agriculture on 7 February 1927.[26] The People's Commissariat for Foreign Affairs informed the German Foreign Ministry of its consent to joint research through a special note.

24 RGAE coll. 478, inv. 7, f. 3579, l. 147–148 rev.
25 PFA RAN coll. 731, inv. 1, f.153, l. 6–8.
26 RGAE coll. 478, inv. 7, f. 3579, l. 127–128.

From the Soviet side, the Institute for the Study of the North, the Institute of Fisheries, and the Murman Biological Station participated in the joint study (Bogdanov 1929). This time, the Floating Maritime Institute was also involved. The fact that one of Germany's best scientific vessels, the *Poseidon*, which had operated in this region as early as 1913, was sent to the Barents Sea in 1927 confirmed the great importance that the German side attached to this joint effort. In Bruno Schulz's posthumous biography, the Soviet-German research program in the Barents Sea, along with a joint expedition with Scandinavian scientists in the North Sea, were noted as the "finest hour" not only of his personal career but also of the German Commission for Marine Research as a whole (Kalle 1949).

During the four-day stay of the *Poseidon* in Alexandrovsk, Averintsev had the opportunity to familiarize himself through conversations with the results produced by the German scientists in the Barents Sea. They consisted of a series of synchronous sections crossing the sea far to the north. The *Poseidon* passed through the western part of the Barents Sea (up to 38°E longitude), while the Soviet vessels covered the eastern part of the sea. Thanks to almost simultaneous observations from several vessels in different areas, it was possible to examine in detail the character of individual branches of the North Cape Current throughout the Barents Sea (Schulz 1930). Favorable ice conditions and good weather allowed oceanographers to venture far north and conduct observations in poorly studied areas. One of the finest achievements was the set of sampling along the northernmost section between the Novaya Zemlya Islands and Franz Josef Land, which allowed for the description of this little-studied area.

At the beginning of 1928, a meeting at the People's Commissariat for Agriculture recognized that during the joint research, all Soviet institutions had collected a large and very useful body of data; it was deemed desirable to publish these data simultaneously with the work of German scientists. The Academy of Sciences was entrusted with publishing the collection, to be edited by Knipowitsch.[27] In a letter to E. P. Voronov, the head of the Department of Scientific Institutions at the Council of People's Commissars, Knipowitsch requested a minor amendment to the decision of the meeting, namely, that "publishing the results of our part of the joint work (as simultaneously as possible with the publication of the work of German scientists) is not only desirable but […] simply obligatory, as otherwise the agreed joint and, if possible, synchronous work would lose its meaning. If we did not publish our results within the framework of the agreement, the USSR would essentially not fulfill its obligation."[28]

However, for reasons still unknown, the obligation was not fulfilled, and the results of the Soviet portion of the joint research remained scattered across technical reports of various institutions and largely unpublished. It is quite possible that after the passage of several years, these data were considered "secret" in the Soviet Union and not to be published openly, let alone in international journals. The issue of "clas-

27 PFA RAN coll. 173, inv. 1, f. 153, l. 20–20 rev.

28 PFA RAN coll. 731, f. 137, l. 45.

sified" data regarding the areas of the Soviet Arctic became acute in the early 1930s; almost nothing was allowed to be published from thenceforward. Such a situation led to the loss of international preeminence of Soviet scientists in many important areas, including those related to the study of the warming of the Arctic in the 1930s–1950s, which remained virtually unknown to the global scientific community.

To the contrary, German scientists almost immediately started publishing the results of their studies (Schulz and Wulff 1927). In the summer of 1928, Bruno Schulz spoke about the Soviet-German joint research at the conference of the International Society for the Study of the Arctic by Means of Airship (Aeroarctic) in Leningrad, but only a very short version of this talk was published in Russian (Schulz 1930). In 1929, detailed materials on oceanography and plankton distribution were published in German in the Proceedings of the German Commission for Marine Research (Schulz and Wulff 1929). In 1930, Gerhard Schott included a brief report on the voyage of the *Poseidon* in a review of oceanographic work carried out by this vessel in 1926–1929 (Schott 1930).

