SVALBARD'S EXTRACTIVE ECONOMY

PAST, PRESENT, FUTURE



|JUNE 2023| ALINA BYKOVA



ABOUT THE REPORT

This report examines the transnational history of extraction on the Svalbard archipelago and the relevance of these activities in the present day as the islands grapple with political and ecological challenges.

It was produced as part of The Arctic Institute's SVALFISH project, which seeks to examine the transformation of Svalbard from a primarily mining-focused region to a modern and economically diverse archipelago in the High North, with an emphasis on fisheries development.

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Svalbard's Extractive Economy:

Past, Present, Future

By Alina Bykova

Introduction

Six hundred miles north of the European mainland, halfway to the North Pole, lies a group of Arctic islands governed by one of the world's most remarkable international treaties. In many ways, affairs on Svalbard, an archipelago the size of Ireland, which is now a Norwegian territory, are not vastly different today than they were 100 years ago. The islands were, and still are, a center for regional resource extraction, tourism, and science, and a zone of transnational cooperation and competition. Although they are a small group of islands at the top of the world, affairs on Svalbard have broader implications, and its unique legal status makes it a perfect case study to look at the environmental impact of transnational activities and security concerns.

Since Svalbard's discovery in 1596, Norwegian, Swedish, Dutch, German, British, American, and Russian actors have competed for resources and influence in the area, partaking in whaling, fishing, hunting and trapping, and later, coal mining, scientific exploration, and tourism.¹ Previously considered terra nullius, the islands were placed under Norwegian jurisdiction following the Svalbard Treaty in 1920. At the same time, nationals of other signatory states were granted the right to carry out activities there on equal footing as the Norwegians.² Today, because of the treaty, Russian coal mines still operate on the Norwegian islands and several hundred Russians and Ukrainians live and work in the town of Barentsburg, which historically belonged to the Soviet Union. More than a dozen countries run scientific research bases on the archipelago. Longyearbyen, the administrative and touristic capital on the islands, has a population of about 2,500, more than half of which is non-Norwegian. It is also home to the world's northernmost university, where half of the students and faculty alike are foreign. Svalbard's transnational legacy, unfolding along extractive, scientific and touristic activities over centuries, is woven into the very name of its main settlement. Indeed, the eponym of Longyearbyen is John Longyear, an American businessman who first traveled to Svalbard as a tourist in 1901 and proceeded to open some of the first coal

¹ Arlov, Thor Bjørn. 1994. *A Short History of Svalbard*. Oslo: Norsk Polarinstitutt.

² Svalbard Treaty 1920 article 3

mines there, eventually becoming a pivotal player in Norway's acquisition of the islands.³

The history of Svalbard is most often discussed in the context of binary Norwegian-Russian rivalry and geopolitics in the Barents Sea region, which is understandably hard to ignore, considering that the world's northernmost Lenin statue can be found on the islands, and that at one point there were more than two times more Soviet citizens on Svalbard than Norwegians. Today, Russia is highly invested in maintaining its presence on Svalbard too, with a special governmental committee in place to address Svalbard questions that gets direct input from President Vladimir Putin. The leadership of Trust Arktikugol, the company running Russian coal mines on Svalbard, claims that they must stay there because the Russian activities on Svalbard are a testament to Soviet Arctic history.⁴ Indeed, while Trust Arktikugol has not turned a profit in the last 50 years of its existence and serves purely political goals today, the Russian state has classified it as an essential and strategic company, underscoring its perceived value and importance in the eyes of the Russian leadership. Since the Svalbard Treaty's inception, Russia has leveraged its rights under the Treaty to pressure Norway and cause problems, and this has been especially true in recent months, after the start of Russia's full-scale invasion of Ukraine.

Yet the history of Svalbard is an international history as well, and the reality of the situation there is far more nuanced than just a rivalry between two states. In the centuries prior to the Svalbard Treaty's creation, Svalbard was considered a no-man's land, and was the site of intense international competition for resources between close to a dozen states. This competition came to a head in the late 19th century for several reasons.

This was the age when European imperialism peaked, polar tourism became more popular,⁵ and coal played a key role in international development and industrial expansion.⁶ In the three decades between 1890 and 1920, more than 100 land claims were made on the archipelago by private actors and numerous states alike.⁷ While many of the claims were not profitable and resulted in the claimants leaving the islands, others produced significant

⁶ Roald Berg, (2017). "Norway, Spitsbergen, and America, 1905-1920," *Diplomacy and Statecraft*, 28(1) 20-38, 21.

³ Roald Berg, (2017). "Norway, Spitsbergen, and America, 1905-1920," *Diplomacy and Statecraft*, 28(1) 20-38, 21.; Hartnell, Cameron C. "Arctic Network Builders: The Arctic Coal Company's Operations on Spitsbergen and its Relationship with the Environment." Order No. 3389743, Michigan Technological University, 2009.

⁴ Trust Arktikugol interview with company director Alexander Veselov conducted by the author in Moscow, March 2019.

⁵ Ulrike Spring, (2020). "Cruise Tourists in Spitsbergen Around 1900: Between Observation and Transformation". *Nordlit*, no. 45 (February):39–55.

⁷ The Svalbard Museum, "Mining Communities." *The Svalbard Museum*, 2021. <u>https://svalbardmuseum.no/en/kultur-og-historie/gruvesamfunn/</u>

resource development schemes that still exist to this day, including the town of Longyearbyen, which was established by Americans but is now the home base on Svalbard for the Norwegians, Pyramiden by the Swedish, Barentsburg by the Dutch (both of which were later bought by the Soviet Union), and Grumant by the Russians, which was abandoned in the 1960s. Mining operations, as well as a fisheries station and a tourist hotel, were established by the Norwegians in Ny-Ålesund, which today serves as the largest research base on the archipelago and hosts dozens of international scientists annually. Even after 1920, when the Svalbard Treaty placed the islands under Norwegian jurisdiction and Norway and the Soviet Union became the most prominent actors on the archipelago, other Western states were very much interested in affairs there and continued to monitor the situation through NATO and their foreign offices, and participated in activities there, primarily in the form of scientific research.

Contrary to many accounts, affairs on Svalbard were not all about geopolitics. Resources have always played a major role in attracting actors to the region, and continue to do so to this day. This paper strives to highlight the most important moments in Svalbard's modern history and show that affairs on the archipelago were, and still are, more than a geopolitical rivalry between Norway and Russia. Further, it aims to provide nuance to current debates about the role of politics and resources on the archipelago. Due to the conditions over the Svalbard Treaty, local level politics on Svalbard have always had massive implications for broader diplomatic processes at the macro level, pulling the islands into the realm of global affairs. Today, Svalbard's cosmopolitan nature echoes an international identity of centuries past and presents new challenges for asserting Norwegian legitimacy in this region of the High Arctic.⁸ Svalbard is also an epicenter of the climate emergency, as the islands have warmed four degrees Celsius since 1970.9 As we enter the second century of the Svalbard Treaty's existence, it is now more important than ever to consider the international actors who have historically been involved on Svalbard and continue to be invested in its affairs to this day.

I. The making of a status quo

he Svalbard Treaty is the single most important piece of legislation governing the Arctic islands. Signed in 1920 as a result of the Paris Peace Conference, it came into effect in 1925 and today includes over 42 participants. The Svalbard Treaty sets all the rules for how affairs on the archipelago are to be carried out, which most significantly includes a provision

⁸ Pedersen, Torbjorn. "The Politics of Presence: The Longyearbyen Dilemma." *Arctic Review on Law and Politics.* 8. 2017.

