Transforming Kiruna

ACTA UNIVERSITATIS UPSALIENSIS
Uppsala Studies in Cultural Anthropology no 62

Elisa Maria López

Transforming Kiruna

Producing Space, Society, and Legacies of Inequality in the Swedish Ore Fields

UPPSALA
UNIVERSITET

Dissertation presented at Uppsala University to be publicly examined in Geijsalen, Thunbergsvägen 3H, 751 20, Uppsala, Friday, 17 December 2021 at 10:15 for the degree of Doctor of Philosophy. The examination will be conducted in English. Faculty examiner: Professor Reetta Toivanen (Helsinki Institute of Sustainability Science and Department of Culture, Faculty of Arts).

Abstract
López, E. M. 2021. Transforming Kiruna. Producing Space, Society, and Legacies of Inequality in the Swedish Ore Fields. *Uppsala Studies in Cultural Anthropology* 62. 280 pp. Uppsala: Acta Universitatis Upsaliensis. ISBN 978-91-513-1335-1.

Extractive resources industries are irreversibly transforming land, air, water, life and society around the world at an unprecedented rate, and Sweden is no exception. This anthropological study analyzes acute issues related to this transformation: the resettlement of six thousand residents of the city of Kiruna due to ground deformations caused by large-scale iron mining by the Swedish state-owned company LKAB (Luossavaara-Kiirunavaara AB). The thesis explains how mining, the dominant mode of production in the Ore Fields (Malmfälten) region, establishes particular social relations, structures of power, and conceptual models of space, nature, and society. I approach these relations and ideas through the perspective of space, and show how space in Kiruna is produced through social processes, material infrastructures, symbols and meaning-making in support of extractivism, the political and economic prioritization of resource extraction. The empirical basis of the work is fifteen months of ethnographic field research in Kiruna between 2012 and 2015. The analysis relies on theories of space in Anthropology and Geography, as well as ideas from settler colonial studies. A central argument in the study is that despite official representations of the city move as a "social transformation", the physical, conceptual, and social production of space extends material and social inequalities integral to extractivism. While all city residents are affected by the insecurity and risks of extractivism, which the city move revealed, the Indigenous Sámi community is uniquely affected. Sámi from the Kiruna area have historically been subjected to colonial policy, limits on their subsistence economy, displacement from land, and harmful stereotypes. However, Sámi have also continually resisted such limitations and stereotypes, adopting diverse forms of work to support reindeer herding (including mine work), establishing urban community spaces, and documenting and preserving local cultural landscapes. The move of the city reveals that such legacies of social inequality, which have been a part of the establishment of mining, persevere in social relations, ideas, and material architectures that form space in and around Kiruna. Providing ethnographic detail and analysis of the reproduction of extractivism and its inherent inequalities in spatial practices, this study contributes to the anthropological literature on space, resource extraction, and social inequality.

Keywords: Space, nature, inequality, Sweden, Kiruna, mining, Sámi, reindeer herding, urban planning, displacement

Elisa Maria López, Department of Cultural Anthropology and Ethnology, Box 631, Uppsala University, SE-75126 Uppsala, Sweden.

ISSN 0348-5099
ISBN 978-91-513-1335-1
URN urn:nbn:se:uu:diva-457024 (http://urn.kb.se/resolve?urn=urn:nbn:se:uu:diva-457024)

Contents

Glossary of North Sámi and Swedish Terms and Abbreviations 9

Acknowledgements 11

Chapter 1: Introduction 15
An ethnography of spatial and social transformation 19
Main Questions and Significance of the Study 22
The People 27
The Sámi: A Circumpolar Indigenous People 28
Sámi Reindeer Herding in Sweden 31
The Čohkkiras Sámi Communities 35
Urban and Regional Background 38
Kiruna: The Capital City of the Ore Fields 41
Fieldwork: Methods and Ethics 44
Interviews 44
Participant Observation 47
Archival Research 49
Ethics and Positionality 50
A Note on Place Names, Terms, and Translations 51
Chapters and outline of the thesis 54

Chapter 2: Foundations: Producing Space in Theory 55
Space, Place, and/as Society 55
Space and Placemaking in Anthropology 57
The Production of Nature and Wilderness 61
The Production of an Extractive Resource Frontier 66
Settler Colonialism 69
Race, Nature, and The Production of Settler Space 71
Swedish Colonialism and Whiteness 75
Settler colonialism as/and spatial production 78
Min Biras (Our Environment): Making Sámi Space and Place 82
Concluding remarks 86

Chapter 3: From "Lappmarks" to Ore Fields: A Social History of Northern Extractive Space 87
Settling the Ore Fields 87
19th Century Colonial Administration 92
The "Lapp Administration" (*Lappväsendet*) 95
The Cultivation Border 96
The National Interests (*Riksintressen*) 101
Concluding Remarks 107

Chapter 4: The Model City in the Wilderness: Domesticating Space and Society in "The Land of the Future" 109
"He Built this City out of Culture" 110
Domesticating the Frontier 114
The Western Shore 122
Spaces of Civilization and Non-Civilization 126
Making Sámi Space in the City: Girona Sámesearvi (The Kiruna Sámi Association) 132
Concluding Remarks 140

Chapter 5: Out of Place at Home: Extractive Space, Sámi Labor, and the Reproduction of Inequality in Mine City Kiruna 143
Reindeer herders and *rallare* (rail workers) 143
"What am I doing here, anyway?" 152
Brokering Mitigation 159
Double work, double binds 167
Recognition and Refusal 173
Concluding Remarks 175

Chapter 6: "Not a Wild Land, But a Free Land": Contesting Wilderness in the Mountains 177
To the Mountains (*Till fjälls*) 178
"No to ILO 169!" 184
Making Nature and Nation 191
Min biras (Our environment): Spaces of Reindeer Herding, Being, and Dwelling 195
Naming, Claiming, Remembering 200
Concluding Remarks 205

Chapter 7: Deformations in the Landscape: Managing Uncertainty and Imagining Sustainable Futures in New Kiruna 207
"The City is Cracking" 208

Imagining a Sustainable Kiruna 221
The Stockholm Office..... 224
Design Tools, Planning Challenges..... 229
Concluding Remarks 239

Chapter 8: Conclusion 242
Producing Space, Nature, and Society..... 244
Spaces of Continuity, Culture, and Conflict 246
Re-Producing Extractivism and Inequality 249

References 253

Glossary of North Sámi and Swedish Terms and Abbreviations

Allemansrätt – the Swedish Right of Public Access

Bergsstaten – The Swedish Mining Inspectorate

Čearru, pl. čearu, čearut – an economic and administrative unit to organize Sámi reindeer herding work within a defined geographical area, and in which members also have rights to conduct fishing and hunting. In this thesis, I limit my usage of the term to the singular ground form (čearru).

Gábna (previously called Rautasvuoma), Leaváš (previously called Kaalasvuoma), and Dálma/Talma –the čearru of the Čohkkiras/Jukkasjärvi area, on whose lands the city of Kiruna and LKAB Kiirunavaara mine were built.

Goahti – a traditional Sámi temporary and transportable dwelling with a wooden inner frame and covered with fabric, peat moss, or timber, often larger than a lávvu

Lappväsendet – "The Lapp Administration". A state institution which existed from 1885 to 1971, and the primary means through which colonial state ambitions for "good reindeer husbandry" and Sámi reindeer herding as an economically rationalized form of animal husbandry was enforced. In the thesis, I use the decisive form of the word throughout.

Lappfogde pl, lappfogdar – "Lapp bailiff", colonial officers of the Lappväsendet ("Lapp Administration")

Lávvu –a traditional Sámi temporary and transportable dwelling, resembling a tent, with a wooden frame covered with reindeer skins or canvas fabric

LKAB – Luossavaara-Kiirunavaara Aktiebolag, a Swedish state-owned mining company

Sápmi – the traditional homeland and territory of the Sámi people, spanning from northern Norway, Sweden, and Finland to the Russian Kola Peninsula

Sameby, pl. samebyar – Swedish term for čearru, meaning "Sámi village"

Sametinget – The Sámi Parliament of Sweden

Siida – a sub-unit within a *čearru*, consisting of three to five households, or the members of a single large family. Siida members move their animals together between seasonal pastures, and organize collective work pertaining directly to their animals, i.e., the selection of animals for slaughter in the fall and winter, marking calves in summer, and other tasks pertaining to the care of the members' reindeer

STF – Svenska Turistföreningen, the Swedish Tourist Association

Storvisten – Semi-permanent seasonal villages of multiple Sámi families, some of which evolved into permanent, year-round villages.

SGU – Sveriges geologiska undersökning, the Swedish Geological Survey.

NSD – *Norrländska Socialdemokraten*, a daily regional newspaper published in Norrbotten

Riksda*g* – The Swedish Parliament

Acknowledgements

This thesis, like all research, has been a collaborative effort. Accordingly, I'd first like to acknowledge and thank the Čohkkiras Sámi community, on whose homelands this research was conducted, and where I lived as a guest for thirteen months. In Orusjohka, *váimmolaš giitu* (heartfelt thanks) to Berit, Katarina and Jon Mihkkal Inga, Gunnar Östman Inga, and Margareta Huuva Stenberg and her family: Helena, Per Jonas, Hans-Göran, and Nils Joel Partapuoli, Ann-Catrin Stenberg Partapuoli, and Laila Stenberg for their kindness, friendship, and immeasurable contributions to this research. Special thanks to John Tomas Idivuoma, Katarina Inga, Jon Mihkkal Inga, Helena Partapuoli and Per Jonas Partapuoli for translation assistance, reading drafts of the thesis, and answering my endless questions. Additional and sincere *giitu* to Girjas *čearru* chairman Mats Berg, and Tor-Erik Huuva and Niila Inga from Leaváš *čearru* for their valuable time.

To my roommates in Kiruna who generously shared warmth, friendship, and the ups and downs of everyday life during my fieldwork, all my love and infinite gratitude. I'd also like to express my appreciation to Göran Cars, Eva Ekelund, Janne Viinikainen, and Marianne Nordmark at Kiruna Municipality, the Department of Societal Transformation at LKAB, and Viktoria Walldin and the Kiruna Team at White Arkitekter for inviting me to follow their work. Finally, sincere thanks, *tack*, and *giitu* and to all residents of Kiruna and beyond who took the time to share their thoughts, sit for interviews, and offer feedback.

This study would also not have been possible without the guidance of my supervisors. Though we worked together at very different stages of the project, their rigorous feedback and patience at each step were integral to the development and completion of this thesis, and to my growth as a scholar. I would thus like to express my sincerest appreciation to Hugh Beach, Eren Zink, Don Kulick, and Vladislava Vladimirova, as well as my excellent co-supervisors, Kjell Hansen and Sverker Finnström for their mentorship. I would further like to express my most heartfelt thanks to Hugh and Vladi for their invaluable support at the very beginning, and very end, of this project. Vladi, thank you especially for all your time, care, engagement, and emotional and intellectual support – thank you for being

an amazing supervisor. For my final seminar, Carina Green's careful and generous reading and feedback on my manuscript greatly facilitated the final stages of this writing. Similarly, Annika Björnsdotter Teppo's engaged, insightful comments as internal faculty reader was invaluable towards the completion of this thesis.

At the Department of Cultural Anthropology and Ethnology at Uppsala University, my academic home since 2012, many thanks are also due. I am truly grateful for all the years of friendship, advice, and support from staff and PhD students at Uppsala, past and present. In addition to my supervisors and readers, I extend special thanks to: Paul Agnidakis, Jan-Åke Alvarsson, Clementina Amankwaah, Anna Baral, Jesper Bjarnesen, Daniel Bodén, Adelaida Caballero, Mari-Elina Ekoluoma, Rikard Engblom, Karin Eriksson-Aras, Ella Johansson, Sten Hagberg, Cristiano Lanzano, Nathan Light, Emy Lindberg, Nadia Lovell, Fernando Manjate, Claudia Merli, Kristian Sandbekk Nordstedt, Göran Nygren, Viveca Motsieloa, Mirko Pasquini, Ulrika Persson-Fischier, Oscar Pripp, Nika Rasmussen, Alexander Sallstedt, Anett Sasvari, Ingeborg Svensson, Molly Sundberg, Eric and Ulrika Trovalla, Susann Baez Ullberg, Mats Utas, Loretto Villalobos, Charlotta Widmark, and Annie Woube. I would also like to sincerely thank all participants of the Department's Higher Research Seminars, as well as Don Kulick and the participants of his PhD writing seminar, for their generous time and deep engagement with my rough texts: Anna Baral, Nika Rasmussen, Clementina Amankwaah, Fernando Manjate, and Petra Östergren. Thanks are also due to Siv Berggren, Carina Fröling, and Anna Gustafsson for their practical help throughout the program.

Additionally, I am grateful to all readers outside our department who took the time to comment on earlier versions the dissertation as it emerged, especially Tomas Cole, Camelia Dewan, Simon Johansson, Bengt Karlsson, Gabriella Körling, Mattias Viktorin, and all the participants of Stockholm University's Research Seminars in Social Anthropology. Further thanks to Atsuro Morita, Casper Bruun Jensen, Aslı Kemiksiz, Mohacsi Gergely, Mai Kawatani, Moe Nakazora, Wakana Suzuki, and the Department of Anthropology at Osaka University for hosting me during a very hot and very inspiring summer in 2016, and to Thomas Hylland Eriksen, Lena Gross, Robert Pijpers, and the Overheating Project at the University of Oslo's Department of Anthropology for inviting me to present my work early in the project. My additional and sincerest thanks to Jennifer Mack, Aina Landsverk Hagen, Marie Stender, and the Nordic

Research Network for Architectural Anthropology for a stimulating workshop in Oslo, and to Carlos Mínguez Carrasco, Daniel Golling, Sujy Lee, Ann Maudsley, and ArkDes (Sweden's National Center for Architecture and Design) for inviting me to contribute to the *Kiruna Forever* seminar and exhibition. I'm also grateful to Niko Besnier, Britt Dahlberg, Ruth Goldstein, Ann M. Iwashita, Susana Narotzky, and Marissa Smith for organizing excellent panels at the American Anthropological Association (2012, 2014, 2015), the American Ethnological Society (2017), the International Union of Anthropological and Ethnological Sciences (2014), the European Association of Social Anthropologists (2014), and the Swedish Anthropological Association (2017, 2018), in which early drafts from this dissertation were presented. Finally, all my gratitude to Benjamin Orlove, Nicole Peterson, and Paige West for their careful (and caring) teaching, advice, and encouragement during my earliest studies in anthropology.