It is known that during World War II, oceanographer Bruno Schulz advised the German naval forces stationed in northern Norway (Selinger 2001). Can it be assumed that he used the knowledge of the oceanography of the Barents Sea, obtained during the joint Soviet-German research undertaken 15 years prior, for military purposes? Perhaps the answer is "yes." But it is equally likely that the Soviet naval forces also used the knowledge acquired by scientists from both countries during these research efforts of the 1920s. The use of scientific research results for military purposes is always possible, and it hardly depends on the scientists themselves. It is difficult to predict, even a few years prior, which countries might enter into a conflict (as did USSR and Germany in 1941) and which might become allies. In hindsight, such situations create a moral dilemma and cast a long shadow. Due to Hitler's rise to power in Germany in 1933 and the subsequent world war, the initially quite fruitful Soviet–German cooperation was halted. Not all collected data were published, and certainly not in the way that had been planned by scientists on both sides.

## Conclusion

In the 1920s, the Soviet Union and Germany were in friendly relations, and scientists from these two nations had a long tradition of cooperation. Both countries at that time were pariahs on the international stage; their scholars struggled to participate in international scientific life. This factor reinforced the desire for closer bilateral ties. The aspiration of scientists to work together, to have access to modern equipment, and to share data is especially important when dealing with such systems of global commons, like the ocean and the Arctic. An important motivation for cooperation on the part of the Soviet scientific community was that German scientists had a much

better equipment, ships and instruments than their Soviet colleagues. Soviet scientists, on the other hand, had been researching the Barents Sea for several decades and possessed a large volume of accumulated data crucial for analyzing newly obtained observations. Such a distribution of strengths (and weaknesses) in polar research, and more generally in earth sciences, remained throughout the entire Soviet period and it continued into the 1990s. As Soviet history illustrates, the secrecy surrounding scientific explorations, sharing of data, and the fear of espionage seriously delayed the development of scientific research and deprived the scientific community of deserved international fame and recognition.

In the conflict analyzed here, the ideas of isolation arose directly within the Soviet scientific community. The isolationist trend suited the trajectories of certain scientists who built their careers internally and were not interested in (or did not want to be distracted by) international cooperation. Meanwhile, the loss of international cooperation and isolationism led not only to the cessation of circulation of scholarly data and ideas; it also made scientists dependent on the state for which they worked. Eventually, it deprived them of freedom in choosing research methods and strategies, and forced them to operate in a situation of limited choice and even according to plans imposed from above. An understandable intention to strengthen domestic science, with its argument of independence from foreign equipment and ideas, could be easily turned into isolationism that leads to weakness and lagging behind the other countries.

Temporary advantages for individual career perspectives accrued for those scientists who chose to support the isolation as their strategy led to disadvanages for teams, institutions and the entire disciplines or areas of scholarship. During the Cold War, after the period of isolation of the late Stalinist era international collaboration, even if restricted and severely controlled, became the foundation for success of Soviet science. It received a certain level of authonomy, including a possibility to participate in large international collaborative venues, like the International Geophysical Year of 1957–58, with the unspoken agreement that scientists would not engage in the critique of Soviet ideology and politics (Adams 2001). Science diplomacy became an important tool used by the state authorities and science administrators.

As the isolation of Russian polar research and researchers once again increases, following Russia's invasion of Ukraine in February 2022, it is worth revisiting the past examples of both isolationism and openness. It would lead to better understanding that the "autonomy" in science may exist for short periods only and that even such short periods produce disadvantages in knowledge production. Opposing individual strategies towards international cooperation discussed here are universal and, therefore, they repeat the same dilemmas: Does science work for the increase of knowledge or for its service to the home country, its military and economic power, in exchange for real or imaginary generosity of the state in support to its servants?