⁹ Fraser, Alex. "On the Front Lines of Climate Change in the World's Northernmost Town." Reuters, 3 September 2019. <u>https://www.reuters.com/article/us-climate-changesvalbard-widerimage-idUSKCN1V019M</u>

that the islands are under Norwegian control (Article 1), but just as importantly for the other signatory countries, it states that, "they may carry on there without impediment all maritime, industrial, mining and commercial operations on a footing of absolute equality" (Article 3). The third most significant point of the document is that Svalbard shall never host any bases that may be used for "warlike purposes" (Article 9), meaning that the islands can never be militarized for as long as the Treaty is in effect.¹⁰ Despite the explicit wording of Article 9, the obsession (by both the Soviets and the West) with Svalbard's strategic Arctic location as a base for military activities brought it into the fold of Cold War geopolitics.

It is remarkable that Svalbard ended up under Norwegian jurisdiction in the first place, considering that Norway was in a union with Sweden until 1905, just 15 years before the Svalbard Treaty was signed. Norway's ambitions on Svalbard were characterized by imperial visions related to its grand Viking past. Despite being subjugated to Swedish rule due to the 1814 Treaty of Kiel, Norway's interest in Svalbard can be viewed in the context of 19th century nationalism and imperialism, writes historian Roald Berg.¹¹ The quest for resources to modernize ran alongside imperial ambitions to control and "civilize", as seen in the case of the European scramble for Africa, and these economic and political motivations were echoed in the European interest in Svalbard.

In the case of the archipelago, numerous important and lucrative resources were useful for exploitation, from Arctic mammals, to abundant fisheries, which remain a contested topic to this day, to coal deposits.¹² The Western interest in Svalbard was both political, "with even the most remote parts of the world emerging as areas of international competition over influence and political control",¹³ but also driven by resource interests. The exploitation of coal on the archipelago in the 20th century captured the attention of numerous European nations, including the United States and Britain, as well as Sweden, and the Netherlands, who developed mining settlements on the archipelago, though ultimately only Norway and Russia maintained coal mines there long-term.

Norway's claim to Svalbard was consistently and vehemently blocked by European powers, including Russia, Sweden and Germany, who were also economically interested in the archipelago and had long histories of exploration and activities there themselves. However, interest from a group of American

¹² Berg, 22.

¹³ Berg, 21.

¹⁰ Arctic Portal. "The Svalbard Treaty," 1920. <u>http://library.arcticportal.org/1909/1/The_Svalbard_Treaty_9ssFy.pdf</u>

¹¹ Berg, 21.

businessmen, led by John Monroe Longyear, helped turn the tide and led to the establishment of Norwegian sovereignty over the islands in the span of less than 30 years. The businessmen effectively convinced the competing states that ownership of the islands should go to a Scandinavian country with a clause that other countries could exploit resources there freely, to avoid potential great power conflict in the region, and that the country should be Norway.¹⁴ Norway's consolidation of control over Svalbard came about partially due to Wilsonian American politics and the aftermath of the Paris Peace Conference of 1919.¹⁵

The Russians were likewise interested in claiming Svalbard for themselves and developing resources there, and argued that they ought to have priority in the region due to the historical presence of Pomor residents on the islands who lived and hunted there for centuries.¹⁶ In fact, in the first decade of the 20th century, Russia, Sweden and Norway were in the process of negotiating a trilateral agreement for ownership of the archipelago, when this process was interrupted by the First World War and the Russian Revolution. Taking advantage of Russia's domestic turbulence, the other two states cut Russia out of the deal. Furthermore, Russia had a separate peace deal with Germany after World War I, and was not present at the Paris Peace Conference where the Svalbard Treaty was decided. It was not until 1924 that the Soviet Union recognized the Norwegian claim over Svalbard (albeit resentfully), in exchange for Norway becoming one of the first states to recognize the Soviet Union's international status as a new state.¹⁷

While Svalbard has historically been the epicenter of high-level geopolitical tensions in the Arctic, life on the archipelago was decidedly calmer for most of the 20th century. The Norwegians did not use their clout on the islands for half a century after the signing of the Svalbard Treaty. Indeed, the state invested very little in its presence on Svalbard up until the 1970s. Governance prior to this, during the period defined by "laissez-faire" policies, was categorized by the Svalbard sysselmann, or governor/king's appointed ruler of the region, having very few resources at their disposal. While Svalbard was legally entirely under Norwegian jurisdiction, the archipelago is a massive space spanned by mountains and glaciers, and is entirely dark for three months of the year during the polar night, and the government's very limited Svalbard budget of the time meant that the sysselmann could not oversee or monitor affairs on many parts of the islands.

¹⁵ Berg, 24.

¹⁴ Berg, 32.

¹⁶ Dadykina, Margarita M., Alexei V. Kraikovski, and Julia A. Lajus. 2015. "Hunting Activities of Russian Pomors on Spitsbergen in the 18th Century: New Evidences in Transnational Perspective." *HSE Working Papers.*

¹⁷ Geir Honneland, *Russia and the Arctic.* Bloomsbury. 2016, 78.

The first governor of Svalbard couldn't even move around the archipelago on his own, and had to ask private shipping vessels to take him places, which went awry when he got stranded in Green Harbor in 1925 and had to spend the winter in the mining community. Additionally, the Soviet settlements on Svalbard were effectively closed to the Norwegians for most of the 20th century, so the government couldn't oversee their activities, and at their peak in the postwar era, the Soviets had 2,500 people on the islands – more than double the Norwegian population.¹⁸ While the Norwegian governor moved around via sled dog or skis, the Soviets had four helicopters, and preferred to be left to their own devices.

Events on Svalbard were influenced by greater global international relations. In the early decades of its Svalbard ownership, Norway was hesitant to implement or assert any hard rules on the islands to avoid provoking the Soviet Union. During the detente period of the 1960s-1980s, the government was able to conduct more business on the archipelago and become more active there overall.¹⁹ In 1971 the Norwegians finally decided to build an airport in Longyearbyen, which they had previously avoided due to Soviet protests, and later that decade the Norwegian government passed major environmental regulations. The governor on Svalbard was also given a helicopter and was finally able to get around with more authority and oversight. Norwegian journalist Per Arne Totland recounts evidence that the Soviets sent KGB agents to the islands after the building of the airport, either to retaliate or to simply keep tabs on what Western powers were doing on the archipelago. The 1975 Norwegian white paper on Svalbard argued that the state had to assert its sovereignty over the archipelago more firmly, and the budget for Svalbard was increased from 0.7 million NKR in 1960 to 2.8 million in 1970 and 37.2 million in 1980.²⁰ The building of the airport led the Soviets to accuse the Norwegians of trying to militarize and push them off the archipelago, a claim they have also made many times since for various reasons, including expanding environmental regulations, perhaps in an effort to assert dominance in the region and undermine the Norwegian right to legislate in its own territory.²¹

¹⁸ Pedersen 2009,148-149; Pedersen, Torbjørn. "The Dynamics of Svalbard Diplomacy." *Diplomacy and Statecraft.* 19. 2008, 237-238.

¹⁹ Pedersen 2009, 151.

²⁰ Pedersen 2009, 149.

²¹ Interview with Per Arne Totland conducted by the author in Oslo, June 2018.

II. A brief history of Russia's Svalbard presence

Russia's presence on Svalbard dates back centuries and has gone through constant flux associated with geopolitical and domestic history. At the end of the Cold War, there were two times more Russians and Ukrainians on the archipelago than Norwegians. In the post-Soviet period, Russia has been invested in maintaining its presence in the region, which it sees as highly strategic. Today the Russian presence is changing yet again in the wake of the COVID-19 pandemic and Russia's war on Ukraine due to Western sanctions against the aggressor.

