

# The crowded and empty Arctic

*Examining research practices, spatial imaginaries,  
and infrastructures in Kiruna, Sweden*

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## Abstract

We, as four foreign researchers with research commitments in Kiruna, Sweden, reflexively examine the imaginaries of Kiruna as either empty or crowded while problematizing the Arctic as a homogenous region. While our scholarly interests (mining, space, education, transport infrastructure) and disciplines are distinct, we reflect on how their convergence in the city indicates broader historical shifts in Arctic imaginaries and the political economies of research, which follow and shape climate geopolitics, development, and cultural practices. In the interstices of these currents, the Arctic – imagined as empty and remote from global metropolises – becomes crowded and connected through mobility to and from as well as within the Arctic, which shapes processes of knowledge production.

*Keywords:* European Arctic, fieldwork, Kiruna, imaginaries, infrastructure

## Introduction

In summer 2022, two of this reflection's authors – an anthropologist (Adams) and a geographer (Bennett) – walked into the new city hall in Kiruna, Sweden. They strolled around the monochromatic building designed by Stockholm-based architects for the new town centre, which

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was built to replace the historic centre four kilometres to the northwest. A century of extraction deep in the world's largest underground iron ore mine had caused the land to crack and subside, compelling the mine's operator, Swedish state-owned LKAB<sup>1</sup> to undertake a billion-dollar municipal relocation project to preserve the city while mining ever deeper underground.

The shiny new city hall sat nearly empty because it was July, the main holiday season in Sweden. There also were hardly any visitors, for the few who were in town were milling around the picturesque historic city centre or joining official LKAB tours of the underground mine. The two social scientists walked around the eerily silent new city hall, where a few odd buckets had been strategically placed to capture leaking water from the ceiling, peering into vacant offices in what was a seeming dead end for ethnographic encounters. On the social scientists' way out, they struck up a chance conversation with a lone employee preparing his lunch in an area that looked like it could one day become a public café, but which, for the time being, was for workers only. The employee shared with the anthropologist and geographer his observations regarding Kiruna's ongoing housing crisis. The many contract workers brought in to assist with the billion-dollar city relocation effort were exacerbating an existing housing shortage. So, too, were researchers, who were renting many of the city's apartments, turned into short-term rentals by opportunistic owners. Adams and Bennett – much like Klinger and Armstrong later in 2022 – were arguably complicit in this practice, all renting through AirBnB during their fieldwork. Despite the Arctic's reputation as remote and sparsely populated, people from around the world are congregating in the region,<sup>2</sup> particularly in hubs like Kiruna. Since iron ore was first identified in 1696 in the mountains of Kiirunavaara and Luossavaara, which fall within the lands of the reindeer-herding Sámi, the area has lured miners, government officials, railroad workers, engineers, urban planners, architects, and tourists – along with scientists trying to make sense of it all. Recreational visits alone to the Arctic have grown exponentially and the industry has different faces through changing seasons.<sup>3</sup> Between 2006–2016, winter tourism across the Arctic grew sevenfold, with visitors primarily attracted to well-connected places like Kiruna for their photogenic snowy landscapes, winter sports, and aurora-filled skies.<sup>4</sup> In summer, the already extensive tourism industry has also increased fourfold, encompassing both domestic and international tourists.

As a nexus of industry and travel, and as the largest city in the region, Kiruna represents a quintessentially “overresearched” place, though it is certainly not the only one. Use of the term has grown since the 1960s, reflecting the exponential growth of science since the post-war period.<sup>5</sup>

Research that involves long-distance travel has likewise grown, fuelled by globalization, prestige politics, funding practices, and institutional pressures. A recently published volume entitled *Over Researched Places: Towards A Critical and Reflexive Approach*<sup>6</sup> problematizes the impacts of the meteoric growth of certain scientific practices. Among the many chapters, “Confessions of an Academic Tourist”<sup>7</sup> contends that overresearch is not only a methodological issue that detracts from the ability to make robust generalizations, but an ethical one, too. In heavily studied yet remote places such as the Arctic, locations with well-connected transportation infrastructure such as Kiruna are more studied than others, leading to an overconcentration of researchers as well as repeated extrapolations about the entire Arctic from a limited set of places.

