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# Chapter 11

**Tracks across the Tundra: Making a Living from Nature in the Borderland of the Russian Northwest** *Urban Wråkberg and Peter Haugseth* 

## Introduction

This chapter explores the environmental history of the Norwegian-Russian borderland in the European subarctic, with an emphasis on sites and towns in Murmansk region (oblast'), the northwesternmost province of Russia. On the Norwegian side, it faces Finnmark County. Both counties are situated along the northern coast of Fennoscandia and the Kola Peninsula. In particular, the western part of this coast has many branching fjords opening on the Barents Sea, the European part of the Arctic Ocean. Taiga covers the southern part of the region, while the land in the north is slightly mountainous and consists largely of tundra.

The city of Murmansk is situated inside the Kola Fjord. Adjacent to it is the naval base, Severomorsk, the home port of the Russian Northern Fleet. On the coast of the Murmansk region are several closed towns around bases for nuclear submarines built during the Cold War that are of continued strategic significance. The western part of Murmansk region forms Russia's northwestern military flank. Norway has been a NATO member state since the organization's 1949 inception. The Russian Northwest is sparsely populated, but even after losing many of its inhabitants during Soviet times, its main city, Murmansk, remains the world's largest population center north of the Arctic Circle. The Kola Peninsula forms Murmansk region's eastern part, with coastlines to the east and south facing the White Sea. Across that sea is Arkhangel'sk—the city and the county—and from there the arctic coast of Russia, with its Northern Sea Route, continues all the way to the Bering Strait and the Pacific.

The Kola Peninsula is home to East Sami Indigenous peoples. Today, their centers of culture and tourism are in the Lovozero region of Murmansk region. Along the White Sea coast of the peninsula are small hamlets, such as Umba, which were originally the homes of the Pomors, Old Believers who retreated to the coasts on the northern rim of Novgorod to make a living from fishing and hunting and extended their livelihood in the late eighteenth century to the high arctic islands of Spitsbergen, present-day Svalbard.<sup>1</sup>

The Western landscape concept is of little use in this region, unless one defines landscape very broadly to include also Indigenous traditional knowledge and an animistic view on nature— keeping in mind the modernized means of travel and communication used in contemporary Sami reindeer herding and fishing. But is it relevant to speak of a non-native subarctic landscape? The history of the subarctic tundra region of Finnmark County and on the Kola Peninsula has continuously been shaped in the minds and actions of its explorers, distant rulers, bailiffs, missionaries, scientists, settlers, and tourists. Since time immemorial, the land has served the East Sami as grounds for hunting and reindeer husbandry. Due to its harsh climate, it has never been enclosed by southerners for forestry and agriculture. To the senses of average contemporary visitors, there is no continuity in the traces of human activity. The Anthropocene manifests itself only in human tracks across the tundra, in dispersed ruins after human endeavors, striving towns, and environmental hot spots. Those who left the tracks all sought something from the tundra, whether to create a socialist dream come true or to gain a modern living from its rare and valuable minerals. Everyone here is still "living from nature" in a borderscape with few but important human signs. The environmental history of the Russian northwest follows a pattern

familiar from other parts of the High North of coevolving with economic, diplomatic, and geopolitical history; this has manifested itself in often sudden local impact of grand plans conceived far south.<sup>2</sup> We will present instances of this pattern in the following.

About 90 percent of all humans living in the subarctic today are non-Indigenous, and this chapter will focus on them as both settlers of and visitors to the Russian northwest.<sup>3</sup> The tundra will be seen as a flexible space, varying in its meanings with the culture and perceptions of its visitors and settlers, Indigenous but today overwhelmingly non-native. Thematizing the social and historical variation in interests and worldviews among the people making tracks on the tundra is necessary in writing its environmental history. What inspired or forced anyone not born there to try to make a living on the tundra? What attracts tourists to the Euroarctic today? What do they and the operators of their tours make out of the state of the environment in the region?