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References

Adams, Mark B. 2001. Networks in Action: The Khrushchev Era, the Cold War, and the Transformation of Soviet Science. In *Science, History and Social Activism: A Tribute to Everett Mendelsohn*, G. E. Allen and R. M. MacLeod (eds.), 255–276. Dordrecht: Kluwer Academic Publishers.

Alexandrov, Daniel A. 1996. Pochemy sovetskie uchenye perestali pechatat'sia za rubezhom: stanovlenie samodostatochnosti i izolirovannosti otechestvennoi nauki, 1914–1940 [Why Soviet scientists stopped publishing in the West: The emergence of self-reliance and isolationism in the Russian science, 1914–1940]. *Voprosy istorii estestvoznaniia i tekhniki* 3: 3–24.

Bogdanov N. F. 1929. Kratkii obzor gidrologicheskikh ekspeditsionno-issledovatel'skikh rabot, proizvedennykh v 1927 g. [Brief overview of the Hydrological Expeditionary and Research activities conducted in 1927]. *Izvestiia Gosudarstvennogo gidrologicheskogo instituta* 24, supplement.

Doel, Ron, Robert Marc Friedman, Julia Lajus, Sverker Sorlin, and Urban Wrakberg 2014. Strategic Arctic Science: National Interests in Building Natural Knowledge – Interwar Era Through the Cold War. *Journal of Historical Geography* 44: 60–80.

Fokin, Sergei I. 2010. Neizvestnyi Konstantin Mikhailovich Deriugin [The unknown Konstantin M. Deriugin]. *Istoriko-biologicheskie issledovaniia* 2(2): 43–66.

International XVII Geological Congress, USSR, 1937. T*he Novaya Zemlya Excursion 1937*. R. L. Samoilovich and M. M. Yermolaev (eds.). Moscow.

Hjort, Johan 1939. N. M. Knipovich. *Journal du Conseil XIV* (3): 335–336.

Kalle, K. 1949. Bruno Schulz. *Berichte der deutschen wissenschaftlichen Kommission für Meeresforschung*, Neue Folge XI, 2: 443–449.

Knipovich, Nikolai M. 1929. O russko-germanskikh issledovaniiakh v Barentsevom more [On the Russian-German joint surveys in the Barents Sea]. In *Trudy Vtorogo Vsesouiznogo gidrologicheskogo s'ezda v Leningrade 20–27 aprelia 1928 g.* Pt. II, 355–357. Leningrad.

Kolchinsky, Eduard I. (ed.) 2001. *Sovetsko-germanskie nauchnye sviazi vremeni Veimarskoi respubliki* [Soviet-German scientific relations during the Weimar Republic]. St. Petersburg: Nauka.

Krementsov, Nikolai 2005. *International Science Between the World Wars: The Case of Genetics*. London / New York: Routledge.

Lajus, Julia 2002. Foreign Science in Russian Context: Murman Scientific-Fishery

Expedition and Russian Participation in Early ICES Activity. *ICES Marine Science Symposia* 215: 64–72.

— 2005. S. V. Averintsev (1875–1957): ego zhizn' i issledovaniia rybnykh resursov Barentseva moria [S. V. Averintsev, 1875–1957: His life and studies of the fishery resources of the Barents Sea]. In *II Ushakovskie chteniia. Materialy nauchno-prakticheskoi mezhregional'noi istoriko-kraevedcheskoi konferentsii pamiati prof. I.F. Ushakova, 2-4 marta 2005 g.*, 147–150. Murmansk.

— 2011. Averintsev Sergei Vasil'evich (Averintsev, Sergei Vasil'evich). In *Biologiia v Sankt-Peterburge. 1703–2008: Entsiklopedicheskii slovar',* E. I. Kolchinsky (ed.), E. I. Kolchinsky and A.A. Fedotova (comps.), 18–19. St. Petersburg: Nestor-Istoriia.