This project was made possible thanks to the generous funding support of the William J. Fulbright Foundation, The Lois Roth Endowment, the Helge Axelsson Johnson Foundation (Helge Ax:son Johnsons Stiftelse), the Royal Society of the Humanities at Uppsala (Kungl. Humanistiska Vetenskaps-Samfundet i Uppsala), the Swedish Foundation for International Cooperation in Research and Higher Education (STINT), the Japan Society for the Promotion of Science, the Good City (Den Goda Staden) research node at Uppsala University, and the Department of Cultural Anthropology and Ethnology at Uppsala University. Thank you especially to Sten Hagberg and the Royal Society of the Humanities at Uppsala (Kungl. Humanistiska Vetenskaps-Samfundet i Uppsala), the Uppsala Forum on Democracy, Peace, and Justice Young Scholar Program, and Institute for Russian and Eurasian Studies (IRES) for supporting the publication of this dissertation, as well as Abbie Connors for her careful eye in the final language check and editing.

On a more personal note, thank you to my all co-workers at the International School of the Stockholm Region, especially Chris Stayne, Lindsay Baker, and Rebecca Y. Gonzalez for their positive energy, humor, and pepp when I needed it most. Finally, muchas gracias y muchisimo amor/stort tack och mycket kärlek to my family: my parents Rosa Maria and Edwin, siblings Maya, Angelie, Heidi, and Vanessa, my nephews Aztlan and Santiago, my cat Maxo, and my dear partner Per for their unconditional love, unwavering support through the daily work of writing. I could not have done this without you.

Chapter 1: Introduction

Sitting at the kitchen table of Risten's home one afternoon in 2012, the flow of conversation had reached a surprising eddy. We'd been talking about reindeer herding in and around the city of Kiruna (in Northern Sámi: *Giron*, Swedish: *Kiruna)*, a traditional livelihood amongst the Indigenous Sámi people of Norway, Sweden, Finland, and Russia. As Risten's family was Sámi, owned reindeer, and often participated in herding work in the mountains to the northwest of the city, we'd been talking about threats to the reindeer – from climate change to the growing number of foreign mining companies prospecting in the area – when the conversation turned to the relocation of Kiruna city. What did Risten think about the city's ongoing "urban transformation" (*stadsomvandling*) and the expansion of the Swedish state-owned LKAB (Luossavaara-Kiirunavaara AB) Kiirunavaara mine? Would the move of Kiruna have any negative effects on the reindeer? In her typical to-the-point style, Risten answered, "I think it's good they move the town and continue with mining at LKAB." Registering surprise in my response ("oh…okay?"), Risten continued. "I think it's better there than new mines in Rahkkurjávri (Rakkuri Lake) and other places. Because it's already destroyed, this land. So, you can continue with it." There was such a demand for workers at LKAB that they didn't need any more mines, Risten said. The existing mine was more than enough.

I'd observed similar views expressed just a few days prior to the conversation in Risten's kitchen. I'd attended an evening meeting titled "Our and the Coming Generation's Future" at the Kiruna People's House (*Folkets Hus*), whose purpose was to discuss the establishment of a proposed mine by Kiruna Iron AB, the Swedish subsidiary of the Australian company Hannan's Ltd[1]. The Australian miner had received test

[1] The Rakkuri project was also one of three proposed projects in the Rahkkurjávri area. The other two by Avalon/Avalon Minerals Adak, and Anglo/Rio Tinto (Lindahl et al. 2016).

drilling permits from the Swedish Mining Inspectorate and was eager to move forward with development of an open pit mine in the Ráhkkurjávri area, near the Gáláseatnu (Kalix) and Gáidum (Kaitum) river systems. This area, an old-growth alpine forest and fishery for arctic char, trout, and grayling, was and is of great importance for many in the room that evening, from Sámi reindeer herders to outdoor recreationalists. With a predicted lifespan of twenty years, Kiruna Iron's mine would not only require the creation of new infrastructure for the mine but also use of these bodies of water to dump tailings[2]. It was also not the only potential mine planned for Ráhkkurjávri; two other foreign companies, Avalon Minerals Adak AB and Anglo/Rio Tinto had also recently sought permits in the area (Lindahl et al. 2016).

The mood in the room was tense. The lone representative of Kiruna Iron AB, a geologist, faced tough questions from the audience of nearly a hundred residents and representatives of local *čearru* (Sámi reindeer herding collectives, in Swedish, *samebyar*), the Kiruna Hunting and Fishing Association, Norrbotten County Board, and local and national tourism industry representatives, among others. Someone had propped up a large red, yellow, green, and blue Sámi flag in a seat near the front row. Near the end of the geologist's presentation, a group of men in industrial work clothes suddenly entered the room, increasing the number of audience members substantially. As the geologist concluded her presentation with a promise that the Ráhkkurjávri mine would bring jobs to the community, a man who identified himself as a representative of the mine and metal workers union Gruvtolvan[3] stood up. "We have enough jobs here," he said. "We don't need this mine!" His statement was met with roaring applause from the audience. Having concluded its member meeting in a nearby conference room, we learned, the union had voted to officially oppose the Kiruna Iron project just moments before.

As the room simmered with energy, a Sámi woman in a red plaid woolen shawl (*liidni*) stood up. "If Kiruna Iron proceeds with this mine, we will fight this like we did the Alta Dam, and beyond!", she said. The applause from the audience swelled once again, as the memories of the forty-year-old Norwegian "Alta Affair" was no doubt remembered by many of the meeting's attendees. Massive protests by both Sámi and non-

[2] In 2012, these water bodies were already classified by the Swedish Water Information System (VISS) as "failing to achieve good" status due to high levels of mercury, heavy metals, concentrations of inorganic materials, and high pH levels. LKAB has also used Mettä Rakkurijärvi as a dumping site for mine waste (LKAB 2012a).

Sámi against the construction of a hydroelectric dam and power station on the Álaheadju/Guovdageaidnu (Alta/Kautokeino) River[4] in the late 1970s and early 1980s – whose impacts included flooding inhabited Sámi villages, sacred sites, and grazing lands – lasted ten years, attracting global attention to the Sámi struggle as Indigenous peoples (Paine 1982 and 1996; Thuen 1995; Minde 2003a). While the protests failed in stopping the dam, the Alta Affair is widely considered the birth for the modern pan-Sámi movement. The iconic red, blue, yellow, and green flag propped up against the stage earlier that evening – the flag of Sápmi, the transnational homeland of the Sámi people – similarly traced its roots to Sámi resistance to extraction in the 1980s, appearing first during demonstrations against the Alta Dam: the moon, the sun, water, fire, and land – things of vital importance for the Sámi people – represented in the shapes and colors of its design.

These scenes from early 2012, and the conversations with the people I grew to know over the course of fifteen months that followed, revealed deeper tensions, diverse and contradictory interpretations, and multiplicities that constitute space in Kiruna, a place that is both a Sámi homeland and the "capital city" of the Ore Fields, Sweden's largest mining region. At first glance, local resistance to a mine in Ráhkkurjávri seemed out of step with popular representations of Kiruna residents as strongly pro-mining. A visitor to the Invest in Norrbotten[5] regional development project website in 2012, for example, would likely come away with the impression that Kiruna residents were naturally disposed to embrace mining or other large-scale development:

People in Norrbotten are strongly disposed to change and they like to focus on the future. Even when it comes to moving whole cities (Kiruna and Gällivare) because of new main galleries in the mines or investing in

4 In 1970, the Norwegian Water and Resources and Electricity Board (NWER) announced a hydroelectric power and damming project on the Alta/Kautokeino River. This project sought to not only dam the last wild river in Norway, but also would put the Sámi village of Masi underwater and permanently flood the surrounding grazing lands, sacred sites, and burial grounds belonging to the Sámi throughout the region. The Sámi resistance to the "Alta Affair" lasted over ten years, and while ultimately unsuccessful in stopping the hydroelectric project, is widely considered the starting point for the modern pan-Sámi movement.

5 A development initiative consisting of by the county council (Länsstyrelsen i Norbotten), twelve of the county's municipalities, Invest: Sweden, and the EU European Regional Development Fund.

infrastructure to develop a future logistics centre for the Barents Region (Invest in Norrbotten 2012).

In contrast, the Kiruna residents I interviewed and spent time with expressed more complex ambivalent relationships to minerals extraction in their community. The Sámi woman in the red shawl, like the metalworkers, expressed what many perceived as unnecessary expansions of mining outside of accepted spaces, an expansion that would lower residents' quality of life and should be resisted. Risten's ambivalently positive view of Kiruna's urban transformation, whilst initially confusing to me, further revealed how complex residents' relations to space and place could be. Gironvárri-Kiirunavaara mountain, once a Sámi reindeer calving land, living place, and hunting area for rock ptarmigan (*Lagopus muta*), is today the world's largest underground iron ore mine. Unlike Gironvárri-Kiirunavaara, for Risten and other residents Ráhkkurjávri had yet to be "wastelanded" or conceived of as a space "pollutable in ways that are both ideational and material" (Voyles 2015; Gross 2019a and 2019b). While the mountain and nearby lakes, forests, and bogs had long ago become "sacrifice zones" of minerals extraction (Reinert 2018), many residents resisted the idea of sacrificing more space to extraction than they already had. Kiruna Iron's invitation for residents to "focus on the future" via new mines was also less an invitation than an insistence, one familiar to Ore Fields residents who'd seen proposed development projects come and go: *more mines will have been good for you.* The mining company's insistence that residents see local space through the tense of the "future perfect" – framing present sacrifice "from the point of view of a reflexive horizon" (Povinelli 2011, 3; Hetherington 2016) – was a utopian narrative that residents had heard before. Long accustomed to seeing their home spaces represented as a frontier, or an "empty stage" for the desires of external development actors to be played out (Young 1992; Haley, Klick; Szymoniak, et al. 2011), Kiruna Iron's extractive *uchronotopia* – a framing of extractive time and space as the expression of an ideal desired future (Askland 2021; Sörlin 2021; Thisted, Sejersen, and Lien 2021) – failed to find purchase with residents that evening. Citing both histories of Sámi resistance to extractive projects and broader community needs in the present – *more* space for housing, reindeer herding, fishing, hunting, and recreation, not *less* – residents refused Kiruna Iron's vision for the future of Ráhkkurjávri, and the mine was never (or has yet to be) built.

An ethnography of spatial and social transformation

The mine meeting, as would many other exchanges and events I encountered during my fieldwork, sharpened my intention to understand the meanings of nature, space, and society in Kiruna. A focal point early in my fieldwork was the "urban transformation", the ongoing resettlement of six thousand Kiruna residents underway when I arrived in 2012. Ground deformations affecting the surface of the earth on which the city was built were detected in 2004. Four years later, LKAB's board[6] voted to construct a new main level in the Kiruna mine, KUJ 1365. This new main level – LKAB's largest investment ever – would extend the life of the mine by an additional thirty years, but its creation and subsequent use would exacerbate ground deformations, gradually affecting more areas of Kiruna city and necessitating the relocation of residents within a shorter period.

Local institutional actors in Kiruna, such as municipal politicians and LKAB representatives, frequently used the term "transformation" *(omvandling)* as a shorthand for this mining-induced displacement and resettlement project (MIDR) (Downing 2002, Terminski 2012, Owen and Kemp 2015, Askland 2018). LKAB and its owner, the Swedish government, in contrast, used the term "societal transformation" (*samhällsomvandling*) to refer to this megaproject. The term also appeared around the city, in information pamphlets for international tourists, banners on chain-link fences around buildings being demolished (Fig. 1), company newsletters sent out to every household, or in corporate annual reports one could pick up at the Kiruna People's House. That Kiruna Municipality, and most residents I knew used "city transformation" (*stadsomvandling*) or "city move" (*stadsflytt*), however, indicated a slightly different take of what was being "transformed". Was it "just" society, or was it "just" urban space? Or was it both? In any case, how could one "transform" either space or society? Journalist Po Tidholm (2018), reflecting over a decade on about the transformation, echoed similar questions:

> Still, it is unclear what it really is one intends to move…it is in the end a philosophical question about whether it is possible to move a city. In a physical sense, maybe the answer is yes, but if you think of the city as a

6 As LKAB is wholly owned by the Swedish state, the company's Board of Directors are appointed by the government Ministry of Trade and Industry.

metaphysical construction, made up of lived life, memories, values, ideas, and ideals it seems impossible. Yet it is said to be possible right in Kiruna.

Fig. 1: Image of the Kiruna City Hall being demolished. The LKAB banner on the fence reads (in both English and Swedish): "Urban transformation is progressing in order to ensure a future together." March 2019. *Photo: Elisa López*

In 2014, I posed some of these questions to Markus, Development Manager at LKAB's Department of Societal Transformation. What did "societal transformation" mean for LKAB, the driving force behind the urban resettlement project? "I have no idea", Markus said, laughing.

> But basically, what I think we mean by it – why the unit is called Societal Transformation – is that it has to do with the built area, it's not really a city, it's a community. And you will transform...it will be transformed, it will be changed and resettled, maybe that's why it's called transformation. I don't know, I don't really know what word is suitable. You have to go back to someone who was involved and ask them. What we are doing in Kiruna is we are going to dismantle the city

> center and help the municipality to rebuild somewhere else. Make people feel secure that they can move from one place to another.

Markus' claim that that Kiruna wasn't "really a city" but a "community" intrigued me. The damage to the city and resettlement of residents, from the company's perspective, was rightly acknowledged as both a technical problem and a social one; indeed, what was happening in Kiruna was not just physical space being "transformed" to continue mining, but also society itself. This was, from LKAB's perspective, a net positive for the community, or "opportunity" that LKAB could help realize, as described in the company's 2012 company annual report (LKAB 2012a, 46):

> For the residents, the transformation represents an opportunity to create new, improved communities in terms of public services as well as communication and housing. It is about offering a high quality of life. For us at LKAB, urban transformation is not merely a heavy responsibility. It is above all a challenge and an opportunity to create something new and better. Many different stakeholders will collaborate on how the new communities will emerge. But it is LKAB that will foot most of the bill. We want to see it as an investment in the future for us as a company and the residents of our communities.

Since the 2004 announcement, however, the "urban transformation" had rarely followed a neat narrative of progress in practice. What at first appeared to both corporate and municipal leaders as a rational, "matter of fact" project, shifted to one increasingly characterized by unruly, proliferating "matters of concern" (Latour 2004). Space in Kiruna – both subterranean and above ground – was no longer a neutral, abstract container for objects or people. Rather, the more space was understood as unpredictable, unstable, and uncertain – as social – the more political and contested the project became. In 2012, it was discovered that the deformations were growing faster than anticipated, and that more people would have to be moved in a shorter period. More land would be required to make this possible, as would clear and concrete plans about how to resettle residents in inhabited areas. Questions about what to move, where to move, and what it meant to do so proliferated: how to choose a resettlement area that balanced out the interest of the many affected stakeholder groups? How, where, and when should the demolition of neighborhoods and relocation of infrastructure be carried out? What forms should compensation for the displaced take? What should the resettlement area look like? What from the "old" city could be preserved and moved to

the new? What could be destroyed? In other words, had space in Kiruna ever been a "matter of fact"? Or had it always been a "matter of concern", only made to appear inert, empty, discrete, and manageable?