The Soviet Union bought Pyramiden and Barentsburg, two coal settlements founded by Swedish and Dutch mining companies respectively, under the Svalbard Treaty's terms of equal access. Soviet coal extraction started in 1931.²² Though the settlements became heavily subsidized and served strategic purposes for the Soviet Union, they were initially economic ventures. During the interwar period, Svalbard was not "in the scope of the Soviet Union's military-strategic considerations," but was a major source of coal for Russia's northern regions.²³ In the early decades of the Soviet era there was no rail connection between the Kola Peninsula and the rest of the country, and coal from Svalbard provided energy to northern cities.²⁴

After World War II, the Soviets realized the military significance of the Barents Sea for its Murmansk naval fleet, and wanted more influence in the region in response to the American military presence in Greenland and Iceland.²⁵ A Soviet base on Svalbard would "make it possible for the Soviets to strike targets in the USA five to ten years earlier than they would otherwise have been able to do," writes historian Sven Holtsmark.²⁶ The Soviet government tried to pressure the Norwegians into renegotiating the Svalbard Treaty immediately following war. Holtsmark describes a 1944 negotiation between Soviet commissar of foreign affairs Vyacheslav Molotov and the Norwegians, in which the former pushed for dual ownership of the archipelago, the installation of a military base there, and territorial rights to Bear Island, the southernmost tip of the archipelago, located approximately halfway between Svalbard and the

²⁶ Holtsmark, 131.

²² Gerlach Julie & Kinossian Nadir (2016) "Cultural landscape of the Arctic: 'recycling' of Soviet imagery in the Russian settlement of Barentsburg, Svalbard (Norway)." *Polar Geography*, 39(1): 7

²³ Sven Holtsmark, 1993. "A Soviet Grab for the High North? USSR, Svalbard, and Northern Norway 1920-1953." *Forvarstudier.* Norwegian Institute for Defense Studies. Issue 7, 14.

²⁴ Interview with Sven Holtsmark conducted by the author in Oslo, June 2018.

²⁵ Holtsmark, 57, 97.

Norwegian mainland.²⁷ Holtsmark argues that by 1947 the Norwegians were prepared to appease the Soviets to avoid facing even harsher demands from the latter, but this plan was thwarted when Norway joined NATO shortly thereafter, and the Cold War's subsequent start.²⁸ When Norway joined the NATO alliance, the Soviet Union fervently protested and claimed that the archipelago would become militarized, despite the explicit statement in Article 9 of the Treaty that forbids these actions.

Soviet papers of the time echo the discontent the state must have felt at their failed plan to split Svalbard with the Norwegians immediately after the war. In 1951 an article published in Literaturnaya Gazeta claimed that the Americans stole Svalbard from the Soviets by giving it to Norway and turning land that did not belong to them into a platform for aggression against the Soviet state.²⁹ This tone is a marked departure from articles of prior decades which hardly mentioned the Western powers at all, focusing instead on the productive coal mines and idyllic Arctic conditions on the archipelago,³⁰ or praising Western powers, including the Canadians and Americans, for freeing the islands from Nazi dictatorship and saving the Russians working there during the Second World War.³¹

While the Soviets were paranoid about NATO claiming the islands for their own purposes, NATO documents from the 1950s and 60s indicate that the alliance was aware of Svalbard's strategic significance, but militarization of the archipelago was ruled out as per Svalbard Treaty guidelines.³² Some Western states felt otherwise. In 1978, the British foreign office wrote that the militarization of Svalbard would be advantageous to the alliance as it would put Western military capabilities "well into an area which the USSR would otherwise expect to dominate...it is up to the Alliance to make sure that the USSR does

³² North Atlantic Treaty Organization. "Area Planning Guidance General." *NATO online archives.* January 1969. https://archives.nato.int/uploads/r/null/1/0/100515/IPT_131_36_DRAFT_ENG_PDP.pdf; North Atlantic Treaty Organization. "North Atlantic Military Committee." *NATO online archives.* 29 November 1966. <u>https://</u> archives.nato.int/uploads/r/nato-archives-online/d/4/3/ d43b496d11814507a5186ec1c343386a82b27063e4a6a7d942b012c416a4222c/MCM-0142-1966_ENG_PDP.pdf

²⁷ Holtsmark, 10.

²⁸ Holtsmark, 143.; Gjørv, Gunhild Hoogensen, Bazely, Dawn R., Goloviznina, Marina, and Tanentzap, Andrew J. *Environmental and Human Security in the Arctic.* Routledge, 2014, 20-22.

²⁹ M. Chernenko, G. Agranat. "Shpitsbergen I Washingtonskoye otkroveniye." *Literaturnaia Gazeta*, 1 December 1951. <u>https://dlib-eastview-com.stanford.idm.oclc.org/browse/doc/26782300</u>

³⁰ Ogonek, "Sovetskaia colonia na Shpitsbergene." *Ogonek*, 22 April 1935. <u>https://dlib-eastview-com.stanford.idm.oclc.org/browse/book/read/82376/start?</u>

³¹ Novoe Russkoe Slovo, "Napadeniye na Shpitsbergen, chast' plana pomoshchi Rossii." *Novoe Russkoe Slovo*, 10 September 1941. <u>https://dlib-eastview-com.stanford.idm.oclc.org/browse/doc/56580761</u>

not exploit the present situation by covertly extending their military influence into the area."³³

In the postwar period, the Soviet state made significant efforts to maintain a foothold on Svalbard due to its strategic location in the North Atlantic, which the government thought could prove advantageous for future military use (notwithstanding the Svalbard Treaty).³⁴ The Soviet settlements on the archipelago were actively developed and financed by the government, and coal mining continued there. The mines were (and still are) run by the state–owned company Trust Arktikugol, even though the Soviet state had much more coal on the mainland, pointing to political motivations for maintaining a presence there more than a resource–oriented goal.

Despite macro-level tensions, relations between Russians and Norwegians on Svalbard were friendly.³⁵ The residents got together for concerts, visited each other's settlements, and competed in races and sports.³⁶ Some Norwegian residents were envious of the conditions in the Soviet settlements, particularly Pyramiden, which was designed to look like a Soviet utopia, and was well-stocked with food, farm animals and a greenhouse, and had a large school, gym and swimming pool.³⁷ Aside from serving as a strategic foothold, the Soviet settlements on Svalbard could demonstrate the power of the USSR and create a positive image for visitors, since the standard of living there was much higher than on the Russian mainland.³⁸

This idyllic Arctic utopia collapsed just a few years after the Soviet Union – as the Russian state stared into the abyss of economic ruin in the 1990s, companies that the government previously sustained went bankrupt en masse. The 1990s and early 2000s are remembered as a terrible time for the Russians on Svalbard. The miners' families were sent home in 1994, the mood in both settlements became increasingly grim. A continuous string of accidents at the Russian mines killed over 20 workers in eight years. The accidents were blamed on bad equipment and sloppiness. On August 29, 1996, a plane carrying 141 people, all Arktikugol employees, crashed into the Operafjellet mountain near Longyearbyen, killing everyone on board. The toll was equivalent to nearly ten

³⁵ Totland, 2018.

³⁶ Totland, 2018.

³⁷ Interview with Hein Bjerck conducted via phone by the author, May 2018.

³⁸ Gerlach, Julie & Kinossian, Nadir. (2016). "Cultural landscape of the Arctic: 'recycling' of Soviet imagery in the Russian settlement of Barentsburg, Svalbard (Norway)." *Polar Geography*, 39(1), 1-19.

³³ The British National Archives, FCO 33/3828, 1978.

³⁴ Pedersen, Torbjørn. "Norway's Rule on Svalbard: Tightening the Grip on the Arctic Islands." *The Polar Record* 45, no. 2 (04), 2009. 147-152, 151.

percent of Pyramiden's population at the time. "There was no end to the misery (in Pyramiden) in the 1990s," said Norwegian journalist Per Arne Totland.