To address this, a historical overview of this ethnically and politically complex region is offered. One of our ambitions, relating to environmental history and issues of land use, is to question some of the evaluations that have been made regarding Soviet and more recent industry in the Russian northwest. The history of Russian industrialization will be discussed for a period after the eighteenth-century part of that subject, which Catherine Evtuhov treats in an earlier chapter of this book. We present our discussion in the form of a travel narrative that will relate field observations made on several visits to sites along the main road across the borderland from the Norwegian border town of Kirkenes to Murmansk. As longtime residents of Kirkenes, we draw on our previous research on Murmansk region and the so-called twin town collaboration between Kirkenes and Nikel' throughout this chapter.<sup>4</sup> This includes participants' observations from many travels with small groups of visitors in the Norwegian-Russian borderland. In this chapter, we also use transcripts of interviews made with East Finnmark and Murmansk tourist operators and museum curators in 2018–20, before and after the pandemic. By drawing on experiences from living in this part of the world and by comparing developments on each side of the Norwegian-Russian border, we apply a similar approach to that used by Bathsheba Demuth in her broad contextual and place-oriented study of Beringia and its peoples' parallel and also differing trajectories under Russian imperial and later Soviet dirigisme and American frontier capitalism on its arctic Pacific periphery.<sup>5</sup>

What characterizes the differences found when comparing Soviet industrialization to similar processes elsewhere in the world? Traveling slowly across the tundra makes seeing the tracks of different humans possible. Environmental traces of human activity viewed over longer periods of time mirror diverse worldviews, value systems, and economic goals. Scaling out in a geographical sense is necessary to explain the impact of geo-economic power vectors up north. Southern events can hamper vital cross-border trade at the local level, and sometimes they have brought war up north. Centralist policies have often spurred northern in-migration by creating favorable opportunities for new waves of settlers.

<Insert Figure 11.1 here>

Figure 11.1. Tourists and a Norwegian border guard at the three-nation cairn between Norway, Russia, and Finland in northernmost Europe. In the background is the clearing along the Norwegian-Russian border. 2011. © Urban Wråkberg.

## Kola and Its Borderland—A Russian Miniature?

Given its location in the Euroarctic periphery, with a globally integrated regional history and rich in natural resources, the Murmansk region exhibits several traits of the environmental history that seem to mirror or even precede those of Russia as a whole. The geological discoveries in the 1920s and 1930s of the region's rich mineral resources and the coming of industrialization, first under communist technocratic leadership and then the continued post-Soviet domination by strong extraregional state leadership and oligarchs, produced a continuity in industrialization and planned demographic movements that was interrupted mainly by World War II and the socioeconomic turmoil after the fall of the Soviet Union.

Looking further back in time, the accord in 1826 on the land border between Norway and Russia produced a segment of borderline that was, then and now, the last unsettled part of the Norwegian national border. In Russia, however, the same stretch forms the oldest piece of its national border still in the place it was originally drawn. The delimitation line between the Norwegian and Russian exclusive economic zones on the seabed of the Barents Sea, in contrast, was agreed upon only in 2010 after forty years of negotiations.<sup>6</sup>

Despite their northern remoteness, the environs of the Norwegian-Russian border have long been susceptible to European and global tensions. During the Russian revolution and its aftermath, several revolutionaries, White Guard interventionists, and many refugees were shipped into and out of Russia via the fishing port and the administrative center of Vardø on the eastern tip of the Varanger Peninsula in Finnmark County.

After the end of the NEP policy, the Communist Party tried to replace the agricultural leaders and industrialists that Russia lost after dekulakization and deportations with a technocracy of scientists and technologists shaped by academics trained at prerevolutionary Russian universities. This became crucial to developments in the Russian northwest. Another important factor in its development was the improvements made to the railway connecting Murmansk to the rest of Russia via the important Leningrad region.<sup>7</sup> The system of forced labor played a significant role in establishing the mining and metallurgical industry on the Kola Peninsula, as did the pioneer workers, Komsomol brigades, and scientists who were drafted by communism. The latter group included many women and was led by the geochemist Alexander Fersman, a Moscow disciple of Vladimir I. Vernadskii. These mineralogists found ores that proved of critical importance to the Soviet Union. They assessed their samples in labs that were built on-site in the north, and named many minerals that were new to science. Due to its strategic value, this work seems to have been conducted in relative safety away from purges going on elsewhere in Russia.<sup>8</sup>

The mining town of Kirovsk, south of Murmansk, was named after the Bolshevik Sergei Kirov, who led attempts under the first Five-Year Plan to expand the manufacturing and heavy industry of the Leningrad region; for this, besides other raw materials and human effort, metals were needed. The railway to Murmansk and the new resources of the Kola region became important given the Soviet Union's inability to trade globally for most commodities. Kirov is believed to have been mostly supportive of Stalin, but was assassinated nonetheless in 1934. In 1929 he succinctly summed up the rationale for developments in the Russian Northwest:

We have decided not only to catch up with the capitalist countries, but to overtake them. ... High rates for industrialization are dictated also by internal conditions. If we seriously want to furnish agriculture with the basis of modern technology, it is necessary to speed up industrialization. We cannot make a pause no matter how difficult it may be and what sacrifices are needed from the working class and peasants. We have to pursue the fastest, highest possible tempo under our conditions.<sup>9</sup> Adjacent to Kirovsk is the town of Apatity, which carries the name of one of the phosphorus-containing minerals found in the Khibiny Mountains in 1921. These deposits became strategically vital to the Soviet Union. Phosphate fertilizers were highly prized on the international market at the time, and Russia's access to it was hampered after the revolution and war of intervention. Fertilizers were in dire need as the Soviets attempted to modernize Russia's agricultural sector in order to free labor from rural areas for jobs in new industries, and hopefully to achieve national self-sufficiency in food production. By exploiting the nepheline and apatite mineral resources of the Kola Peninsula, the Soviet Union managed to become a net exporter of phosphate. In the following years and by 1937, many more deposits of useful metal minerals were found situated accessibly along the Kola Railway.<sup>10</sup>

In the 1940s, grand plans of another kind brought new geopolitical power vectors to bear on the Euroarctic. The outbreak of World War II entailed the Nazi German occupation of Norway in 1940. As in the initial forced industrialization of Kola mining, the harsh climate and rough environment of the roadless tundra put a brake on actions in the High North. Striking from Kirkenes in Norway, Hitler believed that Murmansk would be taken in a matter of weeks. However, the surrounding tundra is characterized by undulating small mountains, often with steep cliffs in several directions. Interfolded by streams, ravines, swamps, and often elongated lakes, it is very different from the drained agricultural plains of Belgium where the blitzkrieg was first applied and the grounds suited for tank warfare in the so-called "Eurasian funnel" in Belorussia, Poland, and Ukraine.<sup>11</sup> Because of Kirkenes's location on Russia's border and the capacity of its harbor for larger tonnage as part of the operations of its iron mine, it was turned into a supply base and garrison town of a German-Austrian Mountain Division stationed there. It added fifty thousand people in excess of the Norwegian population in Kirkenes, which was then some three thousand people. Many barracks were erected, but every local family had to house one or more of the occupier's personnel in their homes, a situation completely different from the rest of occupied Norway. The front was stuck along the Litza River on the Russian side of the border. The mines of Pechenga were on German-held territory and provided enriched nickel ore, which was shipped south to steelworks where it was critically needed to support the Nazi war effort.

Offensives were launched in both directions without a breakthrough. In addition to the casualties of combat, the severe wartime winters took many lives. After some years the Mountain Division received unique orders allowing it to make an orderly retreat westward, and in the fall of 1944 the Red Army managed to force the occupiers off Russian territory and pursued them some tens of kilometers into Norway. Kirkenes became the first Norwegian town to be liberated from the Nazi German occupation on 24–25 October. This event has since been celebrated in Kirkenes in an annual Norwegian-Russian ceremony at the town's war memorial.<sup>12</sup> Most Red Army units were promptly transferred south to fight in the battle of Berlin, and in September 1945 the remaining Soviet troops were all called back to Russia. Murmansk suffered many German air raids throughout the war, and Kirkenes was almost leveled to the ground in Allied air attacks. Houses and villages to its west in Finnmark County were systematically destroyed in the scorched-earth practice of the retreating Mountain Division. It went into camp at Lyngen near Tromsø and escaped further action until the end of the war.<sup>13</sup>

Most minerals of commercial value in the Murmansk region are also mined elsewhere in Russia. Nevertheless, many of those found before and after World War II on the Kola Peninsula are of continued or growing interest. The former includes zirconium ores, copper-nickel sulfide ores, and iron ore. The Kola Peninsula also holds deposits of rare earth elements (REE) and rare

metals that are needed in the Green Shift of Europe's energy production, in everyone's smartphones, and in many military applications. Given the organizational and economic transitions after 1989, in which many jobs were lost, mining and metallurgy are still the dominant sources of income for individuals and local governments in Murmansk Oblast'.