Space in, around, and under Kiruna, it was becoming increasingly clear, had never been a "risk free object", clearly defined or self-contained (Latour 2004b). Rather, the expansion of mining, the resettlement of residents, and the appearance of new mines rendered space increasingly social, political, and agentive (Bennet 2010). As it would become increasingly clear to me as an anthropologist and for Kiruna residents whose familiar spaces now faced radical transformation, extractive space, urban space, and Sámi herding spaces were never discrete and isolated, but have long impacted each other. These impacts and interactions have a long history: as sociologist Henri Lefebvre would summarize it, "(social) space is a (social) product (Lefebvre [1974]1991, 26). It became increasingly clear that to understand how diverse residents affected by mining made sense of these radical change, one must pay attention to not only the physical changes to land but the ways in which people talk about space, do things in space, represent space, make claims to space, and imagine space in the past, present, and future.

Main Questions and Significance of the Study

It is now possible to pose the central questions this thesis considers: How did Kiruna come to be imagined as a particular kind of space desired by extractive resource industries, and imagined as a site of potential (Tsing 2003; Li 2014)? How does resource extraction produce ideal spaces, natures, and societies, and what are the implications of these social-spatial productions for different groups? What to do spatial concepts, representations, and configurations in Kiruna reveal about social histories, inequalities, and relations of power? Finally, how are these socio-spatial realities experienced, articulated, and re-imagined in Kiruna?

In this thesis, I primarily attend to the perspectives of one local group, the Čohkkiras Sámi reindeer herding community. This local group represents a category of stakeholders severely affected by extractivism, the prioritization of resource extraction – such as oil, gas, or minerals – within political economy and development planning (Wilson and Stammler 2016, 1), and whose experiences of extractivism as Indigenous people have long been marginalized. Accordingly, in this thesis I analyze not only how the

prioritization of minerals mining in Kiruna impacts Sámi space and society, but how Sámi displacement from space has been integral, rather than incidental, to mining as the dominant mode of production in the Ore Fields. Furthermore, this thesis considers how extractive socio-spatial change is experienced and negotiated through everyday practices. Risten and her family, who were the first to tell me that the city of Kiruna was to be moved, belong to one of two Indigenous Sámi herding districts and collectives (in North Sámi, *čearru*) on whose home and grazing lands the city of Kiruna and LKAB mine were built on in the late nineteenth century. Just as the damage caused to the city is the result of over one hundred and twenty-five years of mining, two *čearru* whose lands the mine and town were built on – Leaváš and Gábna – have also been increasingly affected by the consistent expansion of mine and city space, which I further analyze through the lens of extractive settler colonialism. This persistent historical, social, and spatial structure, I argue, is key to understanding the politics and production of space in Kiruna. I explain and expand upon this in depth in the following chapter.

The urban transformation is, among other things, an expression of settler colonialism's legacy in Kiruna, as Sámi land is appropriated to sustain extractivism in this part of northern Sweden, and as it has been for at least one hundred and twenty-five years. On our drive to their home one day on my first visit to Kiruna in 2011, Risten's daughter Máret slowed the car to point out a section of LKAB's railroad that had recently been re-routed due to damage from mining deformations. The railroad had been re-routed directly onto an important migration path used by Leaváš *čearru*, and LKAB[7] was currently building a fifty-meter-wide concrete bridge (an "ecoduct") for the reindeer to use as a replacement for this destroyed path. However, herders were worried that the reindeer – animals highly sensitive to noise and stress – would have a hard time using the bridge due to the proximity of trains, vehicles, and heavy machinery from the mine now passing beneath and around them – their migration path was now in the middle of a mining complex. This fractured landscape, which both local Sámi people and animals have increasingly forced to navigate since the 19th century in Kiruna, was an apt metaphor for the fractured, complex, and

7 This was done to meet the requirement for observing the protection of national interests (*riksintresse*). Both reindeer herding and mining are national interests, and I discuss this in the third chapter.

uncertain physical, political, and conceptual landscape which Sámi herders still face today.

In light of this, a further question this thesis asks is: How do Sámi people respond to the expansion extractive space in their homeland? Here, I consider reindeer herding – a complex and multifaceted Sámi Indigenous practice – as *also* a spatial practice, one which actively makes space that is both a "*work* and *product*, a materialization of 'social being'" (Lefebvre 1991, 101-102, original emphasis). Though livelihood strategies across Sápmi are highly diverse and have never been defined by a single occupation or resource, in Giron reindeer herding is a particularly widely practiced one. Reindeer herding is just one of many cultural practices, but it a particularly important ways of making and maintaining social and legal space, cultural landscapes, and multispecies sociality. As I show in the following chapters, it is also a practice with a complex history of state intervention (Nilsson 2020). In Giron-Kiruna, it is a highlight significant and valued Sámi livelihood, as Giron-Kiruna is home not only to Sweden's largest mine but also Sweden's largest reindeer herds.

Sámi reindeer herding is also a land-intensive form of animal domestication and husbandry, colliding with the spatial desires of nation states, extractive industries, military training grounds, scientific research, and many other actors in the Arctic region. At the same time, Sámi reindeer owners Sweden have few means to block the development of development projects which could negatively affect reindeer herding. Regarding mining, Sweden is a country with a mining policy that is general favorable to foreign prospectors, with low fees for mining permit applications, and allows the Swedish Mining Inspectorate to allow exploration against the wishes of property owners and other users (Bergsstaten 2021). Sweden also has most vague and least robust policies in all the Nordics regarding the impacts of mining operations on the Sámi people (Hojem 2015). Even though Sweden is the largest Nordic mining nation and twelve of Sweden's fifteen active mines are in Sámi traditional land areas, mining legislation in Sweden falls far behind global industry norms regarding corporate engagement with Indigenous peoples. In contrast to Norway and Finland, the Swedish Minerals Act makes no mention of the Sámi rights as Indigenous peoples at all (Hojem 2015, 59; Amatulli 2015), nor of the Sámi's status as an Indigenous people and stakeholder group recognized under international legal frameworks, with the right to consultation and participation in resource development in accordance with international law (Raitio, Allard, and Lawrence 2020, 12). The possible effects of this were

recently underscored in a study by Kaisa Raitio, Christina Allard, and Rebecca Lawrence, there are no known cases of mining permits being denied on the grounds mining would negatively impact Sámi reindeer herding in Sweden (Raitio, Allard, and Lawrence 2020).

This unequal relationship between Sámi and the state, as I will argue in the thesis, is both a consequence of settler colonialism and related to colliding representations, conceptions, and spatial practices in Kiruna. As I discuss in chapters four, five, and six, space has been a key means through which Sámi exclusion, marginalization, and dispossession (religious, political, and economic) has been materialized. Representations of land in and around Kiruna as a resource frontier, a wilderness, or an extractive wasteland actively collide with Sámi Indigenous cosmologies, ecologies, and place-based relations to a homeland (Clinton, Joly, and Gross 2019). For example, extractive space has long been (and continues to be) reproduced in Kiruna's built environment – in architecture, street names, and public art, among other forms. Outside the urban space, as I discuss in chapter six, notions of the mountains and forest as "wilderness" (*vildmark*) is contrasted with Sámi views and uses of the mountains as places of work, home, and multispecies sociality.

How do the promises, imaginaries, and representations of extractive space shape relations between different groups (Nuttall 2010)? While development projects often promise to "improve" life in target communities (Scott 1998; Mosse 2005; Li 2007) through promises of jobs, improved infrastructure, or" development", it is highly debatable whether these can be considered a "fair exchange" for land, particularly for Indigenous peoples for whom "land is life" (Wolfe 2006; see also West 2006a). The vignette at the beginning of this chapter, for example, highlighted a moment in which different local interests (for example, reindeer herding and recreational associations) were united in their stance against new mines. The meeting was a glimpse into the emergence of what anthropologist Kim Fortun would term an "enunciatory community", a contingent and temporary collective formed in response to disastrous circumstances and complex double binds (Fortun 2001,11). In Kiruna, the dominance of the mining industry as a source of local and non-local employment is substantial and has long been the source of both positive and negative outcomes for local people. Jobs in the Ore Fields mining industries have long allowed for local people to remain at home, but also destroys the resource base for Sámi reindeer herding, and now threatens residents who must move. In the thesis, I thus use the term displacement to

refer to specific, but often interlinked, socio-spatial effects, namely settler colonial displacement and mining-induced displacement and resettlement (MIDR). Here, I take inspiration from environmental anthropologists Deborah Davis Jackson (2011) and Hedda Haugen Askland (2018), who show that displacement is a condition not limited to forced migration, but also describes emotional and embodied experiences of living with the effects of industrial development. For Indigenous people, as Jackson shows, living with the negative environmental effects of industrial activity adds "new displacement pressures" to the historical experience of settler colonialism (Jackson 2011, 609), while all residents in Kiruna experience what Askland (2018, 231) terms "being displaced in place" people wait in limbo for the resettlement process to unfold. Both perspectives strongly a resonates with the experiences of the people I discuss in this thesis, and as I will show, reveals how the production and expansion of mining also creates social marginalization, inequality, and the feeling of "out of place at home" (chapters five and seven).

While urban space and infrastructure, mining space, and Sámi spaces (of herding, dwelling) overlap densely in Giron-Kiruna, in the thesis there are moments where I make analytic distinctions to show how they overlap and/or move in an out of each another. I signal these distinctions in various ways. One is the use of place names like Giron-Kiruna, Giron, or Kiruna. I use at different moments in the thesis to highlight the spatial perspectives, imaginaries, representations, and definitions at stake in particular contexts; hyphenating Giron-Kiruna, for example, is intended to highlight the hybridity of spaces and the terms people themselves would use when referring to the city. While I have not included the Meänkieli place name, as this was not the focus of my study, a different study could certainly use Kieruna-Kiruna or Giron-Kieruna-Kiruna to highlight the multiple sociospatial dimensions of this place as needed. Finally, it is important to note that these spaces index multiple temporalities. While I don't attend to temporality as central analytic across all chapters, I do consider the role of mining temporalities (D'Angelo and Pijpers 2018) in chapter seven and refer to moments from distinct historical periods to capture specific spatial characteristics of spaces and their creation (or destruction) throughout the thesis. Alongside ethnographic accounts, observations, and interviews, I use these moments to shed light on how social-spatial dynamics operate and unfold in the present. I return to the specifics of how this empirical material was gathered momentarily. First, however, it is necessary to introduce the people, spaces and places this thesis is about.

The People

Since at least the 17th century, the Giron-Kiruna area has been home to diverse groups. Until the early 20th century, present-day Giron-Kiruna and Tornedalen (the Torne River Valley) was designated as Torne Lappmark, (one of the "Lappmarks", or "Lapp territories"), a 16th century geographical term used to describe lands traditionally occupied and used by Sámi. In these territories, the church played a central role in the administration, one of the earliest forms of settler colonialism in Sweden's north (Össbo 2020, 245). Centralized market towns, such as Čohkkiras (in Swedish, Jukkasjärvi) town and parish became the main religious, cultural, and administrative capital of these sparsely populated areas, where rural residents, including nomadic Sámi, would make the annual visits to trade, conduct baptisms and marriages, pay taxes, and partake in other legal matters (Granqvist 2004). Parish districts (*socken*) of the state Swedish Church were the central organizing structure of local administration from the seventeenth century, and the predecessors to municipalities in Sweden. Jukkasjärvi Parish served this function from approximately 1554 until the establishment of Kiruna as a municipal community (*municipalsamhälle*) in 1908. Parishes remained the smallest geographical unit in the country until the 1990s, after which this status was dissolved.

The Tornedalen area became Swedish territory in 1809, during the creation of the border between Sweden-Norway and Russia-Finland. At that time, individual families were compelled to choose a side of the border, typically corresponding with the location of existing properties and farms. Several towns, including Gárasavvon (North Sámi; in Swedish, Karesuando) and Guhttás (North Sámi; in Swedish, Kuttainen), were literally divided in two when the Munio River was designated as the border boundary between the two countries. Today, Tornedalen remains an active transnational region, with "Swedish" Tornedalen encompassing the municipalities of Kiruna, Pajala, Övertorneå, Kalix, and Haparanda, and on the Finnish side, the municipalities of Torneå, Övertorneå, Pello, Kolari, Muonio, and Enontekis. The descendants of these Finnish agriculturalists today are one of Sweden's five national ethnic minorities[8], the Tornedalingar – the people of Tornedalen. While there are few statistics

8 Tornedalers as an ethnic group are different from Swedish Finns, which consists of descendants of Finns who moved to Sweden when Finland was a colony of Sweden or came later during the 20th century because of the Second World War or labor migration.

regarding national minority groups in Sweden today[9], as no census information or statistics regarding ethnic background are collected, some government organizations who focus on issues regarding national minorities, such as the Sámi Parliament, do provide some estimates for these groups based on number of language speakers and other data. According to these, in 2010 there was an estimated 40-70,000 Swedish citizens of Tornedalen ethnicity, who maintain a distinct Finno-Ugric dialect, Meänkieli (Laestadius 2010). Tornedalen is known for a strong regional identity and has an official flag (combining the colors of Sweden and Finland) and national day. Tornedalen people in the areas closer to Kiruna, especially the villages of Jukkasjärvi, Kurravaara, and Vittangi, are known as *Lantalaiset* (pl. *lantalaisen*, Meänkieli for "rural people"), and this area is sometimes referred to as "Northern Tornedalen". The Lantalaiset-Meänkielli (*Lannakieli*) name of the city, Kieruna, appears on road signage along the E-10 highway alongside Swedish and North Sámi. As noted, while I don't attend to perspectives from the Tornedalen community – which would be far beyond the scope of this thesis – they are a significant local group, and as I show in chapters four and five, played an important role in the helping their Sámi neighbors survive difficult periods of climate catastrophe and settler colonial policy.

The Sámi: A Circumpolar Indigenous People

The Sámi are both a national minority group and Indigenous people in Sweden, whose population and traditional territory, Sápmi, is divided amongst the nation states of Sweden, Finland, Norway, and Russia. Today, the total population of Sámi people in the world is estimated to be approximately 80,000-100,000 persons. In Sweden, the estimated population of Sámi range between 20,000 and 40,000. The figure most often cited, 20,000, dates from a 1975 government investigation and has not been updated since, and researchers estimate that the actual number of persons of Sámi ethnicity may be three times higher (Sjögren 2013). North Sámi is the most spoken language across Sápmi with an estimated sixteen to seventeen thousand speakers, with five to six thousand speakers in Sweden. North Sámi is the most spoken Sámi language in both Kiruna

9 The other three national minority ethnic groups are the Finnish, Roma, and Jewish communities of Sweden. These groups are also represented in Kiruna Municipality, as they are throughout Sweden.