In 1998, the decision was made to abandon Pyramiden, and the last coal was extracted from the mine on March 31. By the fall of that year, the town had been forsaken. Hein Bjerck, an archeology professor at the Norwegian University of Science and Technology, and former heritage officer on Svalbard, remembers the last days on Pyramiden, which has now been abandoned for a quarter of a century: "Nobody talked about leaving the place." Bjerck says. "Each time we came there were fewer and fewer people. Every time there was a boat or helicopter, people left with their small backpacks."³⁹

Yet the Russians were not prepared to withdraw from the islands entirely. Trust Arktikugol decided to abandon Pyramiden, but kept the second settlement of Barentsburg, which had more viable coal supplies and was accessible year-round. The second settlement faced its fair share of problems too. In the early aughts, there were food shortages in the settlements and the indoor plumbing in Barentsburg stopped working. People brought vegetables from the Russian mainland because there were none to be found in stores. The Svalbard governor made contingency plans in case people had to be rescued from the settlement if the heating failed.⁴⁰

In 2008 Pyramiden was reopened as a tourist attraction where visitors could see the Soviet Union frozen in time. Trust Arktikugol reported that in subsequent years, the tourism industry flourished, bringing in tens of thousands of people and generating more money than mining. In 2013 more than 40,000 tourists visited the Russian settlements, ⁴¹ but the COVID-19 pandemic and Russia's war on Ukraine have arguably changed this trajectory.⁴²

Tourism to the archipelago dropped due to coronavirus travel restrictions, and since Russia's full-scale invasion of Ukraine, many tour operators have suspended trips to the Russians settlements, further reducing tourist traffic. Meanwhile, Russia has continued to pressure Norway by using its presence on Svalbard, threatening to revisit the historic Barents Sea agreement of 2010 after Norwegian sanctions against Russia disrupted food deliveries to Barentsburg in summer 2022.⁴³ In recent years, Barentsburg's population has slowly dwindled, falling from about 500 people to approximately 250 as of

³⁹ Interview with Hein Bjerck Hein (Archeology professor, Norwegian University of Science and Technology) via phone, May 2018.

⁴⁰ Interview with Timofey Ragozhin, former tourism director of Trust Arktikugol, in Longyearbyen, October 13 2022.

⁴¹ Gerlach and Kinossian, 12.

⁴² Line Nagell Ylvisåker. "Tightening the reins on Svalbard." *High North News,* Oct 29 2021.

⁴³ Reuters, "Russia's speaker asks parliament to look at scrapping Norway sea treaty." July 5 2022.

winter 2023, partially due to the pandemic and also because many Ukrainians working in Barentsburg left when the war started.⁴⁴

Barring exceptional circumstances, it is likely that Russia will maintain operations on Svalbard, even if they are small-scale and symbolic. "We will bring in coal from Russia just to remain here," a Trust Arktikugol tour guide told us when I visited Pyramiden in summer 2018, explaining that Russian coal in Barentsburg may be entirely depleted in the coming decades. ⁴⁵ Trust Arktikugol has further announced that they plan to develop increased tourism and science infrastructure and collaborate with "friendly" countries on the archipelago, presumably meaning China. ⁴⁶ The Russian presence on the archipelago is changing again, but regardless of what the future brings, Russia will likely continue to leverage its position on Svalbard to put political pressure on Norway.

III. Resources and science on Svalbard

While the above account sounds entirely political, resources have always been important on Svalbard and are the basis and source of legitimacy for the Svalbard Treaty. From the time the islands were discovered in 1596 by Dutch explorer Willem Barentsz, to the present day, the Svalbard archipelago and its surrounding waters have been used for a variety of extractive purposes. In the early modern period, whaling near the islands was incredibly popular and lucrative, and was carried out to such a degree that whales in the area almost hunted to extinction. It took centuries for whale populations to stabilize after exploitation.⁴⁷ Archival documents from the late 19th century detail sailors and polar explorers stopping by the islands to hunt seals and birds in a plentiful ecosystem.⁴⁸

Aside from hunting, British archival documents from the early 20th century indicate a frenzy for claiming coal resources. Letters by members of the Scottish Spitsbergen Syndicate, a company which was trying to realize its own coal mining ambitions on Svalbard in the early 20th century, tersely recount the importance of the archipelago in the lead-up to the signing of the Treaty, both

⁴⁴ The Local, "NATO's 'Arctic Achilles heel' in Norway eyed up by Russia and China." June 23 2022.

⁴⁵ Trust Arktikugol tour in Pyramiden, June 2018.

⁴⁶ Thoman Nilsen, "Russia plans Svalbard science complex in cooperation with 'friendly states." *The Barents Observer*, 12 June 2023. <u>https://thebarentsobserver.com/en/arctic/2023/06/russia-plans-svalbard-science-complex-cooperation-friendly-states</u>

⁴⁷ Hugh Francis Anderson, "Off Svalbard, an encounter with the largest animal that has ever lived." *National Geographic*, 27 January 2022. <u>https://www.nationalgeographic.co.uk/animals/2022/01/it-shows-there-is-hope-off-svalbard-an-encounter-with-the-largest-animal-that-has-ever-lived</u>

⁴⁸ Scott Polar Research Institute Archives, University of Cambridge. GB 15, MS 434, pg 21-25.

amongst company leadership and to the British foreign office, and implore the British state to claim the territory for itself, stating that there was a significant threat by both the Norwegians and Russians, and that the potential to establish enterprises and even have a claim over Svalbard would evaporate if they did not act quickly:

"As your Lordship is aware, although Spitsbergen was annexed by Britain by royal authority in 1615, it is nevertheless as your Lordship has informed us, a "terra nullius" but we urge that it is both strategically and economically important to make good of British annexation. We believe that at least two other companies, namely, Norway and Russia, are as fully aware as High Majesty's Government of the strategic and commercial value of this group of islands, and that unless prompt action is taken. British interests will be seriously jeopardised. We may also call attention to the fact that Germany, prior to the war, and even at present time, was and is keenly interested in Spitsbergen...In 1912, a Russian Expedition under Government auspices was trying to acquire coal-bearing land in Spitsbergen, and Russians were again at Spitsbergen in 1914. Russia has also previously on these occasions shown marked activity in Spitsbergen. Russia's interest in coal in Spitsbergen is not without importance in relation to the Kola Railway...We trust therefore that His Majesty's Government will most earnestly consider both on behalf of the two most important British commercial concerns in Spitsbergen, and for wider Imperial reasons, the necessity of British annexation," wrote William Spiers Bruce, director of the Scottish Spitsbergen Syndicate, and F. L. Davis, director of the Northern Exploration Co (a competing coal mining company on Svalbard), in a joint letter to the foreign office in 1916.49

This collaboration between the Syndicate and its rival, the Northern Exploration Co, underscores the urgency and importance of the issue in their need to convince the British government to follow their advice – historically, the two companies did not get along, and internal letters between Syndicate staff indicate that they suspected the Exploration Co. leadership of collaborating with Swedish prospectors.⁵⁰ However, the Syndicate's repeated requests were shut down by the Foreign Office, much to their dismay.

The Arctic Coal Company, run by the Americans with John Longyear as president, was equally concerned about control of Svalbard, and was in constant competition with other prospectors. Correspondence between the

⁴⁹ SPRI, GB 15, MS 101/103, pg 1-3.