It was the size of the renewed Soviet investments in mining across the border that motivated Norwegian policymakers to ask the United States for the transfer of mining technology and the Marshall funding necessary to reopen the iron mine in Kirkenes after the war.<sup>14</sup> During the Cold War and with Norway's entry into NATO in 1949, the borderland was split, and the border was almost completely sealed. Norway's side of the borderland was largely demilitarized except for the lightly armed border guards and NATO intelligence personnel stationed 24/7 in East Finnmark to run radar installations, conduct military surveillance, and guard against communist infiltration of the local population.<sup>15</sup> In his pivotal speech held in Murmansk on 1 October 1987, Mikhail Gorbachev presented new visions for arctic peace and openness in research, at the same time pointing to business partnership and cultural cross-border collaboration. This inspired the inauguration in 1993 of the Barents Euroarctic Region, which came to include most of the Russian northwestern oblasts and republics along with the northern counties of Norway, Sweden, and Finland.<sup>16</sup>

#### Sites and Experiences along the Road to Murmansk

The environmental history of Murmansk region is all-pervading, manifest in traces on the ground, in slag heaps from mines and smelters, and in hills deprived of their natural vegetation of mountain birch, which have succumbed to dust and sulfur dioxide emissions from nearby metallurgical plants. "Nature" and the geographical concept of "space" are hard to define but central to Western field experiences. "Tundra" is a scientific concept with a reductionistic definition that makes it clear and applicable within its cultural realm. Nevertheless, the tundra strikes the eyes of many unguided, lay travelers as existing in what seems to be its natural state. Human-built structures of industrial, military, and civilian types appear on the more populated Russian side of the borderland in all conditions, from brand new and lavish to ruins. By human engagement nature is turned into environment and space into particular places, where the flow of time and the various cultures of the Indigenous and later settlers and travelers are crucial as they find their way into collective memory, media documentaries, and written accounts. Focusing travelers across borders, including tourists, we follow and emphasize the meanings of the tracks on the tundra, along old or new routes. Our approach is place-bound while contextual and historical; we talk with, interview, and participate in the life of the region under our study. Thus our approach is akin to that applied in David Moon and his colleagues' essays on Russian environmental history in their recent book Place and Nature.17

What registers in the gaze of any traveler, tourist, or professional on duty is produced in the mind of the beholder. We have not found any "neo-animistic" powers in man-made structures or nature "itself" that might teach travelers things they had no previous insight into— or were not told by others to observe during the trip.<sup>18</sup> Travel guides and/or conversations during a journey or at a site visit will direct perceptions toward or away from anything. Soviet-built structures can constitute a venerable heritage of a harmonious past in the eyes of some, while to others they are shocking scars on the face of an earth that should have been spared any but Indigenous human land use. This is not what the material object will somehow unexpectedly tell you but what you see based on your background reading, including perhaps some version of the history of the places you visit, what you think you know from school or the media, and/or what

you are instructed to see for yourself on-site by your formal/informal guide. Such social constructions can be deduced from case studies and relate to wider cultural contexts.<sup>19</sup>

After spending time slowly passing the routines at the only custom station between Norway and Russia at Storskog, not far from Kirkenes, you will reach its closest Russian neighbor, the Norilsk Nickel (Nornickel) company town, named Nikel' in Russian, after half an hour's drive. From the Norwegian and Finnish perspectives, the soot-and-sulfur-dioxide-emitting nickel matte smelter in Nikel' was long the most notorious—beside the old-tech Kola Nuclear Power Plant in Poliarnye Zori—environmental hot spot in Murmansk region. The smelter, which can be seen from the Norwegian side, held a premier place in many negotiations between Russian and Scandinavian representatives in which the Scandinavians offered large subsidies to sponsor the modernization of the run-down plant, based as it was on outdated post–World War II metallurgical engineering with no modern exhaust treatment. Worst of all were conditions inside the plant, where workers were exposed to incredible amounts of heat, dust, and smoke on a daily basis.<sup>20</sup>

Since sulfur dioxide is straightforward and relatively inexpensive to measure by an automatic air monitoring station, and metallurgical dust can be sampled from fresh snow and put through standard mineralogical analysis, the Pechenga Nickel controversy produced publishable science-based alarmism in line with anti-Russian sentiments held by many in Scandinavia and thus became a recurring item in local and sometimes national news. This was seldom combined in the media with attempts to ponder the differences between Norway, with a strong state economy based on taxation of its oil and gas export and political traditions of environmentalism, with the Soviet focus on production goals followed by the turmoil of the 1990s and raw oligarch capitalism. As one Russian colleague stated to us at a symposium in Apatity not so long ago when the unsustainability of Russian mining and fossil hydrocarbon extraction had yet again been pointed out by a Western visitor: "If Russia is not to produce metals and fossil fuels, then what is its people supposed to make a living from?" Since few people in Russia, as elsewhere, can afford to go against economic realities, and given the present situation of major outmigration from the Russian Arctic, Scandinavians came to view the smoke-spewing Nikel' smelter pessimistically. However-and in our experience this was well-known by citizens of Kirkenes from colleagues and friends in Nikel'-for many years Norilsk Nickel executives consistently stated that because the Nikel' plant was to be closed, it would not be updated technologically. The plant was shut down on 23 December 2020.