In line with growing recognition of the impacts of overresearch, this reflection contributes to the geography of science in the Arctic by examining our participation in the uneven landscape of research in the region. We do this by reflecting on our own positionalities and motivations for conducting fieldwork in Kiruna, and by connecting these to wider historical imaginaries of the Arctic. We draw on our fieldwork to critically speculate how the town – growing since the 1800s to resource the mine, built with the revenues from extraction, and sustained by workers pulling materials from the earth – forms a microcosm of the scientific and infrastructural pressures on the Arctic.

Internationally, researchers are contributing to wider social and environmental issues such as climate change by traveling, typically by airplane, to far-flung destinations. It is thus timely to ask, “Why go?” This fundamental question – and its ethical, environmental, and methodological consequences – is increasingly debated in academic circles as fieldwork is critiqued for its colonial undertones, carbon footprint, and ableist tendencies. In one important call, Anna Guasco urges fieldwork-based researchers to consider “an ethic of not going.”<sup>8</sup> At the same time, it is worth reflecting historically on why other researchers have gone and continue to go in order to differentiate between research tourism and sustained transnational commitments. The geographies of research, especially in the Arctic, also bear critical and reflexive examination. It is worth considering why some places such as Kiruna become crowded with researchers while countless other locales across the Arctic – including nearby but less spectacular mining towns like Malmberget and Gällivare – are less common locations of scientific research.<sup>9</sup>

### Positionality, motivations, and imaginations

Despite four million people living north of the Arctic Circle – approximately ten percent of whom are Indigenous – the Arctic has long been imagined as barely populated. This imaginary shapes and legitimizes scientific research and other socioeconomic and cultural processes in the region driven by non-local interests.<sup>10</sup> Since the Renaissance, myths of empty, vast, white expanses of land have attracted Europeans northward, with people from other parts of the world joining them more recently. In certain instances, such representations are accurate: for instance, Iceland’s vast, rugged, and unpopulated interior is a useful proxy for lunar simulations.<sup>11</sup> Yet in many other instances, research is carried out in places that are the homelands of Indigenous Peoples and, more recently, settler communities. In northern Fennoscandia, the Arctic offers up “dreams of treasures and dreams of wilderness”, particularly in the context of extractive industries,<sup>12</sup> which in many documented cases turned into environmental nightmares.<sup>13</sup> Presumptions of an empty Arctic erase people from popular representations of the region, turning it into a proving ground for all manner of social and natural experimentations, which historically have had little regard for local communities and ecologies. In the area around present-day Kiruna 150 years ago, reindeer-herding Sámi primarily inhabited the lands on which the LKAB iron ore mining commenced in 1890. Yet forceful southern Sweden interventions soon concentrated in the nearby town of Jukkasjärvi, forcing Sámi into schools and churches. Such efforts were underwritten by a European imaginary that saw the Arctic as a “tabula rasa” onto which colonial, imperial, extractive, and scientific designs could be imposed.<sup>14</sup> Much of the infrastructure cited today as providing the ideal conditions for an Arctic green industrial revolution—hydropower, rail transport, air and seaports, mining cities and towns—is a legacy of settler colonialism.<sup>15</sup>

In the present era, a multitude of forces including climate change, globalization, and militarization have heightened the Arctic’s global role. This increased visibility has attracted new waves of visitors to the region, from international tourists<sup>16</sup> to scientists – groups which are sometimes hard to distinguish. While the Arctic is becoming more crowded, mental images of the Arctic as empty persist.<sup>17</sup> These are consolidated by social media’s rapid dissemination of pictures of “untouched wilderness” in the form of Norwegian fjords and Icelandic waterfalls with visitors conveniently cropped out.<sup>18</sup> These processes reproduce the homogenizing, “cryospheric gaze” of “Arctification”<sup>19</sup> – a trend not only present in current discussions on Arctic tourism and regional branding, but in research and education strategies, too.<sup>20</sup> The pristine Arctic is depicted as a “crystal