⁵⁰ SPRI, GB 15, MS 356/95, page not numbered.

company's general manager, Scott Turner, and Longyear as well as the company board, indicates that "trespassing" by foreigners on the Arctic Coal Co.'s land was an ongoing issue in the 1910s. Turner complained especially about Russian and German trespassers at the Company's claim area in Green Harbor, and sent out numerous letters of warning to other coal companies about staying away from their territory. The Company was also involved in legal action against another company at least once, in which the claim area's boundaries were disputed and had to be proven using company archival papers.⁵¹ These interactions point to the fact that actors on Svalbard in the early 20th century believed that the coal there was significantly valuable and worth competing for. The lack of legal regime in the region prior to the signing of the Svalbard Treaty made the companies' existence and territorial claims all the more precarious, as company managers and owners were not sure whether their claims would be honored under the terra nullius status, and how the status quo would change if a country such as Norway, Sweden or Russian annexed the islands.

Fisheries have also historically played a major role in and around Svalbard, and continue to do so to this day. A major controversy arose in the late 1970s and early 1980s with the passage of the United Nations Convention on the Law of the Sea (UNCLOS) in 1982, which explicitly states that coastal countries are entitled to an exclusive economic zone (EEZ) of 200 nautical miles to conduct economic activities. The passage of this law led Norway to lobby for an EEZ around Svalbard, which is home to some of Europe's most abundant fishing grounds, caused signatory states of the Svalbard Treaty to protest in response, and resulted in some of Norway's closest allies to push against its policy. The issue persists to this day and is a thorn in the side of Norway's otherwise good relationship with the European Union.⁵²

British archival documents from the late 1970s indicate that the foreign office was watching this issue closely and showed concern, along with other Western allies, about Norway's moves to claim exclusive rights to the continental shelf around Svalbard, and worse, that the explicit absence of Western power from the Svalbard region could result in domination of the area by the Soviet Union:

"As Parties to the Paris Treaty of 1920 on Svalbard, France and her principal Western partners are doubly concerned by the Norwegian theses that the archipelago has no continental shelf and that the Treaty does not apply to the shelf; first on the economic plane, since freedom to exploit the seabed and the underlying shelf would

⁵¹ Michigan Technological University, Longyear Spitsbergen Collection (MS-031), box 5 folders 1-10

⁵² Andreas Østhagen, "Fish, not oil at the heart of (future) Arctic resource conflicts." *Arctic Yearbook*, 2020. https://arcticyearbook.com/images/yearbook/2020/Scholarly-Papers/3_Osthagen.pdf, 5.

be denied to them, and second, on the strategic plane, since in common with Norway they have an interest in the safeguarding the security of the Arctic region...It is this aspect of the question which, in the final analysis, should concern the Western powers, since their absence from Svalbard's waters would make the area a Soviet domain in the long run to the extent that Norway herself did not have the necessary means of control," reads a paper from the British Foreign Office issued in 1976.⁵³

Most of Norway's Western allies have argued that it cannot claim Norwegian sovereignty over the waters off Svalbard because the Svalbard Treaty was written prior to UNCLOS, meaning that the situation does not fall under the conditions stipulated in the convention regarding exclusive offshore economic zones. While Norway asserts its control over the waters, which have plentiful fisheries and possible natural resources under the seabed, the European Union and the United States, among others, have protested that they do not support Norway's actions.

Norway ran into a lengthy conflict with the EU in 2015 after it asserted that EU fishing vessels could not catch snow crabs in the waters around Svalbard because the territory was part of the Norwegian continental shelf and the economic zone surrounding Svalbard. The situation escalated in subsequent years, as the EU tried to issue fishing licenses to varying nations, only to have Norway arrest the fishermen when they entered Norway's claimed territory. While Norway had little interest in catching the snow crabs, they wanted to defend the space in principle, and the Norwegian Minister of Fisheries, Per Sandberg, said they would never "give away a single crab!" Norway is largely isolated in this matter, as few countries support their claims regarding the Svalbard off-shore exclusive economic activities. Russia today likewise rejects Norway's claims, arguing that the waters around Svalbard should be divided between Russia and Norway.⁵⁴ The question of fisheries jurisdiction will be especially relevant in years to come, as the Barents Sea warms and fish and crab stocks move further into Svalbard waters, which Norway is trying to claim unilateral access to.

Scientific research is one of the most important factors that makes Svalbard a truly international community. The rate of coal mining on Svalbard has been progressively shrinking in recent decades, and commentators argue that research and tourism industries are vital to fill the gap that coal leaves behind and help Norway keep a foothold on the archipelago. There are four major research bases on the islands that host scientists and scholars from more than a dozen different countries. Svalbard is also home to the world's

 $^{^{53}}$ The British National Archives, FCO 33/3072, pg 1.

northernmost university.⁵⁵ A study showed that research visits to Svalbard totaled more than 61,000 person days in 2014, with Norwegian researchers making up approximately half of that time.⁵⁶

Ny-Ålesund is perhaps the best-known research station on Svalbard, and is also "the most international research community" on the islands.⁵⁷ The settlement started as a mining community in the early 20th century but was closed in 1962 after a major mining accident that killed 21 miners and became a major political scandal known as the Kings Bay Affair, which led to the resignation of the Norwegian prime minister's cabinet and brought down Norwegian three-term prime minister Einar Gerhardsen. The settlement was converted into a research base in the following decade.⁵⁸ Ten countries--Sweden, Germany, France, Italy, Japan, China, England, the Netherlands, South Korea, and India--all have long-term programs in Ny-Ålesund.

The University Center in Svalbard (UNIS) is the world's northernmost university and offers undergraduate, graduate and postgraduate courses in Arctic biology, geology, geophysics, and technology. UNIS was established in 1993 and is owned by the Norwegian Ministry of Education and Research. The UNIS community is highly international both in terms of students and faculty. According to the UNIS website, in 2019 the university had 743 students from 43 countries attending one or more courses. In total, the UNIS staff and their families make up one-quarter of the population of Longyearbyen, which was about 2,300 people as of 2019, which illustrates the importance of the research community on Svalbard.⁵⁹

While Norway has been successful in developing a massive research industry on Svalbard, which is augmented further by a flourishing tourism industry, the remarkable diversity of the population on Svalbard brings with it special problems, such as a diluted number of Norwegian citizens actually living on the archipelago. When mining operations were the main employer in Norway's settlements on Svalbard, most of the residents were Norwegian, but as the local economy has increasingly been diversified since the 1990s,

⁵⁵ Ole Arve Misund. (2017) "Academia in Svalbard: an increasingly important role for research and education as tools for Norwegian policy," *Polar Research*, 36:1.

⁵⁶ According to Law Insider, a person day is the amount of work done by one person each day (so 61,000 days of work were completed by an unknown number of people in 2014, in this case). Seen here: Person Days Definition, *Law Insider*, <u>https://www.lawinsider.com/dictionary/person-days</u>

⁵⁷ Svalbard Science Forum. "Ny-Ålesund." *Research Communities.* 22 March 2019. <u>https://</u> www.forskningsradet.no/en/svalbard-science-forum/svalbard-research-planning/research-communities/ny-Ålesund/

⁵⁸ Ny-Ålesund Research Station. "About the Research Station." Ny-Ålesund Research Station, 2021. <u>https://</u> nyÅlesundresearch.no/about-us/

⁵⁹ Svalbard Science Forum. "Longyearbyen." *Research Communities*, 2021. <u>https://www.forskningsradet.no/en/</u> svalbard-science-forum/svalbard-research-planning/research-communities/longyearbyen/

foreigners have been hired to the archipelago in large numbers because they can stay there visa-free. As of 2017, residents from over 40 different countries live on Svalbard, and the number of Norwegians there has dwindled to 48 percent of the total population, and it is expected that the downward trend will continue.⁶⁰

This demographic trend raises questions about the validity of Norway's claim to Svalbard, seeing as there are actually very few Norwegians there. However, attempts to address the problem result in what scholar Torbjørn Pedersen has called a "Longyearbyen dilemma": doing nothing to rectify the situation could lead to a reduced population on Svalbard overall, creating an opening for increased Russian intervention, but efforts to stimulate businesses, research, tourism, and fisheries could bring even more foreigners to the region and cause the Norwegian population to be diluted even further. On the plus side, having a more diverse population on Svalbard challenges Russia's claim to having special status on the archipelago.⁶¹ The question of maintaining a large population of Norwegians on Svalbard is no doubt important, but for now the consensus among most experts is that Svalbard remains firmly in Norwegian hands. While hundreds of international workers, students, researchers and visitors come to Svalbard every year, very few people dispute Norway's historical claim to the islands.