Municipality and the Swedish nation. However, across Sweden, at least four other distinct Sámi dialects are spoken: Lule Sámi, South Sámi, Pite Sámi, and Ume Sámi. North Sámi, Lule Sámi, and South Sámi, are considered endangered languages by UNESCO (Sametinget 2020a).

The Sámi have long worked to articulate their identity and self-determination as an Indigenous people at the national and international level. The first national Swedish Sámi Association, Fatmomakke Sámi Association (*Faepmien Saemien sibrie*) was founded in 1904 to protect Sámi social, economic, and political interests across the country. In 1918, the magazine *Samefolkets egen tidning* ("The Sámi People's Own Newspaper") was founded by Uppsala law student and future Sámi politician Torkel Tomasson (1881 - 1940) and is today one of the oldest Indigenous publications in the world. In the first issue, the Sámi self-identity as a people is emphasized just below the masthead: "*Same*, pl. *Sameh*, are the people who the Swedes have called and call Lapps. The people call themselves, however, *Same*, pl. *Sameh*.". *Samefolket* remains an important part of the Sámi people's movement for political representation and self-determination in Sweden today (Lantto 2003, Harnesk and Lindstrand 2019).

In the early 1920s, the International Labor Organization became the first international body to recognize the exploitation of Indigenous peoples as laborers and advocate for the protection of their rights as Indigenous peoples, part of the emerging pro-labor movements around the world at that time (Yupsanis 2010). In the second half of the 20th century, Sámi from Norway, Sweden, Finland, and Russia played active roles in the creation of the international Indigenous people's movement (IIPM) and early organizations like the International Working Group for Indigenous Affairs (IWGIA). In Sweden, early contact between Sámi and Indigenous leaders was established when the Canadian First Nations leader George Manuel visited Sweden as a representative to the 1972 Stockholm U.N. Conference of the Human Environment, during which the concept of "sustainability" was first introduced as a part of the meeting's focus on maintaining the earth "as a place suitable for human life not only now but for future generations" (Basiago 1995). During this same visit, Manuel also traveled to Kiruna and to the nearby village of Rensjön, home to herders from Gábna *čearru,* where he met with Sámi representatives and established contacts that would later inform the development of the global Indigenous rights movement. This occasion was featured on the front page of Sweden's largest newspaper, *Dagens Nyheter*, on July 11th, 1972, with the headline

"We have the same problems and should address them internationally" (Minde 2003a,13).

In 1977, the Swedish Parliament voted to constitutionally recognize the Sámi as an Indigenous people who have continually inhabited the territories of present-day Sweden long before the establishment of the nation state, or since time immemorial (Prop 1976/77: 80, bet 1976/77: KrU43). In a landmark legal case decided shortly thereafter in 1981, the Taxed Mountains (Skattefjäll) case, the Swedish Supreme Court ruled while the state was the rightful owner of all land within Swedish territory, the Sámi right to use land (usufructuary rights) is also constitutionally protected and considered on par with property rights (Lantto and Mörkenstam 2008, 37; see also Svensson 1997). However, this constitutional recognition has been inconsistently applied since, and neither the 1971 Reindeer Herding Act nor the 1991 Minerals Act have been amended to account for reindeer herding as a property right (Allard 2016; Lawrence and Åhrén 2016; Raitio, Allard, and Lawrence 2020, 2).

Though the Alta Affair first cast a global spotlight on the political and legal challenges Sámi face as Indigenous people in the Nordics, and these challenges continue into the present (Allard and Skogvang 2015; Ravna 2020; Allard and Brännström 2021). One reason for this, as Norwegian Sámi Indigenous Studies scholar and political scientist Rauna Kuokkanen observes, is that there are aspects of incompatibility between Nordic welfare ideology and Indigenous rights (2006). Notions of individualism and social equality (egalitarianism) as defined within Nordic welfare ideology, Kuokkanen argues, "have tended to ignore and curtail the collective dimension of the Sámi as a separate people with distinct rights within the state". As such, welfare ideology may also function as a tool of assimilation (Kuokkanen 2006, 5). Anthropologist Robert Paine termed this liberal dimension of settler-native relations, and the tutelage that underpinned them as "welfare colonialism", importantly pointing out that for Indigenous people, welfare relations between "the nanny and child" roles are further "'put upon' grown-up men and women…by the demands of the colonial encounter." (Paine 1977, 26).

Recently, anthropologists Frida Hastrup and Marianne Elisabeth Lien (2020) have called attention to the complex links between social welfare systems and natural resource frontiers in the Nordic Arctic. The authors argue that a kind of "benign resource development" is often present in the Nordic Arctic – with an emphasis on the usability and availability of land – and that this resource development is intimately linked to a "welfarist,

egalitarian morality", manifested implicitly in such projects (Hastrup and Lien 2020, vi). I further examine these tensions between welfare state ideology, Indigenous rights, and the politics of land use in chapter six.

Sámi Reindeer Herding in Sweden

Reindeer herding in Sweden is a collectively practiced form of transhumance, the seasonal movement of people and domesticated reindeer (*Rangifer tarandus,* in North Sámi, *boazu*) between fixed summer and winter pastures that has been practiced in the circumpolar Arctic for centuries (Lehtola 2004; Müller-Wille et al., 2006). Today, reindeer herding is practiced over approximately fifty percent of Sweden's land area and is the exclusive "right" of the Sámi people, for whom reindeer is one of several traditional livelihoods. There are fifty-one Sámi reindeer herding districts, or *čearru* (in Swedish, pl. *samebyar*) in Sweden (Fig. 2). A *čearru*, as I will explain in detail below, is an economic and administrative unit, as well as a defined geographical area, within which reindeer herding is conducted and organized. It is estimated that there are between 220,000 and 260,000 reindeer in Sweden today, with sixty percent in Norrbotten County. Accordingly, this region has the highest number of reindeer owners in Sweden (Sametinget 2020). When considering the number of people– both Sámi and non-Sámi – involved in the production and processing of meat and reindeer byproducts (refrigerated transport, slaughterhouses, distributors specializing in reindeer and game), reindeer herding is a significant economic activity for some northern rural residents, as it is for many in Kiruna Municipality.

Fig. 2. Map of the *čearru* in Sweden. Kiruna is the northernmost city in the country, marked by a red dot. The green line depicts the cultivation border (*odlingsgränsen*) drawn up in 1867, while the grey line marks the "Lapland" border established in 1751 (see chapter three). The blue shaded areas denote summer and winter reindeer pastures, and the white lines the individual *čearru* lands (Sametinget and Sunesson, n.d).

Today, seven *čearru* lie within Kiruna Municipality: Leaváš, Gábna, Dálma (Talma), Sárevuopmi (Saarivuoma), Lávnjitvuopmi (Lainivuoma), Rosttu (Könkämä), and Vazáš (Vittangi). These are mainly mountain reindeer herding collectives[10], with a combined herding area of approximately 25,912 square kilometers and approximately 166,000 reindeer, the largest reindeer herds in all of Sweden. Within these seven *čearru*, there are approximately two hundred and thirty-one registered "reindeer companies" (*renskötselföretag)* which are registered to full-time reindeer herders[11], and 1,561 registered reindeer marks, or individual marks of ownership. These marks of ownership, which are equivalent to cattle brands in marking an animal as individual property, are cut into both the ears of reindeer calves (and, if looking at a reindeer from behind, are read from left ear to right ear). While one can own reindeer without being a full-time reindeer herder (as I will explain shortly), "owning" a reindeer mark itself is strictly regulated and left to the discretion of each *čearru* board. Most often, these marks are inherited from relatives and, once the ownership of any remaining animals belonging to the former owner is settled, they are re-registered in the new owner's name. These marks do not follow any patrilineal or matrilineal descent pattern, and can skip multiple generations: for example, a granddaughter may inherit her paternal grandfather's mark, or a nephew his mother's uncle's mark, with the approval of the *čearru*. There are also what are known as "concession" *čearru*, reindeer herding units that operate with special permission from the Norrbotten County Administrative Board (Länsstyrelsen i Norrbotten) and include both Sámi and non-Sámi reindeer owners. These units reflect a long, complex, and place-specific history of Sámi tending reindeer owned by non-Sámi people during the 19th and early 20th centuries and into the present. They also reflect the diversity of livelihoods Sámi people have undertaken over time, as well as relations between Sámi and non-Sámi groups in reindeer herding areas (Brännlund 2018, 50; Nordin 2002;

[10] In areas outside of the cultivation border to the east, the reindeer herding is classified as referred to as a "forest reindeer herding" (*skogsrenskötsel*). In contrast to the mountain form of herding, forest herders do not move mountain areas in the summer, but rather to cooler forest and bog areas. For these groups, fishing and hunting comprised the main base of the household economy, but this could also include the hunting of wild reindeer (in pre-historic times) and later the keeping of small numbers of reindeer or other animals in home corrals (Ruong 1937).

[11] According to the Reindeer Herding Act of 1971, these herders are not allowed to receive more than 50% of their employment from non-herding activities.

Jernsletten 2007). However, after the implementation of the 1971 Reindeer Herding Law, only Sámi people can legally herd reindeer, creating difficult, and at times unjust, relations between Sámi and non-Sámi members[12].

Membership within a *čearru* is typically based on kin relations (Beach 1981; Beach 1997; Åhrén 2004). When discussing *čearru* membership in an administrative sense, members are formally categorized as either full-time registered reindeer herders (*husbonde*[13], operating their own reindeer herding companies and heads of *siida*), or members of *čearru* as defined in the Reindeer Herding Law (SFS 1971:437 §11A):

1. A Sami person who participates in reindeer husbandry within the village's grazing area,
2. A Sami who has participated in reindeer husbandry within the village's grazing area and had this as a permanent occupation and has not transferred to other main gainful employment,
3. A spouse or resident child of a member referred to under 1 or 2, or who is a surviving spouse or minor child of a deceased member.

The Sámi Parliament more simply defines the main categories of reindeer herders as reindeer keepers/herders (in Swedish, *renskötare*) and reindeer owners (*renägare*). Most of the people whom I interviewed and spent time during this research belonged to the second category, reindeer owners. As the number of reindeer owners is much larger than the number of full-time herders, *husbönder* are sometimes also responsible for animals belonging to different owners and/or families in their *siida.* A typical *siida*[14] consists of three to five households, or the members of a single large

12 The denial and recovery of *čearru* membership to Sámi who were dispossessed of the right to herd during the colonial period is an active inter-community debate today.

13 The term *husbonde* (in English, "husbander", pl. *husbönder*) originates from agricultural-industrial society. "Husbander" orginally originally applied to men who owned and oversaw a farm or works. In the old meaning, the *husbonde* was the main political representative on behalf of all workers and family members in the household. Today, the term is used both by male and female reindeer herders to denote the head of a *siida. Husbönder* also serve on a *čearru* administrative board. Other terms from agriculture, such as hired hand (in Swedish *dräng*, in North Sami, *reanga*) are also still used in reindeer herding today.

14 According to Israel Ruong (1937, 2), the *siida* originated in the period where wild reindeer were hunted (prior to domestication) and was a way of organizing hunts and distributing the harvest to all, including the elderly and others who couldn't participate.

family, who move their animals together between seasonal pastures and organize the work pertaining directly to their animals together, such as the selection of animals for slaughter in the fall and winter, marking calves in summer, and other immediate tasks pertaining to the member's reindeer. Each individual reindeer owner, however, is solely responsible for deciding what to do with his or her reindeer, as they are considered individual property. Additionally, there are cases where someone who is kin with members of a *siida* can be "with" or part of the *čearru* though they may not fit into the above member categories. Examples would be a non-Sámi person who has married a member and actively assists with herding and other *čearru* tasks, or a person with a Sámi parent interested in taking up reindeer herding independently as an adult. This person would begin learning the craft and business of herding through assisting family members in the *čearru* with their animals, and over time inherit their own mark and/or purchase animals with the approval of the *čearru* board.

The Čohkkiras Sámi Communities

As noted, Sámi land and inhabitants have been categorized by the state according to different geographic designation over time (i.e., Torne Lappmark) Another narrower designation related to the Swedish Church has been the parish (*socken*). The mountain reindeer herding *čearru* of Gábna (previously called Rautasvuoma), Leaváš (previously called Kaalasvuoma), and Dálma/Talma are the closest *čearru* of Čohkkiras **(**in Swedish, Jukkasjärvi**)** Sámi Parish to present day Kiruna. Indeed, it is these three *čearru* on whose grazing lands the city of Giron-Kiruna and its infrastructure were built, and most of the Sámi interlocutors I knew involved in reindeer herding and reindeer ownership belonged to one of these three *čearru.*

Sámi linguist, ethnologist, and politician Israel Ruong (1937,1969) and anthropologist Nils-Erik Hansegård (1978) both of whom carried out fieldwork with the mountain *čearru* of Čohkkiras Parish in the early 20th century documented how nomadism and herding changed in the area beginning in the 1880s. Most of these changes were the result of, or

Ian Whitaker (1955, 75) described *siida* as "a mobile form of organization" adapted to nomadic life, while Ruong (1937, 2) describes them as a "highly developed society based on communal grounds". However, as Kristina Labba (2015), the modern form of the *siida* as an administrative unit is also a state construction, and which facilitated collectivized punishment for reindeer damage to settler property.

exacerbated by, settler colonialism: the construction of the railroad, the LKAB Kiruna mine and Kiruna city, and the introduction of reindeer herding techniques brought by Sámi re-relocated to the Čohkkiras area after the closure of the Finnish-Swedish and Norwegian–Swedish borders in 1852 through 1925 (Ruong 1937; Hansegård 1978; see also Labba 2020). These herds of Sámi from Norway and Finland, particularly from the Kautokeino and Karesuando areas, were much larger than those kept by the Čohkkiras communities, and these herders introduced what is known as the "extensive" method of herding. The extensive method of herding involved a greater degree of animal autonomy, larger herds of animals kept collectively, and the use of peninsulas and other natural formations to keep reindeer from wandering. In contrast, the intensive form of herding which had previously characterized herding in the Čohkkiras area involved greater individual family/*siida* mobility, smaller herds kept separately, and more frequent roundups and milking. However, the arrival of new herders to the districts, as well as limits on cross-border migration and access to pastures, led to an overall reduction in herders (particularly smaller herders) and more collective forms of herding. Herders in Čohkkiras also adapted these changes at different periods; Gábna and Leaváš did not turn to the extensive form of herding until the very end of the 19th century (Ruong 1937).