Will the citizens of Nikel' leave and allow the town to fall to ruins? According to local people on both sides of the border, this is unlikely to happen to a center of population that is close to Russia's national border. Norwegian governments have, since before the opening of the iron mine in Kirkenes in 1906, followed a doctrine of keeping villages in Eastern Finnmark viable and populated for geopolitical reasons, among others, to demonstrate territorial ownership.<sup>21</sup> This line of thinking shows up from time to time in arctic policymaking, not least in Canada and Greenland, which is reminiscent of the colonial idea that acquiring and upholding territorial sovereignty can be based on the principle of effective occupation.

Another parallel in Russian-Norwegian governance can be found between Nornickel and the major Norwegian oil and gas corporation Equinor (formerly Statoil) in the ways they relate to their national governments. In Norway, a confidential state-private enterprise dialogue is publicly understood to be ongoing at high levels regarding the Equinor firm's impact on national and regional socioeconomic development.<sup>22</sup> Oligarch Vladimir Potanin, the major shareholder of Nornickel, addresses similar issues based on an understanding with Russia's federal government

in Moscow. As part of Nornickel's social responsibility policies, the measures intended for Nikel' seem not to be different from those of the place-renewal program going on in Kirkenes after the closure of its iron mine in 2015. A development project center was established in Nikel', called the Second School. As stated on their web pages, it functions as a social and cultural space transformer through economic diversification projects that facilitate small and medium-sized enterprises (SME). It also aims to integrate town space renewals with tourism development to promote the life quality of the local population as part of forming a new image of Nikel' and the Pechenga Municipality. The founders of the Second School are the Public Education Administration of Pechenga Region and the joint-stock company Kola Mining and Metallurgical Corporation, a branch of Nornickel.<sup>23</sup> Its Norwegian counterpart Sør-Varanger Utvikling opened in 2016, directing a fixed sum of Norwegian state funding to local and regional entrepreneurs based on their applications for project funding. It has no English web pages, and in contrast to the Second School private-public initiative, it has a limited time for its operations that is soon to end.

## Looking at the Dark

Vegetation is expected to return to the tundra and mountains around Nikel', while its heaps of metallurgical slag will leak heavy metals into nearby lakes and streams for the foreseeable future. In the socioeconomic realm, mining will not leave the Pechenga region. No one forecasts that the population of Nikel' will remain the same, but the better part of its housing will remain useful for workers engaged in the mining of nickel and copper within commuting distance in the Pechenga and Monchegorsk regions. Nornickel already sponsors a visitor's center in Nikel' that serves as a gateway to the region's recreational attractions, including downhill skiing in the Khibiny Mountains and birdwatching in the nearby Pasvik River Valley Nature Reserve. The visitor's center also exhibits the region's industrial history and religious interest, being a border zone between the Russian Orthodox and Norwegian Evangelical churches; nearby in Luostari is a large, recently reconstructed monastery. Some sites, one on Norwegian territory, are regularly visited by Russian pilgrims. This cultural take on tourism is wider than what is usual among Norwegian tourist operators, who tend to feature nature-based outdoor experiences under rough field conditions in the hope of creating a lifetime fascination with pristine northern nature among the market segment they prefer: small groups of high-paying Norwegian or English-speaking customers.

Another group of borderland travelers to Nikel' consists of international artists and Western tourists with a fascination for the dark. Environmentally oriented artists have run field projects committed to so-called dark ecology, while some tourists have pursued a more established genre of dark tourism.<sup>24</sup> Tourists are drawn to the horrors of environmental destruction and are keen to witness it at close distance in and around Nikel', putting up selfies and photos of the terrible scenes they have witnessed on social media platforms. Some get their prejudice against Russia confirmed this way; others underestimate the moral implications of exporting environmental problems to faraway countries while accepting the common view of mining as perhaps necessary but "not in my backyard." The bedrock of the Kola Peninsula is part of the so-called Fennoscandian Shield, a geological formation richly endowed outside Russia with, for example, nickel, chromium, cobalt, vanadium, and rare earth elements. Acquiring a mining permit in Norway, Sweden, or Finland is a costly and drawn-out affair today, involving state and municipal agencies and repeated rounds of hearings on many levels of society, so very few new mines have been opened there over the last decades.