Conclusion: The future of Svalbard

While there is little dispute that Norway has sole control over Svalbard, the country is also facing obstacles on the archipelago. The mining operations there are unprofitable and are almost entirely defunct.⁶² Norway's last mine is expected to close in 2025. The massive tourism industry is highly lucrative, but brings with it significant challenges as well, especially when it comes to overpopulation in the Svalbard settlements and pollution, and it has been impacted by the COVID-19 pandemic over the last three years.

The Russian side is facing similar issues as the Norwegians. As coal mining is gradually reduced by Trust Arktikugol, the company is scrambling to improve tourism and research facilities to continue business there and find a

⁶⁰ Pedersen, Torbjorn. "The Politics of Presence: The Longyearbyen Dilemma." *Arctic Review on Law and Politics.* 8. 2017, 100.

⁶¹ Pedersen 2017, 103-104.

⁶² Avango, Dag. 2018. "Extracting the Future in Svalbard." In Competing Arctic Futures: Historical and Contemporary Perspectives, edited by Nina Wormbs, 47–71. London: Palgrave Macmillan.; Avango, Dag, and Peder Roberts. 2017. "Heritage, Conservation, and the Geopolitics of Svalbard: Writing the History of Arctic Environments." In Arctic Environmental Modernities: From the Age of Polar Exploration to the Era of the Anthropocene, edited by Lill-Ann Körber, Scott MacKenzie, and Anna Westerståhl Stenport, 125–43. London: Palgrave Macmillan.; Pedersen 2017: 96.

valid reason to remain on the archipelago, as it has been deemed politically too important to leave behind. Scholars Julie Gerlach and Nadir Kinossian also argue that abandoning Svalbard would appear as a Russian rejection of their Soviet predecessors, and would appear as a sign of weakness by the Russians. While Norway officially has sovereignty on the archipelago, the political situation there with Russia appears almost as a standoff, in which both parties are aware that their ventures are unprofitable, but both are afraid to take a step back from the region and give in to the other side lest the other party swoops in and takes over.⁶³

The question of climate change is an omnipresent one. The Arctic is warming four times faster than the rest of the world, and the islands are currently estimated to be the fastest warming place on Earth, as temperatures there have risen by four degrees Celsius since 1970.⁶⁴ Global warming is changing the archipelago's very geography. Melting glaciers are retreating, and it is estimated that Svalbard's largest island may split into two in the next 30 to 40 years as the Hornbreen–Hambergbreen glaciers melt. The glaciers have already retreated by more than 14 kilometers since the 19th century, so the distance between the Hornsund fjord and the Barents Sea, which are currently separated by the glaciers, is less than 6 kilometers. According to scientists, the Hornsund fjord is expanding by three square kilometers every year as the glaciers retreat.⁶⁵

We are also seeing unprecedented levels of permafrost thaw and glacial, as well as sea-ice melt, which will no doubt affect the future of life on the archipelago. Svalbard was previously thought to be an untouchable place, a giant freezer that would preserve the abandoned town of Pyramiden for decades to come as a relic of the Soviet past. Experts were so confident in Svalbard's frozen qualities that they figured it would be the perfect place to put the Global Seed Vault (a doomsday project that stores millions of seeds in case there is a need to regrow invaluable crops in future decades that was opened in 2008) and the Arctic World Archive (opened in 2017) to preserve the world's supply of crop seeds and digital media. But the same year that the World Archive opened, meltwater flooded the entryway of the Global Seed Vault, raising questions about the future of the vault and whether it is stable enough to house the invaluable seeds going forward (the seeds were untouched, but the entry to the vault was flooded and led experts to raise further alarms about

⁶³ Interview with Jorgen Holten Jorgensen conducted by the author in Oslo, May 2018.

⁶⁴ Fraser, Alex. "On the Front Lines of Climate Change in the World's Northernmost Town." Reuters, 3 September 2019. <u>https://www.reuters.com/article/us-climate-changesvalbard-widerimage-idUSKCN1VO19M</u>.

 ⁶⁵ Nilsen, Thomas. "Climate change is about to divide Norway's largest Arctic island in two." *The Barents Observer*.
16 September 2019. <u>https://thebarentsobserver.com/en/node/5848</u>

the sustainability of infrastructure in the far north). ⁶⁶ Three years later, Norway's last operating mine flooded, halting operations for several months.⁶⁷ Longyearbyen has also faced increasing rain, which led to an avalanche that killed two people and destroyed several homes in 2015, as well as numerous landslides.⁶⁸ These phenomena are intensified by thawing permafrost which makes the ground less stable. The threat of thawing permafrost, as well as landslides and avalanches, is also forcing the city to move its cemetery, which will be carried out in 2023.

Similarly, Svalbard's abandoned coal mines are turning into what some experts have called "zombie mines."⁶⁹ When abandoned mines are flooded with water, this creates a toxic cocktail of heavy metal-laden liquid packed with harmful substances such as lead, copper, arsenic and mercury, that can spread into the surrounding environment and into waterways, which is called acid mine drainage (AMD). As such, simply abandoning coal mines is not enough to curb the environmental impact of this industry, especially in a place seeing extensive thaw and melt like the Arctic, and the government on Svalbard must decide how to mitigate this issue imminently. To complicate the problem further, some of the mines are protected by a heritage law that prohibits people from touching historical items built prior to 1946. Furthermore, coal dust and other chemicals have been trapped in the ice and can be detected in local ecosystems in the former coal areas, including Longyearbyen, and presumably the Russian towns too.⁷⁰ Studies have found that AMD is leaking into Longyearbyen's drinking water supply, especially in the warmer months.⁷¹ It is clear that the fundamental physical structure of Svalbard is undergoing rapid, profound and unavoidable changes, which are already affecting affairs there, and will undoubtedly worsen in the future.

⁶⁸ Sydnes A.K., Sydnes M., Hamnevoll H., 2021. "Learning from crisis: the 2015 and 2019 avalanches in Longyearbyen." *Safety Science* 134.

⁶⁹ John Sandlos and Arn Keeling, "Living with Zombie Mines," *Seeing the Woods,* 6 March 2013. <u>https://seeingthewoods.org/2013/03/06/living-with-zombie-mines/</u>

⁷⁰ Bocking, Stephen. 2017. "Toxic Surprises: Contaminants and Knowledge in the Northern Environment." In Ice Blink: Navigating Northern Environmental History, edited by Stephen Bocking and Brad Martin, 421–64. Calgary: University of Calgary Press.; Kalinowska, Agnieszka, Malgorzata Szopinska, Stanislaw Chmiel et al. 2020. "Heavy Metals in a High Arctic Fiord and Their Introduction with the Wastewater: A Case Study of Adventfjorden-Longyearbyen System, Svalbard." Water 12, no. 3 (March): 794.