ball” for climate change research and as a “laboratory that illustrates a wide range of problems faced by indigenous peoples in the world,”<sup>21</sup> and as “a ‘laboratory’ of physical transformation, where climate change is happening about two times faster than the global average”<sup>22</sup> (and potentially four times faster according to other models<sup>23</sup>). While remote sensing studies the circumpolar north at scale, physical climate research infrastructure concentrates in specific places such as Abisko (an hour away by car from Kiruna in Northern Sweden), Utqiagvik, (Alaska, USA), and atop the Greenland Ice Sheet. These locales have been crucial for advancing global scientific knowledge about climate change while attracting the bulk of the infrastructure and capital underpinning scientific knowledge production. In the Anthropocene, as the green energy transition gets underway and specific sites, such as Kiruna, are viewed as providing the raw materials necessary to provision it,<sup>24</sup> these regions are being positioned to test out controversial geoengineering experiments.<sup>25</sup> Such dynamics may reshape the specific geography of Arctic research. So, too, may shifting geopolitics as tensions between Russia, China, and the West heighten and crystallize in specific locales. The Norwegian archipelago of Svalbard, where a division of the Russian state-owned company Arktikugol operates a former Soviet coal mining town as a tourist destination, and where dozens of nations have research facilities, is one such place increasingly attracting social scientists<sup>26</sup> as exemplified by the formation of the Svalbard Social Science Initiative in 2018.<sup>27</sup>

Since the early 2000s, invocations of a “new frontier” in the Arctic have directed natural and social sciences with renewed intensity, alongside neo-cold war geopolitics,<sup>28</sup> business interests,<sup>29</sup> and tourism.<sup>30</sup> The renewal of frontier discourses is reflected in the political economy of research funding for scholars hailing from both Arctic and non-Arctic states. Our own research projects emerge from these political economies of science – often driven by national governments, including both those with Arctic territory and those without – that work to draw Arctic regions more firmly within the purview of non-local and transnational interests. Klinger and Bennett, for example, have been funded by a US National Science Foundation (NSF) program entitled “Navigating the New Arctic,” which ran from 2016–2023 as one of the NSF’s ten “Big Ideas”. Bennett is also collaborating with Adams on her research into the effects of transport infrastructures of the Malmbanan Railway on local communities between Kiruna and the Norwegian coastal port of Narvik, which is part of the European Research Council-funded “InfraNorth” project. Armstrong is funded through an internal postdoctoral position on informal science education that brought her to Sweden’s Stockholms Universitet and with additional monies from the Helge Ax:son Johnsons stiftelse. We four

researchers are outsiders whose work is coalescing in Kiruna – a place to which we have all traveled since 2019, taking the path of least infrastructural resistance and following in the footsteps of centuries of Arctic researchers before us. From Nordic-wide projects such as REXSAC, to northern Swedish research like the Umeå University project *The Perfect City 2.0* and international research collaborations in which the authors are involved, large-scale projects continue to be funded to study Kiruna and its surrounding area within broader imperatives to understand “the Arctic”.

The process of narrativizing the Arctic, of course, is not a one-way street. Gradually – and promisingly – imaginaries of the region are becoming more plural as Indigenous Peoples and their voices, agency, and organizations strengthen and gain recognition. Local Indigenous polities with historical claims to the region preceding those of the sovereign states that have demarcated borders across Arctic spaces view and experience presumptions of “emptiness” quite differently, and indeed often destructively. Tropes of emptiness constitute Indigenous erasure, for the Arctic is not empty but instead overcrowded with interests and activities that undermine Indigenous lifeways and relations to the land. For example, in contrast to discourses of Sweden’s Norrbotten County (in which Kiruna is located) as empty and open, local Sámi reindeer herders point out that roughly only 4% of traditional herding pathways remain undisrupted by mining, infrastructure, or urbanization.<sup>31</sup> We observed these tensions in Kiruna and vicinity, which we are endeavouring to understand within broader contexts of a shifting climate, changing geopolitics of development, and cultural practices. At the same time, we acknowledge that we are exacerbating several of these tensions at a range of scales. As just a few examples, our work oversaturates local and Indigenous communities with questions, overburdens already limited housing, and contributes to carbon emissions.<sup>32</sup> While recognizing these issues, we believe there are ways to reduce the negative impacts of Arctic science. We invite fellow researchers to think with and from a wider array of communities to find ways to make Arctic research less extractive and more representative rather than simply more crowded.

### The researcher as tourist?

Each fall, winter, and spring, “conference tourists” arrive in droves in particular places in the Arctic, along with snow- and aurora-seeking tourists. In Kiruna, scientific conferences that cover the Arctic, which can be compared to bigger events such as Arctic Circle in Reykjavik, Iceland and Arctic Frontiers, Tromsø, Norway, are beginning to be hosted in larger

numbers following the town's relocation. These events include extractive industry conferences, such as SveMin's October 2022 "Green and Innovative North," and Rymdforum held in March 2023. Like many other conferences taking place across the Arctic, these offer package tours to attendees that cater to participants from academia, industry, the government and military, often including tours of the LKAB mine, trips to the Ice Hotel, and aurora viewings. An increasing number of researchers are also studying Arctic tourism itself,<sup>33</sup> staying in the same ice hotels and vacation rentals in a process of participant observation in which it is difficult to separate the researcher from tourist.