<Insert Figure 11.2 here>

<CAP>Figure 11.2. Borderland travelers observing the environmental degradation around Nikel'. Beyond the lake in the background is Norwegian territory. 2006. © Urban Wråkberg.</CAP>

Boyar Potanin's fiefdom, if it is reasonable to speak of it in that way, has been operational for decades, and thus it is sociopolitically and economically sustainable. Monchegorsk is the location of the largest metallurgical plant on the Kola Peninsula. A particular mine is, strictly speaking, never sustainable, while swings in world prices and technological development continuously alter the commercial size of any deposit within the geological bounds it is believed to have underground. Rare metals and rare earth elements are refined in complex processes that often produce environmentally harmful tailings. Most of the global consumption of cobalt and REEs is currently mined and refined in Africa and China, at places where fans of dark tourism would not be welcomed.

Commenting in the light of history, some scholars have concluded that the mining and metallurgical industry in the Murmansk region was built by a combination of gulag laborers, German POW slave labor, and incompetent leadership. "Poor planning, unskilled workforce, inefficient management, and insufficient knowledge of ore deposits" characterized its practice, according to Anatolijs Venovcevs, referring to Andy Bruno's research on Kola mining.<sup>25</sup> One reviewer of Bruno's work claims that Alexander Fersman held "psychopathic disregard for the laborers sent to Khibiny" and that some of his ideas on the relationship of humans to their material predicaments (which strikes the present writers as typical of views held by many intellectuals outside the Soviet Union at the time as well) "can be read as a homicidal obfuscation of real conflicts that Stalinist idealists simply chose to ignore."<sup>26</sup> To our knowledge, Bruno never states any of this in his 2016 book. Historians of science and technology would have limited interest in putting labels on past industrial practices based on their shortcomings in the eyes of the present. As Bernd Cyffka sums up based on his research on the history of Kola mining: "One should not judge too critically; there were (always) economic constraints in the Soviet Union and mistakes were also made by other regimes, and after all, today the issue is no longer about the mistakes of the past but how they should be put right."<sup>27</sup> Most environmental historians, however, remain very critical to the policies and practices of industrial development and resource extraction in the Russian subarctic and arctic regions.<sup>28</sup>

#### **Burdens and Benefits of Industrialization**

Looking beyond Cold War historiography, many people believed in communism under the Soviet Union. They became Komsomol northern pioneers for that reason, while some of their compatriots joined the same movement for other, more selfish reasons. After Stalin's death, the labor camps were closed on the Kola Peninsula. The bonus systems for northern workers and professionals offered during the late Soviet period included higher wages, state premium holidays in southern Soviet or Eastern Bloc resorts, and reserved rights for northern workers to return to relatively fine accommodations in a southern town after a comparatively early retirement. Among other factors, this explains why work in the subarctic was domestically appealing in late Soviet times.<sup>29</sup>

Looking at the earliest period of Kola industrial history, it is no defense of the hard labor conditions to ask for contextualization in the light of international circumstances, but it is relevant to view the forced process taking place on the Kola Peninsula as part of what many contemporary Soviet planners and interested observers in the West viewed as the belated and crucially needed industrialization of Russia. The massive societal change that industrialization caused in all nations exposed to it seems nowhere to have been a neat and well-planned process with few casualties, least of all in its British places of origin. It is possible that it was successfully directed top-down in Japan, but not in the Soviet Union. Nevertheless, only a few generations later, it is hard to find any capitalists, military experts, politicians, or members of the public who want to reverse the industrialization of their regions or nations.<sup>30</sup>

Some environmentally troubled sites in the Russian northwest would be too dark, even for hardcore enthusiasts of dark tourism. Few people would care to risk going to Andreev Bay, a fjord on the coast of Murmansk Russia, where spent submarine nuclear fuel and radiationcontaminated machine components have been kept since the Cold War in temporary storage inside derelict buildings. Permits to go there are only issued for high-level official visits and personnel engaged in cleanup operations. The restoration of the site has been ongoing since the 1990s and is a fair example of international joint work in pooling funding, knowledge, and stateof-the-art technology to handle a difficult situation. The first step included securing the site against terrorist actions. The work is now in the final stage of transferring the corroding materials to secure containers for further transport by Russian authorities to safe final deposits in the Urals. The risks of radioactive leakage into the Arctic Ocean from Andreev Bay are about to be eliminated.<sup>31</sup>

### <Insert Figure 11.3 here>

<CAP>Figure 11.3. Deteriorating storage containers for spent nuclear submarine fuel at Andreev Bay on the Kola Peninsula. Cleanup work is seen in front, and in the background are new buildings for the preparations for transit of the waste to a safer final deposit. 2015. Reproduced with the permission of Birgitte Wisur Olsen.</CAP>