⁷¹ Aga Nowak, "The water supply to Longyearbyen: Gruvedalen." *Cold Region Science*. <u>https://www.coldregionscience.com/gruvedalen</u>

⁶⁶ Carrington, Damian. "Arctic stronghold of world's seeds flooded after permafrost melt." *The Guardian.* 19 May 2017. <u>https://www.theguardian.com/environment/2017/may/19/arctic-stronghold-of-worlds-seeds-flooded-after-permafrost-melts</u>

⁶⁷ Roberts, Lily. 2020. "Melting Glacier Floods Arctic Coal Mine, Highlighting Climate Change Paradox." GlacierHub (blog). The Earth Institute – Columbia University, September 18, 2020. <u>https://blogs.ei.columbia.edu/2020/09/18/</u> coal-mining-svalbard-glacier-flood/.

Perhaps even sooner than extensive climate change, the Russian war on Ukraine, as well as the COVID-19 pandemic, will likely leave a profound impact on the islands as well. Today, while the main Russian settlement of Barentsburg relies on coal, tourism has taken over in a major way. In the 2010s, Trust Arktikugol reported that the nascent tourism industry brought in tens of thousands of people to the Russian settlements and generated more money than coal mining. It is unclear what the future of Russian tourism on the archipelago will be, as the Svalbard tourism association voted in October 2022 to ban tour operators from travelling to the Russian settlements and to exclude Trust Arktikugol from the Svalbard Tourism website, though there are now rumors that Trust Arktikugol will attempt to open a tourism office in the heart of Longyearbyen, which will have major local and macro political implications for the archipelago.⁷²

Taking all these factors into account, it therefore seems that the greatest problems the Norwegian government on the archipelago faces today are both political and existential – the former involving an increasingly belligerent and unstable Russian presence, coordinated by a government which is currently at war, and the latter due to a rapidly evolving climate catastrophe which is already being felt in the Arctic.

As we have seen, the status quo on Svalbard has historically been, and still is today, nuanced and multivariate. While in the early 20th century Svalbard was a regional center of competition between numerous European countries, as well as the United States, soon enough just Norway and the Soviet Union were left. However, this is not to say that the other states disengaged from the archipelago entirely. Many states retained a presence there, and still do to this day, through scientific research and work in the tourism sector. Today, resources and politics on the archipelago are as important as ever, and in many ways, the European competition for resources in the region continues, as seen in the dispute with the snow crabs and Norway's EEZ claims. Svalbard's history is not solely a Norwegian or Soviet history, but a broader European and global history. It can be viewed through transnational, political, social, and environmental lenses. More than 100 years since the Svalbard Treaty was signed, affairs on the archipelago are still in flux, and face rapid changes today more than ever before.

⁷² Thomas Nilsen, "Visit Svalbard cuts ties with Russian tour company," *The Barents Observer*. October 16 2022. https://thebarentsobserver.com/en/2022/10/visit-svalbard-cuts-ties-russian-tourism-company; Per Annar Holm, "Vil apne matbutikk og selge pakketurer fra Longyearbyen," *Svalbardposten*, October 7 2022. <u>https://</u> www.svalbardposten.no/lokalstyret-lokalvalg-russki-dom/vil-apne-matbutikk-og-selge-pakketurer-fralongyearbyen/492832

Primary materials consulted

The British National Archives, London, United Kingdom

Eastview Soviet newspapers online archive

North Atlantic Treaty Organization online archive

Michigan Technological University archives, Houghton, MI, USA

The Scott Polar Research Institute, Cambridge University, United Kingdom

Works cited

- Arctic Portal. "The Svalbard Treaty," 1920. <u>http://library.arcticportal.org/1909/1/The_Svalbard_Treaty_9ssFy.pdf</u>
- Avango, Dag. 2018. "Extracting the Future in Svalbard." In Competing Arctic Futures: Historical and Contemporary Perspectives, edited by Nina Wormbs, 47-71. London: Palgrave Macmillan.
- Avango, Dag, and Peder Roberts. 2017. "Heritage, Conservation, and the Geopolitics of Svalbard: Writing the History of Arctic Environments." In Arctic Environmental Modernities: From the Age of Polar Exploration to the Era of the Anthropocene, edited by Lill-Ann Körber, Scott MacKenzie, and Anna Westerståhl Stenport, 125-43. London: Palgrave Macmillan.
- Berg, Roald. (2017). "Norway, Spitsbergen, and America, 1905–1920," Diplomacy and Statecraft, 28(1) 20–38, 21.

Bjerck, Hein. 2018. Interview conducted May 23, 2018 via phone.

- Bocking, Stephen. 2017. "Toxic Surprises: Contaminants and Knowledge in the Northern Environment." In Ice Blink: Navigating Northern Environmental History, edited by Stephen Bocking and Brad Martin, 421-64. Calgary: University of Calgary Press.
- Carrington, Damian. "Arctic stronghold of world's seeds flooded after permafrost melt." The Guardian. 19 May 2017. <u>https://</u> www.theguardian.com/environment/2017/may/19/arctic-strongholdof-worlds-seeds-flooded-after-permafrost-melts

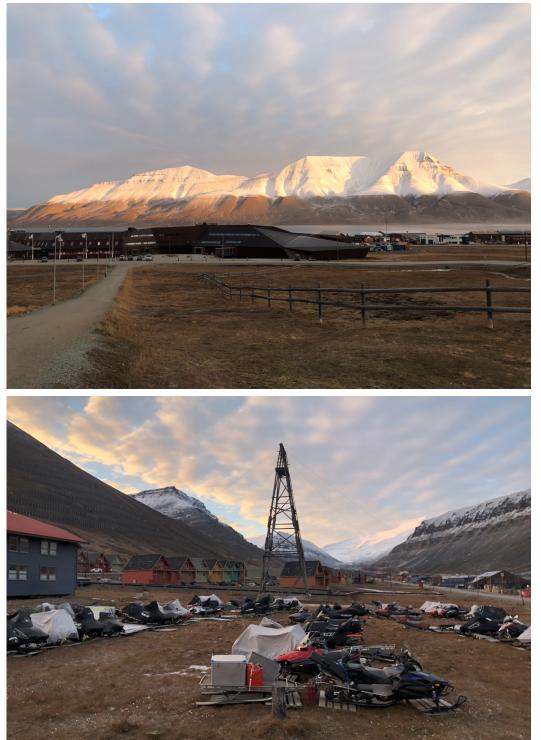
- Chernenko, M. and G. Agranat. "Shpitsbergen I Washingtonskoye otkroveniye." Literaturnaia Gazeta, 1 December 1951. <u>https://dlib-eastview-</u> com.stanford.idm.oclc.org/browse/doc/26782300
- Dadykina, Margarita M., Alexei V. Kraikovski, and Julia A. Lajus. 2015. "Hunting Activities of Russian Pomors on Spitsbergen in the 18th Century: New Evidences in Transnational Perspective." HSE Working Papers.
- Francis Anderson, Hugh. "Off Svalbard, an encounter with the largest animal that has ever lived." National Geographic, 27 January 2022.<u>https://</u> www.nationalgeographic.co.uk/animals/2022/01/it-shows-there-ishope-off-svalbard-an-encounter-with-the-largest-animal-that-hasever-lived
- Fraser, Alex. "On the Front Lines of Climate Change in the World's Northernmost Town." Reuters, 3 September 2019. <u>https://</u> www.reuters.com/article/us-climate-changesvalbard-widerimageidUSKCN1VO19M.
- Gerlach, Julie & Kinossian, Nadir. 2016. "Cultural landscape of the Arctic: 'recycling' of Soviet imagery in the Russian settlement of Barentsburg, Svalbard (Norway)." Polar Geography, 39(1), 1–19.
- Gjorv, Gunhild Hoogensen, Bazely, Dawn R., Goloviznina, Marina, Tanentzap, Andrew J. 2014. Environmental and Human Security in the Arctic. New York: Routledge.
- Holtsmark, Sven. 1993. "A Soviet Grab for the High North? USSR, Svalbard, and Northern Norway 1920–1953." Forvarstudier. Norwegian Institute for Defense Studies. Issue 7.
- Holtsmark, Sven. 2018. Interview conducted on June 19, 2018 at the Institute for Defense Studies, Oslo, Norway.
- Honneland, Geir. 2016. Russia and the Arctic: Environment, identity, and foreign policy. London: I.B. Tauris & Co. Ltd.
- Jorgensen, Jorgen Holten. 2018. Interview conducted on May 25, 2018 in Oslo, Norway.
- Kalinowska, Agnieszka, Malgorzata Szopinska, Stanislaw Chmiel et al. 2020. "Heavy Metals in a High Arctic Fiord and Their Introduction with the

Wastewater: A Case Study of Adventfjorden-Longyearbyen System, Svalbard." Water 12, no. 3 (March): 794.