— 2013. Field Stations on the Coast of the Arctic Ocean in the European Part of Russia from the First to Second IPY. In *Science, Geopolitics and Culture in the Polar Region: Norden beyond Borders.* S. Sörlin (ed.), 111–141. Farnham: Ashgate.

— 2018. Experts on Unknown Waters: Environmental Risk, Fisheries Science and Local Knowledge in the Russian North. In *Eurasian Environments: Nature and Ecology in Imperial Russian and Soviet History*. N. Breyfogle (ed.), 205–220. Pittsburg: University of Pittsburg Press.

Lajus, Julia and Sverker Sörlin 2014. Melting the Glacial Curtain: The Soft Politics of Scandinavian-Soviet Networks in the Geophysical Field Sciences Between Two Polar Years, 1932/33-1957/58. *Journal of Historical Geography* 44: 44–59.

Rozwadowski, Helen M. 2002. *The Sea Knows No Boundaries: A Century of Marine Science Under ICES*. Seattle and London: ICES.

Schott, G. 1930. Die hydrographischen Arbeiten der Jahre 1926–1929 ("Poseidon"). *Berichte der deutschen Wissenschaftliche Kommission fur Meeresforschung.* Neue Folge V. 4: 211–216.

Schulz, B. 1930. Nemetskie issledovaniia Barentseva moria v 1926 i 1927 gg. [German studies of the Barents Sea in 1926 and 1927]. In *Trudy Vtoroi poliarnoi konferentsii. Leningrad 18 – 23 iiunia 1928 g.*. P. V. Vittenburg (ed.), 107–108, Leningrad: Izdanie Gruppy SSSR «Aeroarktik».

Schulz, Bruno and Alfred Wullf 1927. Hydrographische und Planktologische Ergebnisse der Fahrt des Fischereischutzbootes "Zieten" in das Barentsmeer im August-September 1926. *Berichte der deutschen wissenschaftlichen Kommission für Meeresforschung.* Neue Folge III, 3: 211–273.

Schulz, Bruno and Alfred Wulff 1929. Hydrographie und Oberflächenplankton des westlichen Barentsmeeres im Sommer 1927. *Berichte der deutschen wissenschaftlichen Kommission für Meeresforschung*. Neue Folge IV, 5: 231–372.

Smed, Jens 2003. Russia, USSR, and ICES – For Years a Tricky Problem. In *History of Oceanography. Abstracts of the VII International Congress on the History of Oceanography.* Kaliningrad. September 8–12, 2003, 98–103. Kaliningrad: Museum of the World Ocean https://issuu.com/icesdk/docs/jens_smed_archive, 252–259 [accessed 15.01.2024]

Sorokina, M. Yu. 2005. Dvukhsotletnii yubilei Akademii nauk [The 200 th anniversary of the (Russian) Academy of Sciences]. In *Na perelome. Otechestvennaia nauka v kontse XIX–XX veke. Vyp. 3 Istochniki, issledovaniia, istoriografiia*. E. I. Kolchinsky and M.B. Konashev (eds.), 206–235. St. Petersburg: Nestor-Istoriia.

Vodianitskii, V. A. 1975. *Zapiski naturalista* [Memoirs of a naturalist]. Moscow: Nauka.

## Figures

1 Map of the routes of German research vessels *Zieten* and *Poseidon* which carried out hydrographic surveys in the Barents Sea in 1926 and 1927. Combined from Schulz, Bruno and Alfred Wullf 1927. Hydrographische und Planktologische Ergebnisse der Fahrt des Fischereischutzbootes "Zieten" in das Barentsmeer im August-September 1926. *Berichte der deutschen Wissenschaftliche Kommission fur Meeresforschung*. Neue Folge III, 3, p. 215; and Schulz, Bruno and Alfred Wulff 1929. Hydrographie und Oberflächenplankton des westlichen Barentsmeeres im Sommer 1927. *Berichte der Deutschen wissenschaftlichen Kommission für Meeresforschung*. Neue Folge IV, 5: 237.