People in the Norwegian and Russian borderlands keep potassium iodide pills at home so they can be prepared against exposure to airborne radioactive iodine if anything goes wrong at the graphite-moderated nuclear reactors at Poliarnye Zori. The plant has been upgraded and certified by relevant Russian authorities. It was originally a 1970s design with reactors of the kind that were operated at Chernobyl'. The cross-border connection between the North Norwegian and Russian electricity grids offers important backup and stability to the regional Norwegian grid, given its weak domestic supply from the southwest. This partnership is reported to work to everyone's satisfaction so long as it is not discussed in the media, boosted by a combination of hydropower and nuclear power from the Kola electric power system.<sup>32</sup>

#### Murmansk—Arctic City

The short trip of this chapter ends in Murmansk, a commercial and military port connecting Russia's western railroads to the Northern Sea Route and, via the North Atlantic, to the world's oceans. It is an ice-free, year-round open port well sheltered inside the large Kola Fjord with great scope for harbor area expansion. Murmansk has lost a large portion of its citizens since Soviet times, but with slightly over three hundred thousand inhabitants, it is still the world's largest city situated north of the Arctic Circle. The authors conducted interviews with Murmansk tourist operators and museum curators in 2018, which provided information that we have explored further by comparing with business ideas articulated in conversations in 2021 with Norwegian tourism developers engaged in Cross-Border Collaboration (CBC) programs<sup>33</sup> with major Russian operators. Of course, the COVID-19 lockdowns during this period shelved most plans but offered more time for building business alliances.

The closure of the smelter in Nikel' and the renewal of that town are seen as offering opportunities for innovations in international tourism and domestic short-term recreation. Downhill skiing is already established in the Khibiny Mountains on the Russian side; it is combined with other leisure activities at spa hotels, among others, in Kirovsk. Domestic tourists may access this region at low costs by the Russian railway system, making it possible to welcome visitors from moderate income levels in society. In any case, since the resourceful Nornickel enterprise is taking on the Pechenga renewal, major changes are now within the scope of the possible.

Tourism promoters on both sides of the border have ambitions to increase the volume of customers from neighboring countries. In Norway, operators have been complaining about red tape and nontransparent administrative obstacles for decades. Despite some progress in the negotiations to cut costs and speed up the process of issuing short-term visas for Europeans' entry to Russia from passenger ships calling at Murmansk Harbor, the Norwegian *Hurtigruten* coastal passenger line has failed to find a viable Russian-Norwegian business model that would include regular tours between Kirkenes and Murmansk, and cruises to the Arctic islands of Franz Josef Land.<sup>34</sup> The main group of Russians and Norwegians with visas to cross their border is not growing and mostly consists of regional people who cross for shopping and weekend vacationing.<sup>35</sup>

First-time Scandinavian visitors to Murmansk often go on guided city tours. Groups are often small enough for the tour guide to engage in dialogue and cater to individual interests. Conversations evolve around issues of everyday life in Murmansk, housing, costs of living, the labor market, social trends, politics, and town history, especially during the Soviet Union. Guides, some of whom are not only trained in English but also fluent in Norwegian, enjoy this greatly. They advise on shopping of every kind and on dining and clubbing. Nevertheless, this group of tourists is not currently growing, and it doesn't engage in nature-based recreation, given that there is at least one full-service skiing and spa hotel right outside the city. One of our informants pointed to the new silver lining of military careers in Russia and gave us striking examples from his circle of friends of incomes and benefit systems, including attractive apartments after a certain number of years of contracted service in Russia's armed forces. He hinted at his own plans to move to Norway for a job in the port and shipping service business.

A striking contrast to this state of affairs in 2018 was the rapidly growing Asian tourism business in and outside Murmansk. This new trend is indicative of the vastness of Russia. Scaling up from the narrative construct of this chapter of Murmansk Oblast' as Russia in miniature, its enormous land mass comes into view, forming a Eurasian land bridge. While visas are mandatory for entry into Russia for citizens of NATO member states like Norway and are time-consuming and relatively costly, nationals of several non-European countries need no visa to Russia for tourist visits of a normal duration. These countries include South Korea, Hong Kong, and Thailand, while visa routines for citizens of China and Vietnam are less unwieldy than for Europeans. Before the pandemic, there was a rise in the number of direct air routes to Moscow from destinations in Southeast Asia. Adding a direct flight from Moscow to Murmansk means no more than roughly two additional hours of travel. Dark environmental tourism makes no sense to Chinese visitors, who have plenty of heavy industry to visit at home if so inclined. It is nature that interests Asian tourists, winter and above all the northern lights. Murmansk tourist operators either engage with the new groups of Asian tourists directly or are referred in as local hosts for travels organized by firms in Moscow and St. Petersburg. This is a recent addition to the old ways of living from nature's resources in the subarctic periphery of northwest Russia.