- Misund, Ole Arve. (2017) "Academia in Svalbard: an increasingly important role for research and education as tools for Norwegian policy," Polar Research, 36:1.
- Morris, James. "What life has been like on a European island with zero COVID cases." Yahoo Sports, 22 December 2020.<u>https://sports.yahoo.com/</u> svalbard-norway-zero-coronavirus-cases-151834469.<u>html?</u> guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&gu ce_referrer_sig=AQAAAMCCHWYPgdg08m_TUq8V5avfvriCF9AUimZp2y_2 eEcEUyAJD2OXbFfsIK7m7Uwq3RWDzB4SEabuAS42CKxiyWyVn6j3_ByqckpVeQn5hmkzKZEEAhjoq6BbrSrpxDO9Syd1eG9iysSTZNO6Eo4KyjOHhQuEOWR4 uxusQpTZuM
- Nilsen, Thomas. "Climate change is about to divide Norway's largest Arctic island in two." The Barents Observer. 16 September 2019. <u>https://</u> <u>thebarentsobserver.com/en/node/5848</u>
- Novoe Russkoe Slovo, "Napadeniye na Shpitsbergen, chast' plana pomoshchi Rossii." Novoe Russkoe Slovo, 10 September 1941. <u>https://dlib-</u> <u>eastview-com.stanford.idm.oclc.org/browse/doc/56580761</u>
- Ny-Ålesund Research Station. "About the Research Station." Ny-Ålesund Research Station, 2021. <u>https://nyÅlesundresearch.no/about-us/</u>
- Ogonek, "Sovetskaia colonia na Shpitsbergene." Ogonek, 22 April 1935. https://dlib-eastview-com.stanford.idm.oclc.org/browse/book/read/ 82376/start?
- Østhagen, Andreas. "Fish, not oil at the heart of (future) Arctic resource conflicts." Arctic Yearbook, 2020. <u>https://arcticyearbook.com/images/</u> yearbook/2020/Scholarly-Papers/3_Osthagen.pdf
- Pedersen, Torbjorn. "The Dynamics of Svalbard Diplomacy." Diplomacy and Statecraft. 19. 2008.
- Pedersen, Torbjorn. 2009. "Norway's rule on Svalbard: tightening the grip on the Arctic islands." Polar Record, 45(233), 147–152.
- Pedersen, Torbjorn. "The Politics of Presence: The Longyearbyen Dilemma." Arctic Review on Law and Politics. 8. 2017.

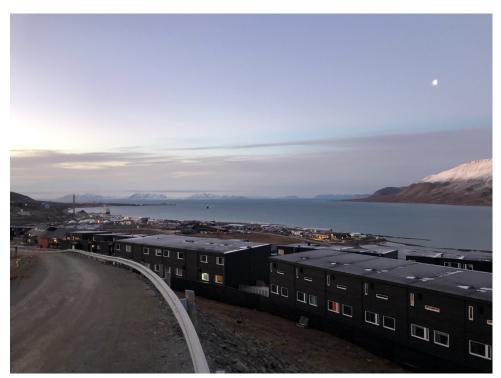
- Reuters. "Norway to close its last Arctic coal mine in 2023." Reuters, 30 September 2021. <u>https://www.reuters.com/business/energy/norwayclose-its-last-arctic-coal-mine-2023-2021-09-30/</u> #:~:text=OSLO%2C%20Sept%2030%20(Reuters),ending%20120%20years%2 <u>0of%20exploitation</u>
- Roberts, Lily. 2020. "Melting Glacier Floods Arctic Coal Mine, Highlighting Climate Change Paradox." GlacierHub (blog). The Earth Institute – Columbia University, September 18, 2020. <u>https://</u> blogs.ei.columbia.edu/2020/09/18/coal-mining-svalbard-glacier-flood/
- Sandlos, John, and Arn Keeling, "Living with Zombie Mines," Seeing the Woods, 6 March 2013. <u>https://seeingthewoods.org/2013/03/06/living-with-</u> <u>zombie-mines/</u>
- Spring, Ulrike. (2020). "Cruise Tourists in Spitsbergen Around 1900: Between Observation and Transformation". Nordlit, no. 45 (February):39-55.
- Svalbard Science Forum. "Longyearbyen." Research Communities, 2021. <u>https://www.forskningsradet.no/en/svalbard-science-forum/svalbard-research-planning/research-communities/longyearbyen/</u>
- The Svalbard Museum, "Mining Communities." The Svalbard Museum, 2021. https://svalbardmuseum.no/en/kultur-og-historie/gruvesamfunn/
- The University Centre on Svalbard. "About UNIS," The University Centre on Svalbard, 2021. https://www.unis.no/about-unis/
- Totland, Per Arne. 2018. Interview conducted on June 20, 2018 in Oslo, Norway.
- Trust Arktikugol. 2018. Tour on May 28, 2018 in Pyramiden, Svalbard, Norway.
- Veselov, Alexander. 2019. Interview conducted on March 5, 2019 in Moscow, Russia.

Svalbard today



The University Center in Svalbard (UNIS). In the background is the Hjiorthfjellet Mountain, in the foreground (inside the fenced area) is a former German gun emplacement from WWII which is protected by a heritage law (photo by author, October 2022)

A view into the Gruvedalen (mine valley) which is part of Longyearbyen. Some of the rainbow houses at the left were destroyed by an avalanche in 2015. (photo by author, October 2022)

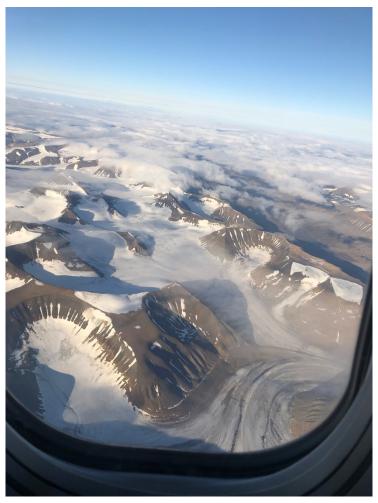


Top: A view over Longyearbyen (residential district and port area) and the Adventfjord (photo by author, October 2022)

Bottom left: acid mine drainage (heavy metals runoff from mines in the Gruvedalen) seen in central Longyearbyen. The building to the left is a school (photo by author, July 2022)

Bottom right: Mountains and glaciers in the Svalbard landscape, seen from a plane just after takeoff from Longyearbyen (photo by author, July 2022)





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Top: The northernmost Lenin statue in the world in the abandoned town of Pyramiden (photo by author, June 2018)

Bottom: The secondnorthernmost Lenin statue in the world in Barentsburg. The sign behind the statue says "Our goal is Communism!". The orange and blue buildings are residential complexes. Out of the frame to the left is the Russian consulate on Svalbard. (photo by author, July 2022)

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