Arctic conferences are not only academic and recreational. They play a role within the Arctic governance system and complement the work of the Arctic Council.<sup>34</sup> These events offer central forums for international and interdisciplinary cooperation, making them important for exchanging ideas and "for deliberating the geopolitical structure of the Arctic."<sup>35</sup> Representation at these conferences, however, is highly unequal due to geopolitical, financial, and logistical reasons. For instance, participation by individuals affiliated with the Russian government, institutions, and organizations has all but plummeted following the country's unjustified invasion of Ukraine in February 2022. Participation is also shaped by the fact that travel to Arctic destinations is expensive, limiting participation by people without access to institutional funding. Hefty registration fees can even prohibit local participation. Arctic conferences generally occur in places where there is an airport because air travel facilitates short-term visits by non-local researchers and scientists. The long distances travelled by researchers and others to these conferences, and the many layovers often required on flights to get to Arctic airports, are underscored in informal conversations that verge between valorisation and shame at such events.<sup>36</sup> Infrastructure built to serve industry and tourists first and locals second thus also serves researchers and shapes scientific knowledge production. Rarely do these infrastructures, which typically connect locales in the north to southern hubs, offer the more longitudinal mobilities necessary to efficiently connect Indigenous Peoples across the Arctic. In many ways, then, these conferences are largely often "empty" of specific yet crucial circumpolar demographics. There are, however, important funding efforts to increase Indigenous representation at such events, such as the North Pacific Arctic Conference Fellowship and the Arctic Research Consortium of the U.S. Early Career Conference Funding Award.

Aviation infrastructure incorporates specific locales in the Arctic such as Kiruna, Tromsø, and Reykjavik into networks of "academic jet-setting."<sup>37</sup> These geographies influence the construction of regional geographical imaginaries to non-local audiences by dictating not only what

is seen or experienced by researchers with tightly scheduled agendas, but also by curating the possibilities for recreation and informal learning. Experiences by non-local researchers gained in a relatively more accessible space can be transformed in both informal discourse and peer-reviewed publications into generalized knowledge about “the Arctic” as a region. Problematically, these experiences can also colour ideas about areas of the Arctic that are less accessible due to infrastructural limitations or geopolitical restrictions. Most recently, large-scale restrictions by US and Russian authorities to international research collaborations in the Russian Arctic (where approximately 2 million people live, and over 50 percent of Arctic coastline is located) for both Russian and non-Russian funding agencies further compounds uneven knowledge production. As new and old divisions (re)surface across sites of Arctic scientific knowledge production, it is worth critiquing who gets to make what claims about the region, and from where.

### Vertical infrastructures – Research geographies above and below Kiruna

After extending northward from southern locales, Arctic science reaches above and below the terrestrial surfaces where social encounters take place. Research and the infrastructure that it both critiques and depends upon have vertical dimensions that interweave the Arctic’s subterranean and orbital spaces, which intensifies social and environmental pressures on the ground. In Norrbotten County, geological endowments have been re-narrativised as crucial to provisioning the renewable energy transition in Europe and beyond to respond to the climate crisis, incorporating vertical territories<sup>38</sup> into the politics of place and knowledge production. Accordingly, SveMin, the Swedish mining industry association, launched a public relations and policy campaign in 2022 to recast the region as one being remade by green growth: “Sweden is in the middle of a green industrial revolution. Metals and minerals are absolutely crucial to produce the climate technologies needed to go from a fossil-dependent to a fossil-free society. That journey starts in the bedrock.”<sup>39</sup>

Kiruna, northern Sweden, and the wider Arctic have long been framed as mineral hinterlands for broader geopolitical purposes.<sup>40</sup> During Klinger’s October 2022 fieldwork to the region, however, several interlocutors across industry, academia, local government, and within the Sámi Parliament described the influx of mining interests and investment to the region as greater than any other time in history. Interlocking with the green growth-oriented plans to expand the iron mine are a host of other industry ventures, such as the development of hydrogen-fuelled steel



plants, construction of a plant to separate rare earths, gypsum, and phosphate from the planned expansion of LKAB's iron mining facilities, and plans to build graphite mines and reopen copper mines. Longstanding concerns about critical raw material supply chains that depend significantly on China have been refracted through the prism of responding to the climate emergency within international, European Union, and Global North/West policies and discourses aimed at pressuring public agencies to weaken permitting and regulatory processes. Within this, Sweden, with its international reputation for strong environmental regulation and long histories of mining and industrial development, has emerged in wider Western discourses as an ideal new extractive frontier to assuage the anxieties of the day – and as a place in which the future of just transitions and green energy may be fulfilled.<sup>41</sup> The imaginary of Norrbotten's expansive emptiness, which belies the true busyness of places like Kiruna, supports its narrativization as an ideal location to jumpstart the green revolution.