After 1880, whole families migrated less and less frequently. Extensive herding techniques required less overall mobility, which dovetailed with the 1919 Reindeer Herding Convention's aim to reduce the number of people and animals crossing the border (Ruong 1937). This change meant that a smaller number of male herders – rather than whole families, who were no longer allowed to move together – followed the reindeer for weeks or months at a time, keeping watch on the herds. Women, children, and the elderly now stayed in semi-permanent seasonal villages of multiple families (in Swedish, *storvisten*), groups of five to fifteen homes often located near good fishing waters and/or relatively close to seasonal grazing and calving areas. Several of the largest, like Nihkkáluokta (Nikkaluokta), Rensjön[15], Orusjohka (Årosjåkk), and Rávttasjávri, evolved into permanent year-round villages, in which most if not all residents were Sámi. In such

15 People did not initially stay in the site today known as the village of Rensjön. The stayed on the other side of Njuohčamjávri (in North Sámi, "the lake near the village") up on the tree line. Similarly, people did not stay in the specific place today known as Rautas, but rather Rávttasjávri, a nearby lake. The sites of Rautas and Rensjön were settled when the railroad came, and some chose to move there.

villages, family members not involved in seasonal work with the reindeer were engaged in other kinds of tasks, including boatbuilding, tending to cows and goats, caring for calves and reindeer in need of extra feeding at home corrals, harvesting berries and other edible plants, fishing, producing handicrafts, and snaring birds.

The transformation of traditional areas into national parks in the 19th century outdoor also affected the Čohkkiras Sámi communities, offering both positives and negatives. In periods during which the herds were weakened – due to unfavorable weather, poor pasturelands, or disease – working as mountain guides or offering transport and lodging to tourists was one way for Sámi to supplement the herding livelihood and remain in their homelands. One example is Nikkaluokta (in North Sámi, *Nihkkáluokta*), a *storvisten* that grew to become the site of the Nikkaluokta Mountain Lodge (today Nikkaluokta Sarri AB), located at the trailhead to the Kebnekaise Mountain area and a key stop on the Kungsledgen hiking trail. The first caretaker and director of this Mountain Lodge, Nils Olsson Sarri, was a herder and mountain guide from Girjas *čearru* whose family (among others) settled in Nikkaluokta in the early 20th century after losing many reindeer to starvation. While Nikkaluokta was close to the migration paths for the reindeer and fishing waters – and thus ideal for year-round Sámi residents – it also increasingly attracted tourists on their way to the STF (*Svenska Turistföreningen*, The Swedish Tourism Association) Kebnekaise Mountain station, established in 1908. The Sarri family began to offer food and accommodation to travelers in their home, offerings which soon developed into a successful hospitality business still managed by the family today. Like Nikkaluokta, several Sámi-owned tourism companies have since been established in and around Giron-Kiruna, many of which promote Sámi cultural perspectives and activities, such as corral feeding, exhibitions by local Sámi artists, and serving Sámi traditional foods in diverse settings. While some of these businesses are highly successful and provide an important source of income for families, these tend to function – as industrial or other wage labor does – as a complement to reindeer herding, rather than ends in themselves (Müller and Huuva 2009). However, intra-Sámi perspectives on representation of the Sámi culture in tourism are by no means uniform (Olsen 2016). In the Giron-Kiruna area, I examine how the mountains came to be (and still are) conceived as spaces of recreational "wilderness" in chapters two and six.

Urban and Regional Background

The Ore Fields (*Malmfälten,* or the Lappland Ore Fields [*Lappländska Malmfälten*]) region is an area over thirty-seven thousand square kilometers, encompassing the municipalities of Kiruna, Gällivare, and Pajala. The region is home to two of the largest iron mines in Europe – LKAB Malmberget and LKAB Kiirunavaara – operated by the Swedish state-owned mining company, LKAB (Luossavaara-Kiirunavaara Aktiebolag). The mines, cities, and infrastructures of Kiruna and Gällivare-Malmberget today comprise the Norrbotten Technological Megasystem, a regional network of interdependent infrastructure established in the late 19th century by a mix of private and state actors, consisting of mines, rail, terminals at the shipping harbors of Luleå and Narvik, the Porjus hydropower power station, and the military fortress at Boden (Sjöholm 2019). Large-scale urban settlement in the Ore Fields in the late 19th and century was a direct byproduct of the iron mining industry, as was settlement throughout the region to attract a labor force necessary to build various parts of the megasystem.

The first mining settlement to be built in the "Lappland Ore Fields" (*Lappländska malmfälten*, today just the Ore Fields, *malmfälten*) was Malmberget[16], one hundred and twenty kilometers south of Kiruna. In 1888, a consortium of Swedish and British financiers completed enough railway between the Bothnian Gulf seaport city of Luleå and the magnetite ore mines in Gällivare-Malmberget to transport crude ore between the two points, and later building material to build housing. The Swedish state took over ownership of the railway the following year, completing this section of the line in 1892, and beginning construction between Gällivare and Kiruna – a site one hundred and twenty kilometers to the north and location of a much larger ore deposit. After the Swedish Parliament voted to extend the railroad beyond Kiruna to the Norwegian border in 1898, the settler population of the burgeoning Ore Fields mining towns increased rapidly. Five thousand workers from southern Sweden arrived to build the railway and/or take work in the Gällivare and Kiruna mines, and between 1890 and 1910 the population of Norrland increased by fifty-four percent (Viklund, Brunnström and Sjöholm 2015). Many of these settlers (*nybyggare*) came from the mines in Bergslagen, Sweden's largest mining region, as mine

16 Malmberget, built adjacent to the main ore deposit, is five kilometers outside the city of Gällivare,where displaced residents will be resettled.

labor wages in the Ore Fields were three times higher than in the mines of central Sweden, due to the high demand for professional, skilled miners (Forsström 1973, 29-30). Construction of a railway link between Gällivare, Kiruna, and the Norwegian-Swedish border (*Riksgränsen*) was completed in 1902 and connected to the Norwegian port of Narvik in 1923. Until 1984 when E-10 European highway was completed, the railroad was the sole transport link between Kiruna and Narvik, as well as villages in between.

The Luossavaara-Kiirunavaara Aktiebolag (hereafter, LKAB) mining company was founded in 1890 through a joint venture between the British-owned Gellivare Co Ltd. and Swedish investors, as subsidiary of the Swedish industrial concern Grängesbergbolaget. Permission to complete the railway between Gällivare, Kiruna and Narvik, Norway (The Ofoten Line), a project begun by the Gällivare Company, was transferred to LKAB by the Swedish state and completed in 1902. LKAB's open pit mining of the Kiirunavaara and Luossavaara mountain ore deposits was underway by 1903. From 1907 onward, in response to concerns about foreign control of assets important to the Swedish economy and military establishment, LKAB began to be slowly nationalized through joint ownership between the Swedish state and Grängesberg, with the state owning fifty percent of shares by 1903. During the Second World War, ore from the Kiruna and Gällivare mines, known for its high magnetite content (requiring less fuel/energy in the manufacturing of steel), would come to play an important role in Sweden's foreign policy. Germany was, and remains, one of the largest importers of Swedish iron ore, and during World War II this trade increased[17] (Karlbom 1965; Fritz 1974; Salmon 1981). After the war, the nationalization of LKAB continued apace, with the Swedish state purchasing an additional forty-six percent of the shares in LKAB and 1957, and by 1976 owning one hundred percent of the company shares (Viklund, Brunnström, and Sjöholm 2015; Liedholm and Ericsson 2015).

In the 1970s, a global recession led to the closure of many steel mills and mines throughout Germany, North America, and Britain. The mining communities in Bergslagen, southern Sweden, were equally hard hit, leading to rapid depopulation of former mining and steel works communities throughout Sweden. LKAB was partially able to weather this crisis through state restructuring of the steel industry in the 1980s, which

17 Between 1936 and 1944, Swedish iron constituted between twenty-five to fifty percent of Sweden's total exports to Germany, a foreign policy decision not without implications with regards to Sweden's claims of "neutrality" during the war and a source of concern for the Axis powers (ibid.).

turned its attention to developing mining technologies, scientific research, and patents, as well the reduction of surplus labor power through increased automation on the production side (Ericsson 1981). Employment in the mines began to decrease sharply in 1975, the beginning of a time LKAB refers to as "the difficult years" (Viklund, Brunnström, and Sjöholm 2015). In 1981, the Swedish National Industrial Board presented a study showing that the Ore Field mines had no more than twenty-five years left of production (SIND PM:1981:8), further exacerbating fears of impending mine closure in Kiruna. The report noted that LKAB would only be able to keep its present market share and production levels to remain profitable if the company was able to increase productivity per employee. The report presented two possible scenarios in which either a) no new investments in mine development were made and the market continued to deteriorate and a minimum of four thousand sector jobs would be lost; or b) LKAB slashed the workforce by half and invested in new main transportation levels and other technologies to increase productivity in the remaining twenty-five year estimated lifespan of the mine. LKAB chose to act upon scenario B, and by 1982 the domestic workforce at LKAB was cut from over 6,200 employees down to 3,700, in addition to closing the Tuolluvaara and Svappavaara mines and pelletizing plant. Between 1976 and 1992, twenty-six major iron ore mines across Sweden were shut down, including several-century old mines like Danemora, Stora Kopparberg, and Grängesberg. In 2010, approximately six thousand workers, or 0.1-0.2 percent of the Swedish labor force was employed in the remaining fifteen mine sites (Elgstrand and Vingård 2013, 78).

LKAB's Kiruna and Malmberget mines today produce, process, and export approximately ninety percent of the iron ore used in Europe, and the Ore Fields is one of the largest and most active mining regions remaining in Europe. The entire LKAB Group, which in addition to the Kiruna and Gällivare iron mines includes offices, operations, and subsidiaries throughout Sweden, the United States, China, and Europe, presently employs approximately 4,535 people (LKAB 2020a). LKAB (and its subsidiaries) is the second largest employer in Kiruna Municipality, and in 2019 employed approximately two thousand two hundred and twenty-five people, or 20.3 percent of all employees in the municipality (Regionfakta n.d.).

Kiruna: The Capital City of the Ore Fields

Since its official founding in the year 1900, Kiruna city has been home to a diverse population. In addition to the Sámi, the first residents of the city were Meänkieli-speaking Tornedalen farmers, Finnish migrants, and southern Swedish settlers who came to the Ore Fields to work in the mine or build the railroad. I examine the ideological and conceptual aspects of Kiruna city's production in detail in chapter three, but for the moment will briefly introduce the general background and current demographics relevant to the study.

Today, approximately sixteen thousand of Kiruna Municipality's twenty-two thousand residents live in the city of Giron-Kiruna, with the remaining municipal population distributed amongst fifty or so small villages (*byar*), spread out over 19,447 square kilometers. Following employment trends in the mining industry, the population of the Kiruna city urban area (*tätort*) has declined steadily since 1975, when the urban population consisted of 25,410 persons. In 2020, the population of urban Kiruna was 16,420 (Fig. 3**)**, the lowest population levels since 1960.

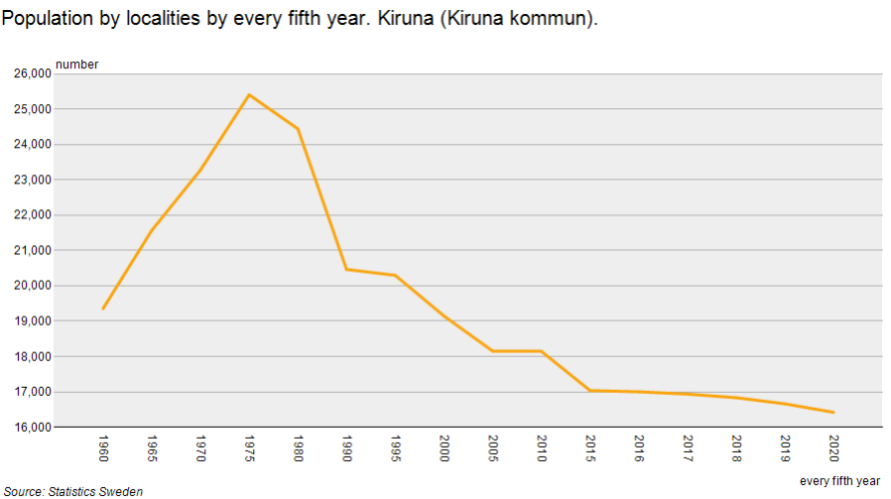

Fig. 3: Population of the Giron-Kiruna urban area (*tätort*), 1960-2020. *Source: Statistics Sweden, 2021a*.

Kiruna Municipality's total population reached its peak in 1975 at 31,194 inhabitants, and began to decline thereafter, also reaching its lowest number in 2020 at 22,664 inhabitants (SCB 2021b). Between 2011 and 2015, there was a slight population growth of approximately 0.9 percent,

making it an exception to adjacent Norrbotten municipalities such as Pajala, Gällivare, Övertorneå, and Jokkmokk. In these municipalities, labor employment in industries such as hydropower, logging, and mining has steadily declined in the post-war period due to increased automation and technology (Hansen 1998), but also a reduction in workforce once the build-phase of large infrastructure such as dams, roads, bridges, or electric grids have been completed. Nevertheless, employment in the mining, quarrying, and manufacturing sectors continues to dominate, with nearly a quarter of Kiruna's municipal population over the age of sixteen employed in these industries (Fig. 4). Since 2010, unemployment in Norrbotten also remained consistently low, and in 2020 Kiruna Municipality had the lowest unemployment rate of all of Sweden (Tillväxtverket 2021).

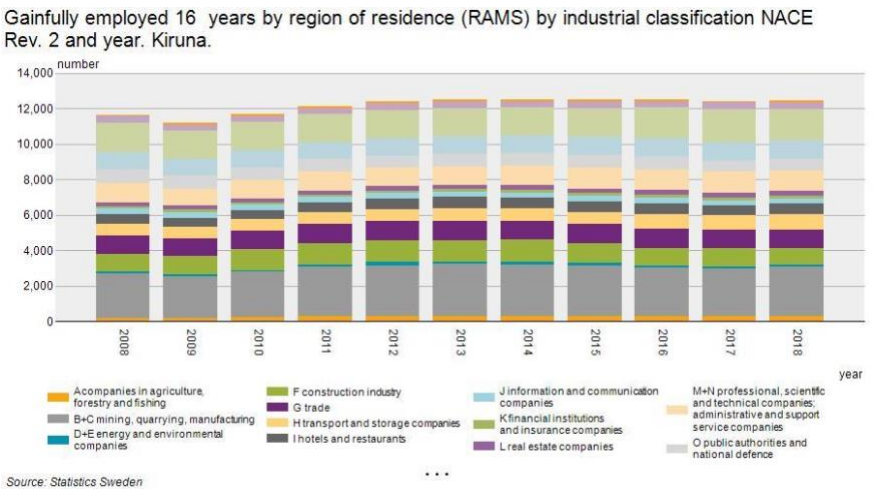

Fig. 4: Employment in Kiruna Municipality by age, year, and industry, 2008 – 2018. *Source: Statistics Sweden, 2021b.*

Swedish municipalities are local government entities that are responsible for most social services and administration. This includes schooling, pre-school care, facilities or homecare for elderly and disabled residents, sanitation, energy services, sports facilities, emergency services, public transportation, and urban and land use planning. As in other cities, Kiruna Municipality also has its own real estate division for property rentals (Kiruna Bostäder AB), as well as its own energy production facilities (Tekniskaverken i Kiruna AB). Because of this, Kiruna Municipality is also the largest public employer in the area. The highest decision-making

body in Kiruna Municipality is the legislative municipal assembly (*kommunfullmäktige*), consisting of representatives from local and national political parties chosen through democratic elections conducted every fourth year. In 2020, ten parties were represented in the municipal assembly. A second important body is the municipal board (*kommunstyrelsen*), whose representatives are selected by the municipal assembly. The chairperson of the municipal board (*kommunalråd*) is an office considered equivalent to a city mayor.