## Conclusion

Tourism is one part of what shapes the environment and its history. This is manifested in the choices of attractions, enactments of truth, travel narratives, and photography that tourists carry out, facilitated by their operators. The cultural backgrounds of individuals and groups determine what nature and human constructs, such as the Soviet heritage, mean. There is a difference in meaning if the person smiling at a red Communist flag in a historical exhibition at the Murmansk Regional Museum is a pensioner from China or a European millennial.

While Murmansk region can provide examples of the regional impact of many national processes and events, certain other aspects of its environmental history appear only when scaling the model up to life-size. Differences in political trajectories between Russia and many of its small-state neighbors go a long way to explain contemporary contrasts in land use and environmental attitudes. There seems to be a difference between small, crowded European states and global powers (including non-European urbanized countries with vast territories, such as Argentina) in institutionalized understandings of land, distance, and space, which defines what anyone will prioritize when engaging with the natural environment in endeavors to make ends meet.

Memory of empire as a socioeconomic system is absent in Europe, or is identified with centralist EU policy ambitions and disliked by most people. In Russia, the Soviet version of empire still carries positive meaning, including among those in the younger generations who have communicated constructively with older relatives. Given the oppressive reality of the Soviet system, the idea of an inclusive mega-nation where ethnic differences were cherished in politics and put on display in art to enrich all citizens stands in stark contrast to the contemporary Western abhorrence of cultural appropriation, identity politics, and the neoliberal socioeconomic reality that most people face in the High North.<sup>36</sup> The Soviet vision of empire was not fulfilled, but it established a trust in its science, technology, and industry based on conformity in schooling and the idea of meritocracy in careers. Given that ownership of land by other parties than the state had been abolished and territory seemed to be the only resource of which there was a surplus, geological prospecting and mining were held in high esteem.<sup>37</sup>

The life-improving and heroic aspects of engineering were combined with a security aspect, the idea that like any other major nation Russia would have to resort to its own resources in times of crisis. The highly decorated geologist and member of the Russian Academy of Sciences, Alexey Kontorovich, exemplifies this line of thinking in a recent historical exposé of the rise of the Russian oil and gas industry.<sup>38</sup> Nevertheless, or rather in line with this, in the same popular science article he points to the need to promote Russian competitiveness in industries besides fossil fuels and raw materials as part of the efforts of the National Innovation System. In his 2021 Victory Day speech, Vladimir Putin conjured up the enduring image of Russia as left to its own human and material resources at momentous points in its history.<sup>39</sup> His Decree No. 204, issued in 2018, outlined the future land use and regional development of its Arctic; in this policy document, environmental concerns and nature protection figure prominently.<sup>40</sup> Given a probable postpandemic reconstruction, northern tourism seems likely to make a rather modest future addition to the nature-based industry of the Kola Peninsula.

Geopolitics has always played a role in the lives and collective memory of Norwegian-Russian borderland dwellers. It has conditioned local business and survival since before the British blockade in the early and mid-nineteenth century of the coastal seas of Europe, including the Pomor trade in northernmost Europe. Throughout modern history this borderland has proved robust in facing major outside changes and geopolitical tensions. The Barents Euroarctic Region, despite being an EU neighborhood CBC policy offspring, worked well from its start in 1993 based on this cross-border tradition, while the present Russian war on Ukraine has brought this initiative to a halt.<sup>41</sup>

Either there are many or no landscapes to be found on the tundra. Epistemology needs to be part of the discussions of this flexible space. Its material and immaterial heritage varies in meaning with the cultural perceptions of its inhabitants, visitors, and observers. It is reasonable to thematize the social and historical diversity in interests and outlooks among the people making tracks on the tundra in writing its environmental history. Contemporary Western tourists are worried about the north, want to evaluate the "situation" for themselves and to experience winter before it is gone. Sublime aesthetic experiences, like those sensed while watching auroras, seem more important in Asian arctic tourism.

The human and environmental costs of industrialization were high wherever it occurred. This doesn't make the history of the Gulag laborers in the Soviet-Russian Northwest brighter, but it is still worth noticing. After Stalin's demise the camp systems shrank in importance beside new bonus-regimes aimed at attracting workers north. The Kola Peninsula appears like a "Russian miniature" in economic history. The experiences from this region were used in designing a Soviet technocratic model for the eastward exploitation of Arctic Russia.

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