Looking up from the ground into the skies, space entrepreneurs and scientists have also recast northern Sweden as the perfect place for building launch sites strategically positioned—and therefore economically competitive—for putting commercial small satellites (“smallsats,” or those weighing less than 500 kg) into polar orbit. This strengthens narratives in favour of building out space launch and space research infrastructure despite competing land uses and the heavy emissions footprint of space launches. One space scientist contended, “Kiruna is the right place for reusable rocket tests – there's all the space in the world.”<sup>42</sup> In January 2023, Sweden's King Carl XVI Gustaf, President of the European Commission Ursula von der Leyen, and Swedish Prime Minister Ulf Kristersson gathered outside Kiruna to open the European Union's first orbital launch complex, called Spaceport Esrange, with the first launches scheduled for 2024. The push to launch polar-orbiting satellites from northern latitudes has also brought the United Kingdom's Shetland SaxaVord Spaceport and Norway's Andøya Space, which are both constructing commercial spaceports.<sup>43</sup> This new space race in the European Arctic risks creating excess regional launch capacity and overcrowding orbital space with satellites that may ultimately become space debris, repeating the same old problem of filling up seemingly “empty” frontiers with modernity's excretions.

Activities taking place in orbital space also command surface spaces and resources. Reifications of Kiruna's vast emptiness in the service of extractive and outer space-related ventures overshadow locally scaled conflicts driven by the crowdedness of particular sites in the Arctic, where there is intense competition over land, water, ice, air, and space. Local contestations win some concessions to the reality that Kiruna, as a place, is not

empty. For instance, safe houses on Esrang's lands offer shelter to herders should they need to seek it out during a launch. Yet reaching these shelters can be difficult,<sup>44</sup> and once there, they are only sufficient for the herders rather than the entire herd. The rapid expansion of vertical infrastructure has occurred without clear understanding of how rising numbers of rocket launches may impact reindeer herds and Sámi livelihoods. What did halt the launches for several months, however, was Russia's 2022 invasion of Ukraine. Out of fear of provoking Russia, Esrang ceased launching sounding rockets and stratospheric balloons following the invasion until September 2022. This response suggests an uneven sensitivity towards internationally-scaled geopolitical relations versus locally-scaled community relations.

Undervaluing local considerations resonates with the controversies surrounding increasingly dramatic attempts at climate fixes, such as blocking solar radiation, some of which aim to use Kiruna as a laboratory. For example, in 2021, the Harvard Stratospheric Controlled Perturbation Experiment that was planned to launch from Esrang was cancelled after the Sámi Council and other environmental organizations successfully raised the alarm over the ethical and safety issues of such a venture.<sup>45</sup> It was not the Swedish Space Corporation or the Swedish Government that halted the experiment, but the Harvard Advisory Committee,<sup>46</sup> demonstrating the potential for science to advocate for local interests. The cancelled experiment also highlights the problematic imperative of both scientific and for-profit space ventures to carry out activities and capture contracts, respectively, to remain operational, which can pit outsider interests against local livelihoods. These tensions are written into the landscape through vertical infrastructure construction in the forms of mining and space technologies, which exacerbate uneven mobilities on the ground. While the circulations of social scientists wishing to unpack and expose these contestations can reproduce that unevenness, their actions can also help remedy them.

## Conclusion

As place-specific questions such as, "Whose climate security matters?", "How can housing security be achieved?", and "How do local energy concerns stack up against the global green transition?" are debated, we urge reflection on our individual and collective journeys to the Arctic as scientists and researchers. Reducing the frequency of research travel, especially short-term academic jet-setting, should be given serious consideration alongside careful, sustained and engaged research that builds solidarity and collaborates with local knowledge producers who are often

marginalized by development, mining, space, and tourism ventures. Such approaches, which are increasingly proposed in calls for the co-production of Arctic research,<sup>47</sup> “slow research,”<sup>48</sup> and making Arctic research more locally embedded<sup>49</sup> may enable research practice to move beyond the region’s most easily and rapidly accessible points if so desired by local communities. In turn, spreading out scientific efforts may help to build, deepen, diversify, and humanize knowledge about the region beyond the imaginaries of emptiness and experiences of crowdedness while enabling the exchange of knowledge in a greater array of places.