Between 2004 and 2018, Kiruna Municipality's council was led by the Social Democrats (*Socialdemokraterna*), in coalition with the Left Part (*Vänsterpartiet)* and the Sámi Party (in North Sámi, *Sámelisttu,* in Swedish, *Samelistu*). Sámelisttu was the first Sámi party to gain seats in Giron-Kiruna's municipal council, winning two mandates in the 2006 election. In 2018, the Centre Party, in coalition with the local Hospital Party (*Sjukvårdspartiet*), the Moderates (*Moderaterna*) and the Christian Democrats (*Kristdemokraterna*) won the majority mandates in the council, the first non-Social Democratic municipal majority in Kiruna's history. Since 2018 Gunnar Selberg (Center Party) has headed the municipal council. Selberg has long advocated publicly against bans on snowmobiles during the reindeer calving season, and opposes Sweden's ratification of ILO 169, the Indigenous and Tribal People's Convention in Sweden (Marakatt and Karlsson 2019, Dahlberg 2020). As I would come to learn, heated political debates and conflicts around snowmobile use mountain spaces have long existed in Giron-Kiruna, dating back decades to the time when snowmobiles first became popular consumer vehicles. These debates, and their appearance in what at first seemed indirectly related issues – like the urban transformation – revealed that concepts, values, and social relations to the environment in Giron-Kiruna were far from universal. Instead, I came to understand that mining, reindeer herding, and recreational snowmobiling/tourism also constituted multiple "colliding ecologies": systems competing to use natural resources, in which one system's exploitation may limit the viability of others (Kirsch 2014, 16). In chapters five and six, I explore not only how mining and recreation reproduce ideas of nature which impact the resource base of reindeer herding and the lives of reindeer owners, but also how these are articulated spatially (Moore 2005).

Fieldwork: Methods and Ethics

The empirical material for this thesis was collected over a period of fifteen months between 2012 and 2015. I resided in the Lombolo neighborhood in Kiruna over two periods: seven months from January to July 2012, and six months from January to June 2014, a total of thirteen months in all. In between and after these periods, when I was based in Uppsala and Stockholm, fieldwork was supplemented by research visits to Kiruna ranging from one week to a month. These were: January, February, September, and December 2013; August, September, and December 2014, and January and February 2015. In addition to the participatory-observation methods I discuss below, I recorded fifty semi-structured individual interviews with a wide range of people in each of these sites. Interview typically lasted from one to four hours, with longer interviews often spread out over several recorded sessions or days. Institutional actors included representatives of LKAB, Kiruna Municipality, White Architects, the Sámi Parliament, and board members of the local Kiruna *čearru*. These interviews were conducted in the workplace setting (typically the interviewees office), and the topic of the interviews was the work the interviewee was formally involved in. Non-institutional actors included my housemates, their extended families and friends, and other residents I got to know as a resident-researcher through snowball sampling (Bernard 2013). I also posted a call for interviewees in a local Kiruna Facebook group, and engaged one participant this way. These interviews typically took place at mine or my interlocutors' homes, or sometimes at a public location like a café. The recorded interviews always began with a brief conversation about the project, the voluntary nature of participation and how to withdraw, information about institutional affiliation and contacts, individual preferences for anonymization, and recorded consent. While all interviewees gave permission to use their names, a decision was made early on to anonymize participants in observation of professional ethical (American Anthropological Association 2012) and national guidelines (SFS: 2003:460, Swedish Research Council 2017), which forefronts protection of interlocutors from any risks involved in participating in academic research.

Interviews

All interviews were audio recorded, accompanied by primarily hand-written notes taken during and immediately after the interviews. The

recorded interviews were then transcribed and annotated, with secondary interpretations generated during re-listening and transcription. Most of my interviews were conducted in English, particularly in the early part of my fieldwork. Though I had intensively studied Swedish for two years during my master's studies, my practical Swedish speaking skills needed more time to develop. Younger people I formally interviewed were often fluent in English, while older people (age forty and above) often preferred that I pose my questions in English and they respond in Swedish, which I understood much better than I spoke. Towards the end of my field research, my conversational skills improved, and I used spoken Swedish more often, or a blend of Swedish and English known colloquially as "Svengelska." In informal situations, or when observing meetings and other gatherings, active listening took on a much more important role, as did discussion with my friends and interlocutors about observed interactions and occurrences after the fact. Informal situations included unplanned or spontaneous social gatherings (often with people I did not know nor encountered again), or everyday moments with my interlocutors in domestic settings we shared with or socialized in.

In my interviews, I was consistent in my use of English as a working language, which had both positives and negatives. Some interlocutors noted that they found it helpful to establish a distance from our topics of discussion, while two potential interviewees declined to be interviewed because they felt that their English comprehension might not be up to par, despite my offer to arrange an interpreter. Overall, most people I approached for interviews were interested in participating and conversing on the subjects at hand, with the assistance of friends or a dictionary if necessary. My primary concern above all was providing a conversational space where people could express themselves in the best way that worked for them. Accordingly, I conducted a further three interviews in which North Sámi was the primary language. On these occasions, I asked local friends who had experience with journalistic interviews and/or academic research and spoke North Sámi, Swedish, and English to assist as live interpreters, and with interview transcription in all three languages. In everyday one-on-one conversations, my communication followed similar patterns, but in larger social settings, Swedish was the primary language spoken, and in these settings, I relied more on listening and observing, usually assisted with the help of a companion (such as a friend or roommate) for clarification. In settings such as municipal meetings open to

the public, I audio recorded the proceedings, taking notes and re-listening for clarification.

Because of the contested nature of the subjects under discussion in this thesis, all names in this thesis are pseudonyms, with some notable exceptions I discuss below. The sensitive nature of the conflicts, inequalities, and tensions that often accompany debates around mining in the Ore Fields has been one factor in this decision. This is not a condition unique to Kiruna, but to many places in the world where one industry dominates local economic life, producing entanglements that circumscribe local possibilities for critique of corporate harm (Benson and Kirsch 2010; Benson 2014; Kirsch 2014). A second reason is the sensitive nature of discussions around structural discrimination and oppression of minority groups in Sweden, including Sámi. Until the last twenty years or so, inquiries about structural racial or ethnic discrimination in Sweden have been strongly challenged, exacerbated by a general lack of statistics and other "hard" data on minority groups and demographics (see Pred 1997, 1998, 2000, 2001; Lundström and Teitelbaum 2017; Hübinette 2017; Körber 2019). I have thus taken further care to anonymize most individuals belonging to *čearru* and information that might identify their association to a specific *čearru* to the extent it is possible. Two people whose real names I use throughout the thesis are Sámi Elders Margareta Huuva Stenberg and Anna Dynesius, highly engaged community activists, historians, and knowledge-keepers. While Anna had passed away before I came to Kiruna and Margareta passed away shortly after our interviews in 2016, both were Sámi community leaders, Elders, and activists whose activities included publishing works about local Sámi history in collaboration with academic research institutions. These texts, in addition to my interviews with Margareta and her relatives (for whom I do use pseudonyms), have been central to this project. I also use pseudonyms to refer to individuals associated with planning of the New Kiruna resettlement area, as the long time horizon of the urban transformation megaproject (Flyberg 2014; López 2021) has meant that many have moved on to less public roles since I conducted the research. Finally, I did not use pseudonyms when writing about public figures such as politicians, state agency representatives, and company representatives whom I did not interview and quote from news coverage or other media.

Participant Observation

As I was interested in people's experiences of space, place, and spatial practices in the context of their everyday lives, sharing experiences of dwelling and movement (traveling between villages, around the region, and reindeer work sites) with my interlocutors was central to my research methodology (Pink 2008). Early on, I sought living arrangements with others, avoiding living alone in favor of shared housing. After explaining my research aims and interests to the Rássi family, who I'd met prior to my anthropological studies, I was introduced to Ante, who also had family in the same *čearru.* My first accommodations in Kiruna were with Ante and Hannele, and during my second period of fieldwork, with Ante's close childhood friend Roger, who lived in the same neighborhood. In retrospect, I was lucky to be able to find housing in Kiruna at the time that I did. With the demand for housing being as high as it was due to the mining boom between 2010-2015, new acquaintances I met in Kiruna would often note my good fortune securing such living arrangements. Living with others was also important to my study as it provided an organic means of getting to know people and explain my research project to interested locals, some of whom agreed to be interviewed or suggested people I speak with, places to visit, or related topics to explore. It was also helpful to be a part of an established home due to the Arctic climate, which limited spontaneous interactions in the city. Kiruna does not have the kind of outdoor urban civic life locations with warmer climates might allow and having a welcoming space where I could conduct interviews, host my own visitors, and invite new social contacts was invaluable. Outside of our home, I regularly used public spaces such as the library, shops, bars, restaurants, the local adult education center, and the café in the old Kiruna city hall with other people or on my own. I attended political debates and events around the 2014 municipal elections, municipal information meetings for residents about the city transformation, and city council meetings in which urban planning issues related to the city transformation were debated and voted on.

I also visited LKAB's InfoMine[18] several times over seven years (most recently in March 2019) with tourism groups and once with a special

18 The LKAB Info Mine is an information center, museum, and "show mine", located about 300 meters underground in the Kiruna mine. Tours in both English and Swedish can be booked through the Kiruna Tourist Information Centre and is a popular visitor attraction.

municipal delegation, attending tours given in both English and Swedish, as well as attended and observed three demonstrations against foreign mining companies, two in Stockholm and one in Jokkmokk, where I also conducted interviews. To learn more about the process of planning New Kiruna which was just getting off the ground when I arrived in the field, I reached out to the ten architectural firms competing for the design of the New Kiruna city center. White Architects of Stockholm was the only one who responded and made time for me to interview and observe their work in Stockholm and Kiruna, both at the pre-competition stage in 2012, and subsequently in 2013 and 2014, which was a stroke of good research luck. I also had the opportunity to conduct interviews at LKAB's Department of Societal Transformation in 2012 and 2014, and Kiruna Municipality's planning offices in 2014.

The people I lived in Giron-Kiruna with (Ante, Roger, and Hannele) and the members of Rássi and the Biegga families – especially Máret Rássi, Risten Rássi, and Elin Biegga – were integral to this project as roommates, friends, interlocutors, and research collaborators. For example, I'd often spend extended periods, ranging from one day to several weeks, with the Biegga and Rássi families in Bobäcken[19], a village approximately fifty kilometers outside of Kiruna. Each family both had children around my age (such as Máret and Elin, who I introduce in chapter six), and we socialized frequently when I resided in Kiruna as well as Uppsala and Stockholm. Most members of the Biegga and Rássi families also worked as cultural workers, scientists, students, academics, politicians, journalists, teachers, and artists deeply engaged in the preservation of Sámi culture and knowledge, balancing these professional roles with reindeer ownership (some more formally, or full-time than others) and the responsibilities that accompany such ownership. Through them, as well as my housemate Ante, I learned how an individuals' involvement with reindeer keeping might fluctuate according to life circumstances and in relation to other personal or professional aspirations, but also how different types of employment, education, and political work were strongly connected to supporting the reindeer. Thanks to the Biegga and Rássi families, as well as Ante and his family, I had the opportunity to participate in numerous discussions,

19 I have chosen a fictive name for this village in consideration of my informants' privacy. However, the name "Bobäcken" ("The Living Brook") is a moniker that members of one village family sometimes used to describe the village and is a translation of the original Sámi meaning.

interviews, and activities around reindeer herding in and around Giron-Kiruna.

Archival Research

Because narratives of the city's history were so frequently cited by residents in conversations about the city's present and future, I found it useful to synthesize ethnographic methods – long-term fieldwork and participant observation – with the analysis of historical primary sources. I reviewed materials in Kiruna Municipality's city archives (*Stadsarkivet*) in the old City Hall, as well as in LKAB's archives on the lower floor of the company's Kiruna headquarters at Kiirunavaara, the "archive under the canteen" ("*arkiven under matsalen").* Both archives were extensive and contained a wealth of material on the development of the Kiruna community and the company in tandem over the last century. In the municipal archives, the materials included the first city maps, maps documenting the development of the city, architectural models, and a collection of ethnographic and archeological materials. LKAB's Kiruna archives, which were in the process of being re-organized, offered an almost overwhelming amount of material. Some documents dated to as early as 1740, and included maps, personal correspondence, sales receipts from around the world, clippings from national and regional newspapers of interest to the company (or mentioned the company), architectural plans, and a large collection of photographs documenting everything from company recreational programs for employees to everyday life and work at the mine. These materials, which I only visited once in the early stages of my research project, nevertheless helped me gain a deeper understanding of the strong relationship between Kiruna residents and LKAB, informed by generations of mining relations (Rolston 2014).

After returning south, I consulted archival and audiovisual material about Kiruna at Uppsala University's Carolina Rediviva Library and The Royal Library in Stockholm on a more regular basis (monthly) particularly after returning from the field in 2015. At the Royal Library, I focused primarily on digitalized newspapers, which provided valuable documentation of life in early 20th century Kiruna, as discussed in chapters four and five. At Carolina Rediviva, I similarly focused on 19th and early 20th century editions of texts which would profoundly shape representations of space in Kiruna, such as *Lappland: Den Stora Svenska Framtidslandet* ("*Lappland: The Great Swedish Land of the Future")* a

large book of plates published between 1906-1908 by Olof Bergqvist and Fredrik Svenonius and featuring works by the artists John Bauer and Karl Tirén. Many of Bauer's illustrations featured Sámi people from Kiruna, with an emphasis on traditional activities, clothing, and places as markers of exotic difference, representations that were highly popular during the early 20th century (Conrad 2020). Other works of interest included pamphlets penned by Hjalmar Lundbohm, the first mine manager at LKAB. One such pamphlet, *Kiruna 1910*, features Lundbohm's personal reflections and narration of the founding of Kiruna ten years prior, providing a fascinating glimpse into what he believed made Kiruna a successful model community. Finally, I consulted original editions of publications on racial eugenics produced by the former State Institute for Race Biology at Uppsala, several of which featured Sámi people subjected to unethical research. This knowledge production would have profound implications for Sámi people and space, and I examine specific links and implications of this research in the Kiruna area in chapter three.