Rather than pointing fingers at other researchers doing valuable and necessary work, we invite further examination of rapid and short-term experiences and research that can reinforce rather than challenge problematic imaginaries about the Arctic and materially reproduce conditions of uneven development. We also suggest attending to the *how* and *for whom* in doing research. Conducting only desk-based or archival research or switching to fully online and digital fieldwork without experiencing the place is not the solution we propose. Instead, and especially for those of us funded by foreign institutions, we urge prioritizing local experts and empowering local knowledge producers, including by leveraging institutional mechanisms to ensure that a share of the research budget is allocated to local partners. All of these efforts can help contribute to projects designed to conduct in-depth and long-term research together *with* local people, and not only just *about* them or their circumpolar homes. With so many pressing issues to learn and debate, knowledge production practices in and *from* the Arctic have implications far beyond the region.

We also suggest doing “local” research in more places. This doesn’t mean finding a completely new field site for its own sake, but rather considering how one’s research questions might interact with regional (im) mobilities and branching out to other nearby communities, provided that such efforts will not overburden their own limited infrastructure. As one example, the international *Mediating Arctic Geographies: Contemporary Imaginaries of the Circumpolar World* conference held in June 2022 in the sparsely populated municipality of Inari, Finland, where a third of residents are Sámi, demonstrated how non-local researchers can shift capital and knowledge exchange to a less central place, even if doing so requires more time and financial commitments. Non-local conference participants had to take a four-hour bus ride from Rovaniemi – a more typical conference locale thanks to its airport and infrastructure – to Inari. Just as Arctic tourism represents an evolving economic opportunity for tourism industries and local communities,<sup>50</sup> so, too, does the growth of Arctic science. Researchers should try to ensure both the benefits and impacts of their work are more evenly spread out. In the case of Kiruna, this could

mean seeking collaborative research engagements in the aforementioned nearby towns of Malmberget and Gällivare, where mining activities are also occurring, and which are also accessible by plane or train. In places like Alaska, this might mean visiting North Slope villages instead of only Utqiagvik. When making such decisions, local consent is paramount and sensitivity is required, for “smaller” does not always mean less researched. The Russian town of Teriberka two hours north of Murmansk, which has attracted an increasing and potentially unsustainable number of tourists (and researchers) since featuring in the film *Leviathan* in 2014, attests to this incongruence.<sup>51</sup>

In our own research, an off-the-beaten-path visit by Adams and Bennett to Svappavaara, an LKAB mine site and town less than 50 kilometres from Kiruna, proved eye-opening. During the short drive to the town of 400-odd residents, we saw more caribou – albeit darting around fenced-off mine sites and parking lots – than we had during their entire time in Kiruna. We first went for lunch at the LKAB mining facility’s Gruvköket cafeteria, which is open to the public, in the hopes of speaking with miners. Our hopes were again dashed, for no workers were to be found during the holidays. It was indeed too quiet for short-term social science research. Two cafeteria workers, a man and a woman, sat quietly in a corner, enjoying their own lunch. Not wanting to interrupt them, we left and decided to go into town. Outside the Ralph Erskine-designed, originally 197-meter-long residence building known as Long Snake (Ormen Långe),<sup>52</sup> we struck up a conversation with a man who was a Christian refugee from Palestine – one of many immigrants living there. The man mentioned that the woman we had spotted on her lunchbreak in the cafeteria was his wife. Together, the three of us had an engaging conversation about his personal trajectory from the Middle East to the Svappavaara mine, in which he now works. He noted that when he first arrived, he had thought he would eventually end up in Kiruna, or perhaps even somewhere like Stockholm. But ultimately, he decided life in Svappavaara was good. It was quiet, and the rent was more affordable. In a little town outside Kiruna – one far less crowded – we ended up finding the world.

## Notes

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13. See, for example: Earth Island Institute, “*Sacred Land Film Project*”, 2023. <https://sacredland.org/lands-of-the-sami-finland-norway-russia-sweden/>, (accessed 21 August 2023).
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