Ethics and Positionality

During this research, I was grateful for the opportunity to converse with many people from the Čohhkeras Sámi community, who generously shared their viewpoints, family histories, knowledge, and time with me. Nevertheless, many were justifiably skeptical of anthropology as a subject and my presence as an anthropologist, based on substantial community experiences of harm caused by academic research. This is a condition both specific to my field site and to places around the world where anthropology has played a harmful role in colonialism and colonial administration, war, or counterinsurgency research (Sluka 1995; Price 2011; Finnström 2015). Scientific research as a tool of external intervention and state control is something residents of the far north have long been familiar with; from the many ethnographic research projects written about Sámi over the last several hundred years to the traumatic impacts of "racial anthropology" research conducted on Sámi and other Tornedalen residents by the State Institute for Race Biology in the early 20th century (Whitaker 1955, 77-78; Kjellman 2013; Rudling 2014; Persson 2013; Hagerman 2015).

As a non-Indigenous scholar undertaking this work at a Swedish university with close ties to much of this harmful research, I was sensitive to the power asymmetries and painful histories that my work as a researcher entailed. For this reason, I worked actively to refine the project ambitions

in conversation with my interlocutors, practice transparency at all stages of the research process, and follow ethical guidelines and research methodologies developed by Indigenous scholars and/or scholars working with Indigenous peoples (Smith 2013; Simpson 2014; Moffitt, Chetwynd, and Todd 2015; Sillitoe 2016). I have continually composed this ethnography in a way that centers the agency of my Sámi interlocutors, as well as their perspectives on the issues under discussion here. Advanced drafts of this work were shared with interlocutors, during which I gained much valuable feedback that helped me improve the thesis immensely. At the end of the day, however, the final composition and knowledge production which this thesis represents is an act steeped in power. All flaws and interpretations within this work, it should be clear, are solely my own.

Finally, as American, non-white researcher in a majority white Nordic country, my positionality was complex. On the one hand, my personal experiences as a non-white person in Sweden were critical toward helping me recognize the ways in which social inequality and discrimination are often manifested, and resisted, in ways that are not visible (Abu-Lughod 1996). I had many opportunities to discuss and reflect on shared experiences of racism, discrimination, and Swedish cultural attitudes with my Sámi interlocutors, which inspired me to further investigate how these social hierarchies and orders were materialized in my field site. On the other hand, as an American scholar and native English speaker based at a prominent Swedish university, I was generally welcomed into both institutional and non-institutional settings, despite my spoken Swedish being somewhat limited upon my arrival in the field. Both positions, and the creative and personal tensions they generated at times, were invaluable in the development of this research making a distinct contribution to the subjects under discussion here.

A Note on Place Names, Terms, and Translations

In this thesis, I primarily use the North Sámi place name whenever relevant and possible, followed by the Swedish and/or English translation as needed. Making space for Sámi socio-spatial terms and concepts as much as the Swedish and English ones, I seek to address what Indigenous scholars have noted can be an unwillingness, or inability, for non-Indigenous people to learn Indigenous place names, terms, and concepts (Silva 2004, Alia 2006). The Sámi place name I most frequently use is Giron ("Ptarmigan mountain") the Sámi name for Kiruna and from which,

alongside Meänkieli and Finnish, the Swedish city name Kiruna was derived. Throughout the thesis, there will be sentences where I use both, i.e., Giron-Kiruna. Here, my intention is to show in the writing the overlapping nature of extractive and Indigenous spaces. In other moments, particularly when discussing Sámi histories, oral narratives, and interlocutor's individual perspectives connected to the specific area surrounding Gironvárri/*Kiirunavaara* mountain, including the city, I will only use Giron.

I similarly describe reindeer herding units known in Swedish as *samebyar* (Beach 1981; Green 2009) using the North Sámi term *čearru* following the orthographic form used by my Sámi interlocutors and more recently by Indigenous scholars, including political scientist Ranghild Nilsson (2020), Kristina Sehlin MacNeil and Niila Inga (2019). My reasons for doing so are twofold. First, the Swedish term *sameby* (literally, Sámi village) is somewhat spatially misleading, as what the word designates is not an actual village of Sámi people but an administrative unit for reindeer herding created by the state during the late 19th century colonial period (whose history I discuss in chapter three). In contrast, the term *čearru* – a North Sámi term for a stony, flat mountain plain above the vegetation line – while used to denote many of the same administrative areas and functions related to reindeer herding today, further denotes a community, kin relations, and spatial concepts which exceed the Swedish meaning (Brännlund and Axelsson 2013).

I would also like to warn and inform readers about the use of a loaded term that will appear throughout the work. This word in its different forms and prefixes – "Lapp" – appears here solely in relation to historical material, legal and policy documents, and terms for colonial authorities, institutions, and officers. The harmful and racist legacy of this term must be acknowledged, and it is not my intention to further harm Sámi readers or to give the impression this term is acceptable for non-Sámi to use when referring to Sámi people. This word, however, often arose in my interviews with Elder Margareta Stenberg Huuva, who used the term in our conversations specially to denote and highlight the racialized, colonial view of Sámi with which she grew up in the early 20th century. Following Margareta's lead, and after reviewing the text with my Sámi interlocutors, I have similarly decided to use the term to accurately represent the logic, rhetoric, and policies of Swedish authorities toward the Sámi. These paternalistic and colonial attitudes normalized and perpetuated a view of Sámi as racialized others in Sweden, actively contributing to their

marginalization from the level of language to the production of space. This profound legacy of harm, as I show throughout the thesis, was enacted conceptually, representationally, and materially, and the Sámi community still lives with the impacts of this marginalization today.

Readers will also note that I capitalize the terms Indigenous and Elder throughout the text. In doing so, I refer to Gregory Younging's (2018) *Elements of Indigenous Style*, a valuable resource as a North American, non-Indigenous scholar writing about Indigenous People. In North America, it is also increasingly standard for scholars to follow this form and capitalize terms for Indigenous identities, and I have opted to do the same. I capitalize the term Elder especially to denote keepers of Sámi traditional knowledge, oral history, language advocates, and other cultural work acknowledged for their lifelong contributions within the community as such, rather than someone who is just elderly.

Finally, I generally use the English term "urban transformation" when discussing aspects, decisions, or debates around the mining-induced displacement and urban resettlement megaproject ongoing in Kiruna since 2004. This specific English-language translation has become the standard used by both corporate and municipal actors since 2004, though as noted earlier in the chapter, there are a variety of Swedish terms used depending on who and what is being discussed. LKAB and Swedish government actors most frequently use *samhällsomvandling*, or "societal transformation", while Kiruna Municipality and all residents I spoke to used either "city transformation" (*stadsomvandling*) or "city move" (*stadsflytt*). I more explicitly refer to and analyze LKAB's term, "societal transformation", in chapter seven.

All translation between Swedish and English are my own, with some translated terms, such as "societal transformation" (*samhällsomvandling*) chosen after extensive discussion with both my interlocutors and my colleagues at the Department of Cultural Anthropology and Ethnology at Uppsala University. The Sámi translations and terms were reviewed by Sámi interlocutors also working in academic research contexts, and without whom, it cannot be said enough, much of this research would not have been possible. To reiterate, all shortcomings regarding translation and interpretation in this work are solely my own.

Chapters and outline of the thesis

To recap, this dissertation examines the ways in which spaces in Kiruna (and their transformations) reflect and reproduce social histories, relations of power, and legacies of inequality. In chapter two, I provide the theoretical foundations for my analysis of space, both as an empirical object of study and as site of theoretical engagement. The third chapter introduces the historical and ethnographic background to the research, further clarifying the spaces and people under discussion in the thesis. Chapter four's ethnography attends to Kiruna's history as a 19th century model city for workers, analyzing the way ideas of dwelling, labor, and difference determined who had a right to space in early Kiruna. In chapter five, I examine how "double work" – mine labor combined with reindeer herding – became a way for generations of Sámi from reindeer herding families to weather the twin impacts of settler colonialism and environmental crisis, both of which have played key roles in the dispossession of Sámi land since the early 20th century. In chapter six, I consider how persistent conflicts between recreationalist and reindeer herders in the mountains near the city reveal divergent views over the relations between nature and society, and particularly the reproduction of social persons (and who constitutes a "person") for different groups. In chapter seven, I return to the urban space to examine how alternative imaginaries of ideal space and time were articulated in Kiruna's urban transformation, and how these played out in the planning for the New Kiruna resettlement area. In the eight chapter and conclusion of the thesis, I summarize the key findings of the work, reflecting on the implications of social difference, extractive inequality, and the right to space in Giron-Kiruna.

Chapter 2: Foundations: Producing Space in Theory

This chapter outlines the theoretical framework of the thesis. In the first part of the chapter, I clarify how can space be understood empirically as a site(s), a product(s), and a social relationship(s). I then move to introduce the second part of my theoretical and analytic framework, settler colonialism or the production of space through the displacement of Indigenous people to make land available to settlers (Wolfe 1999). I show what these two approaches share, as well as how they help answer the questions I pose throughout this thesis: How do people in Giron-Kiruna experience and understand spatial and social "transformation"? What histories, discourses, and ideologies gave rise to the creation of these spaces? How did/do these spaces and spatial orders reproduce relations of inequality and marginalization in Kiruna? How are existing spatial-social configurations sustained, and how are they challenged, refused, and resisted? This final question I address in the third and last part of the chapter, where I bring to the fore Indigenous and Sámi theories of space, nature, and society to analyze how people and animals co-produce social space in Giron-Kiruna.

Space, Place, and/as Society

Space has long been a part of anthropological inquiry; it is ever-present in descriptions of geographical locations (the village, the municipality, the field), living conditions and material culture (the house, the temple, the plaza), or as metaphor (cross-roads, stage, border). Space as a specific subject of analysis, however, has less often been considered; relegated to an *ex-nihilo* realm, where social life is enacted and subsequently given form and meaning. In 1974, sociologist and philosopher Henri Lefebvre addressed this tendency in *The Production of Space* (1991 [1974]) a work

that had a profound impact across the humanities[20]. Writing in the context of the sociopolitical struggles of mid-century urban Paris, Lefebvre recognized the need for tools to analyze space as the outcome of social practice, rather than as an empty, abstract realm primarily assigned value through positivist – scientific, economic, technocratic– means. Instead, Lefebvre called for an understanding of space as "the product" of spatial practices, representations of space, and symbolic spaces (representational spaces) – the purpose of all three being to reproduce social relations of different kinds. Put another way, these three aspects of space, which constitute what Lefebvre termed the "logico-epistemological production of space", are the *physical, mental,* and *social*, which together constitute "the space of social practice, the space occupied by sensory phenomena, including products of the imagination such as projects and projections, symbols and utopias." (Lefebvre 1991, 11-12) This tripartite interaction Lefebvre summed up in his well-known formulation, "*(social) space is a (social) product.*" (ibid., 26; original emphasis)

Particularly attentive to the social and political implications of conceptualizing space as by default abstract and empty, Lefebvre argued that such positivist imaginaries purged spaces of our everyday lives – cities, neighborhoods, and even individual homes – of their "dialectical moments" (ibid., 13). These dialectical moments, for Lefebvre, were integral to spatial production of all kinds, and for this reason he was particularly critical towards state, capitalist, and technocratic views of space – notions of "pure" Euclidean space, "rational" spaces imagined by planners, urbanists, politicians, economists – which dominate our spatial understanding within modern capitalist societies (ibid., 38,39). Lefebvre argued strongly against this depoliticization and de-socialization of space, what he saw as attempts to strip spaces of their "(social) history or time" (ibid.,96). Producing spaces which matched the abstractions of state and capitalist actors, rather than the social process and practices of everyday people, as Lefebvre saw it, was integral to the modern topography of power. To apprehend how and why space is at the core of so many social and political struggles, Lefebvre's work offers us a way of analyzing space(s) as the result of multiple dialectical and empirically observable processes. Lefebvre's model of space as made up of concepts, representations, and actions (notably a tripartite process, rather than a

[20] French post-structuralist scholars like Lefebvre were at the forefront of these new inquiries of space. See also: Bourdieu (1970, 1997,1996), De Certeau (2011), Foucault (1986), Deleuze and Guattari ([1983] 2014).

duality) helps us reveal the dynamic movement, flows, disruptions, and continuities that are integral to the production of space in late modern societies (Gottdeiner 1993, see also Soja 2014).

Space and Placemaking in Anthropology

Within the history of anthropology, interest in non-European spaces and living arrangements (Morgan 1881), institutions and material culture (Levi-Strauss 1988; Carsten and Hugh-Jones 1995), and spaces as a site of social practice (Bourdieu 1970) have long been subjects of research. In the 1990s, however, critical perspectives around the construction of "the field" and what it meant to conduct fieldwork in an increasingly globalized world highlighted a greater need to theorize space within the discipline (Low 1996). Akhil Gupta and James Ferguson (1992) noted that "...For a subject whose central rite of passage is fieldwork, whose romance has rested on its exploration of the remote…there has been surprisingly little self-consciousness about space in anthropological theory" (Gupta and Ferguson 1992, 6). While some scholars had already begun to analyze questions of power, space, and place in a transnational context (Appadurai 1986; Hannerz 1996), Gupta and Ferguson call attention to the fact that the general disciplinary "assumed isomorphism of space, place, and culture" (7) limited analysis of experiences shaped by borders, mobility across borders (migrant workers, nomads, refugees), or by post-coloniality. Gupta and Ferguson further noted that anthropological tendencies to conflate cultures with nation-states or geographical locations had furthered "the presumption that spaces are autonomous", enabling "the power of topography to conceal successfully the topography of power" (8).

Critical studies of space and place comprise a wide and ever-growing body of work across multiple disciplines, and which is beyond the limited scope of this thesis to fully summarize. Though space and place are now well-established concepts within critical geography, urban studies, and anthropology, these concepts are used in several different ways (Soja 1989, Thrift 2008; Hubbard and Kitchin 2010). Anthropologist Setha Low acknowledges this complexity, identifying at least five distinct conceptual paradigms[21] for analyzing the confluences and differences between space

21 These paradigms include architecture (Low and Lawrence 1990, Low and Lawrence Zúñiga 2003), geography, philosophical and mathematical, French social theory, environmental psychology, archeological, and anthropology (Low 2016).

and place (Low 2016, 13-14). Anthropologist Denise Lawrence-Zuñiga (2017, n.p.) helpfully distinguishes between space and place as follows: "Space is often defined by an abstract scientific, mathematical, or measurable conception, while place refers to the elaborated cultural meanings people invest in or attach to a specific site or locale."

In this thesis, I primarily take inspiration from the concept of space as articulated Henri Lefebvre (1991) and as applied by anthropologist Paige West (2006), who, like Lefebvre, sees space as not only produced by powerful actors but also by everyday people. I also use the concept of place as articulated by Lawrence-Zuñiga when appropriate. The bodies of work on space and place which I engage in thesis can be grouped into two general types: studies that focus on the social production of space, and studies that focus on the social construction of place, or place-making (Low 2009, 2016). Setha Low makes use of both the space and place concepts in her work, foreclosing the temptation to see these as binaries by understanding both as always embodied (Low 2009, 22). However, she differentiates between the "lenses" through which one can analyze spaces and places, terming these the "social production" of space and place, and the "social construction" of space and place (Low 2009, 2016). The "social production" lens sheds light on how spaces and places come to be through inquiries into political, economic, and historical motives in the physical planning and development of spaces and places. With this lens, there is an emphasis on the ideologies which underpin this materiality, as well as the impacts of these produced spaces on social action (Low 2016, 34). The broader social production lens, used by Low and other anthropologists like Donald Moore (1998, 2005) and Paige West (2005, 2006), is strongly informed by Henri Lefebvre's spatial dialectics, as well the work of Marxist critical geographers, such as Neil Smith (1984), David Harvey (2004, 2005, 2006), Doreen Massey (1995), and Nigel Thrift (2008). These scholars understand space and place production as social practices within, or as extensions of, economic and political projects. I expand on this concerning nature and wilderness, two specific kinds of space and place productions, in the following section.

The "social construction" lens, on the other hand, focuses much more on social dynamics, as well as conflicts and contestations, around space and place. These are enacted through people's social interactions, their "memories, feelings, imaginings and daily use – or lack thereof – that are made into places, scenes and actions that convey particular meanings." (Low 2016, 68). Low notes that it is the social construction of spaces that

anthropologists like Margaret Rodman (1992) and Steven Feld and Michael Basso (1996, see also Basso 1995) began to term "place", and the processes by which they were constructed as "place-making" (Low 2016, 73). Basso, whose analysis of Western Apache individual and collective moral relationships in and through land, for example, argues that "places are the spatial conceptions of history" (1995, 34), generated through narratives, place names, living practices, perceptions, and personal identities connected to specific sites. Some scholars, such as anthropologist Tim Ingold, see place as distinctly preferrable to the concept of space, which he considers the "most abstract, the emptiest, the most detached from the realities of life and experience." (Ingold 2009, 29). Ingold understand place(s) as the primary socio-spatial category through which life is lived and linked together – through movement: "My contention is that lives are not lived inside places but through, around, and to and from them, from and to places elsewhere" (Ingold 2000, 2009). Drawing on Henri Lefebvre's idea that people's and animal's movements and spatial entanglements "…together make up the texture of the world" (Lefebvre 1991, 117-18), Ingold sees places as "knots" which reflect these entanglements, part of a greater "meshwork" of threads (paths) and knots (places). Ingold's concept is particularly useful when accounting for multiple sites of dwelling and working, as well as travel to and from multiple places, as in Indigenous livelihoods in the Arctic (Ingold 2009, 33-34). Place, for Ingold, is thus primarily generated through movement and dwelling, with ensembles of "tasks" as the key constitutive acts of dwelling what Ingold terms "taskscapes" (Ingold 1993, 158).

However, place is not only a phenomenological experience, or generated primarily through everyday use, movement, and dwelling. It is also the outcome and articulation of political and social realities. Anthropologist Fred R. Myers argues that seeing placemaking and experiences of place as somehow preceding, or unmeditated through social processes, as Ingold does, risks obscuring the ways in which Aboriginal/Indigenous people articulate land ownership, labor, and individual and collective identities which mutually constitute places (Myers 2002, 112). Furthermore, Myer points out that Aboriginal people's places and place making practices, which often include urban contexts, challenge notions of "tradition" in Australia. This is because the majority society's emphasis on activities like hunting, gathering, and dwelling as the pre-eminent flattens complex and contemporary Aboriginal notions of place and placemaking. These debates are not merely academic; they play

crucial roles in recognition of Indigenous rights to land, i.e., native title, or the recognition of Aboriginal traditional rights, custom, and interest in land and water in Australian law (ibid., 115; see also Povinelli 1995). To counter this, Myers argues for an understanding of Aboriginal place that accounts for notions of place belonging, ownership, and personhood beyond dwelling – seeing place-based kinship ties, individual and collective social identities – and as integral to the production of social persons (Myers 2002, 112).

Given Myer's understand of Aboriginal place, two questions unfold: what constitutes a society, and who constitutes a social person? Anishnaabe and Haudenosaunee sociologist Vanessa Watts centers these questions in her analysis of Indigenous "Place-thought" amongst the Anishnaabe and Haudenosaunee First Nations peoples of Canada. Watts importantly argues that Indigenous understandings of the world are often understood by non-Indigenous people as myth, lore, legend, or fantasy, whereas in fact they represent real events and histories involving supernatural beings and non-humans (animals, land) with social agency. Watts contrasts two frames for understanding agency: place-thought (Anishnaabe and Haudenosaunee cosmologies) and epistemological-ontological (Euro-Western frame) (Watts 2013, 21). Place-thought is "the non-distinctive space where place and thought were never separated because they never could or can be separated", a theoretical and materially embodied understanding of the world. Furthermore, in Anishnaabe, Haudenosaunee – and, I argue, Sámi – cosmological frameworks, theory and praxis are inseparable, as these cosmologies represent literal and animate extensions of the agency and thoughts of supernatural beings, and the understanding that the land is alive, sentient, and "that humans and non-humans derive agency through the extensions of these thoughts." (Watts 2013, 21-22). Watts characterizes the Euro-Western framework as beginning with abstractions, which are then articulated in behavior and practice, reinforcing the dichotomy between epistemology/theory and ontology/practice (ibid.). Part of the violence of colonialism, Watts argues, is the purposeful misrepresentation of Indigenous cosmologies as myth or stories (Watts 2013, 22), a point emphasized by anthropologist Zoe Todd (Métis/Otipemisiwak) in relation to the recognition of Indigenous legal orders (Todd 2016; I expand on Todd's thinking later in this chapter). Place is also central to the articulation of Indigenous political identities and actions, and an important component of my analysis as well. Political scientist Glenn Coulthard (Yellowknives Dene) suggests that Indigenous peoples' place-based ways

of knowing the world can further serve as orienting political frameworks. Cosmologies can be the basis for activism, resistance, and critiques of settler colonialism because they also constitute an ethics – one which imagines alternative relations between humans and non-humans, and between people and institutions of authority (Coulthard 2010, 81). In chapter six, I examine Sámi cosmologies of space and place as recounted in *muitalusat*, a Sámi oral tradition that draws its etymology from the word *muitit*, memory, or remembering (Cocq 2008). Place names and *muitalusat* about places, I will argue, not only articulate Sámi notions of space, society and claims to space, but also function as counter-narratives to colonial encounters and spatialized hierarchies of power (Cruikshank 2005).

From these scholars, I distil the notions of space and place-making that I use throughout this thesis. To summarize, I use the lens of the production of space to primarily analyze instances where dominant ideologies, discourses, imaginaries, and structures of inequality are materialized in spatial planning, the built environment, or geographic categories. These spaces not only obscure their own ideological production, but spatialize Euro-Western abstractions, concepts, and imaginaries. I also use a construction of space approach to describe and analyze the conflicts, contests, and resistances of specific spaces and places, as well as how memory, heritage, and individual and collective histories are inscribed in space and place (Low 2016, 75-76). Finally, I use the terms place and place-making to refer to the embodied, mobile, and everyday practices which generate people's attachments and ideas of space and place, with the bulk of the attention given, as noted, to the local cosmologies and perspectives of Čohkkiras Sámi reindeer herders. In chapter six, I also make use of Ingold's concepts of dwelling, labor, and taskscapes to show how places are generated by the movement of Sámi people and animals in the mountains, and to underscore what is at stake in land dispossession for my Indigenous interlocutors.

The Production of Nature and Wilderness

I now turn two specific spatial productions and categories I encountered frequently in Giron-Kiruna, and which I will address throughout the thesis. In the Ore Fields and other resource producing regions around the world, land is considered a raw material indispensable for the means of production (Marx [1867]1990). "Land intensive" industries like mining are fully dependent on continued access to space on and near new minerals deposits.

In northern Sweden, the desire for minerals has motivated state engagement with residents and lands of the north for hundreds of years. In different eras, different spatial imaginaries, abstractions, and representations played key roles in furthering these extractive aims, and analyses of these, as I do here, remain relevant toward apprehending their continued existence and effects on the present.

As noted, a key contribution of Henri Lefebvre's thinking is the attention to spatial imaginaries, abstractions, and representations, such as scientific notions of "pure" or empty space, and their integral role in the reproduction of capitalism. These abstractions, according to Lefebvre, mask both the social conditions of spatial production and the role of space in the social relations of capitalist production (Lefebvre 1991, 32). Lefebvre, here in close conversation with Karl Marx, noted that "the raw material of the production of space" – nature – required ideological, conceptual, and symbolic transformation into a product to be useful for capital (Lefebvre 1991, 12). Geographer Neil Smith (2010), building both on Marx and Lefebvre's scholarship, further examined the unique role of the concept of nature in the reproduction of capitalism. Specifically, Smith showed that the "production of nature" under capitalism is 1) dependent on an ontological separation between nature and culture in Euro-Western thought (Smith 2010, 27-28, 65); 2) exemplifies what Marx called "second nature", or the transformation of the non-human world (first nature) into the world of commodities (second nature) – i.e., iron into iron ore – by subjecting it to the labor process (ibid.65); 3) that the production of nature linked categories like "wilderness" and "frontier" have a clear political, social, and ideological function, and 4) that the former are prime examples of the production of space under capitalism, what Smith calls the "ideology of nature" (ibid., 28, 80-1).

Nature, as philosopher of science and technology Donna Haraway observed, has long served as a kind of "theatrical stage" where the concerns of society are played out (Haraway 1989). The Western ontological distinction between nature and culture is a central axis around which differences – between humans, and between humans and non-humans – have long been imagined and organized in Europe and European colonial contexts. The work of feminist scholars such as Sherry Ortner (1972), Donna Haraway (1989), and Marylin Strathern (1988; Strathern and MacCormark 1980) were instrumental in early critiques of "nature" in essentializing (gendered) differences and hierarchies, as uncritically reproduced in academic disciplines, from primate science to anthropology.

These scholars pointed out that discourses and representations about "nature" should not be seen as mirroring a self-evident reality, condition, or category but are cultural domains, and must be subject to equivalent empirical analysis as are the categories of class, race, and gender (Cruikshank 2005). As these scholars, Lefebvre, and scholars of science and technology such as Bruno Latour have shown, positivist claims to authority over the knowing nature and space are attempts to bypass (depoliticize) the distribution of power in Western societies. Latour, using the metaphor of a political bi-cameral assembly – with humans in one house and non-humans in another – argues that experts who claim to speak on behalf of those who cannot speak (non-humans, "nature") seek to "convert the authority of one into that of the other" (Latour 2004b, 13). These elite experts (scientists, planners), Latour observes, "can make the mute world speak, tell the truth without being challenged, put an end to the interminable arguments through an uncontestable form of authority that would stem from things themselves" (Latour 2004b, 14).

Anthropologists Paige West (2006a, 2006b; West, Igoe and Brockington 2006; West and Brockington 2006), Donald Moore (1998, 2005; Moore Kosek, and Panandian 2003), and David Hughes (2005, 2006) have similarly considered how ideas of nature, space, and social difference are put to work in managing, or governing space. In the work of these scholars, protected areas, such as conservation zones and national parks – which abound in Kiruna Municipality – are "particular kinds of spatial productions" borne from histories of interaction with the state and Western science (West 2006b, 310, n1). Nature imagined as wilderness has consistently been an integral part of the production of settler colonial space in Kiruna, and the notion of nature as wilderness, as I will argue throughout the thesis, is a fraught spatial imaginary with consequences for inhabitants and users of these lands, particularly the Sámi. Spatial concepts like "wilderness", I argue, have real implications for how spaces are apprehended by different groups including mining companies and recreationalists. These ideas inform both which spaces are chosen as sites for protection as well as who is excluded from decisions about their use and value (West, Igoe, and Brockington 2006).

For many outsiders, the mountains in and around Kiruna are perceived and presented as wilderness *par excellence*. Each year, tourists from around Sweden and the world make their way to Kiruna, attracted by the five hundred thirty thousand hectares – twenty six percent of Kiruna Municipality – which consists of protected natural areas. This includes two

of Sweden's first national parks, Absiko (1910) and Vadvedjåkka (1920), nine nature reserves, six thousand alpine lakes, six large rivers, and the highest mountain peak in Sweden, Giebnegáisi (in Swedish, Kebnekaise). Today, the Kiruna in Swedish Lapland[22] tourist office markets the mountains and forests to international visitors as "uninhabited wilderness" (Kiruna in Swedish Lapland, n.d.). A Swedish-language advertisement from the Jukkasjärvi Ice Hotel invites visitors to experience the "Lappland wilderness and mountain world around the corner", while regional development agencies emphasize wilderness as a key part of Kiruna Municipality's economic value, based on tourism-centered interpretation of Kiruna's "icons" – the Ice Hotel, the northern lights, wilderness, Sámi culture, the mine, and space tourism – which are said to reflect "core values", such as "genuine" and "exotic" (Tillväxtverket 2015, 2). Popular activities offered by tourism operators in winter include skiing, snowshoeing, dogsledding, and snowmobile tours, while hiking on the 440-kilometer long Kungsleden trail, stretching from Abisko National Park to Hemavan, Västerbotten, is popular amongst both Swedish and international hikers year-round.

The creation of national parks and protected areas, which I analyze in chapter six as a form of settler colonial spacemaking, were closely followed by the establishment of laws enshrining access to spaces for outdoor recreation as a constitutional right, the Swedish Right of Public Access (*allemansrätt*). For example, same year the Ore Line railway (*Malmbanan*) between Kiruna and Riksgränsen was inaugurated, the Swedish Tourism Association (STF) began advertising rail tours on the "Lappland Express to the Land of the Midnight Sun", with English-language posters prominently depicting Sámi reindeer herders (Fig. 5).

22 Lappland (Anglicised as Lapland) is the name of Sweden's most northern province (*landskap*). While these terms no longer have any formal administrative functions, the twenty-five historical provinces are still frequently referenced in relation to meteorological reports, regional dialects, and folk costumes.

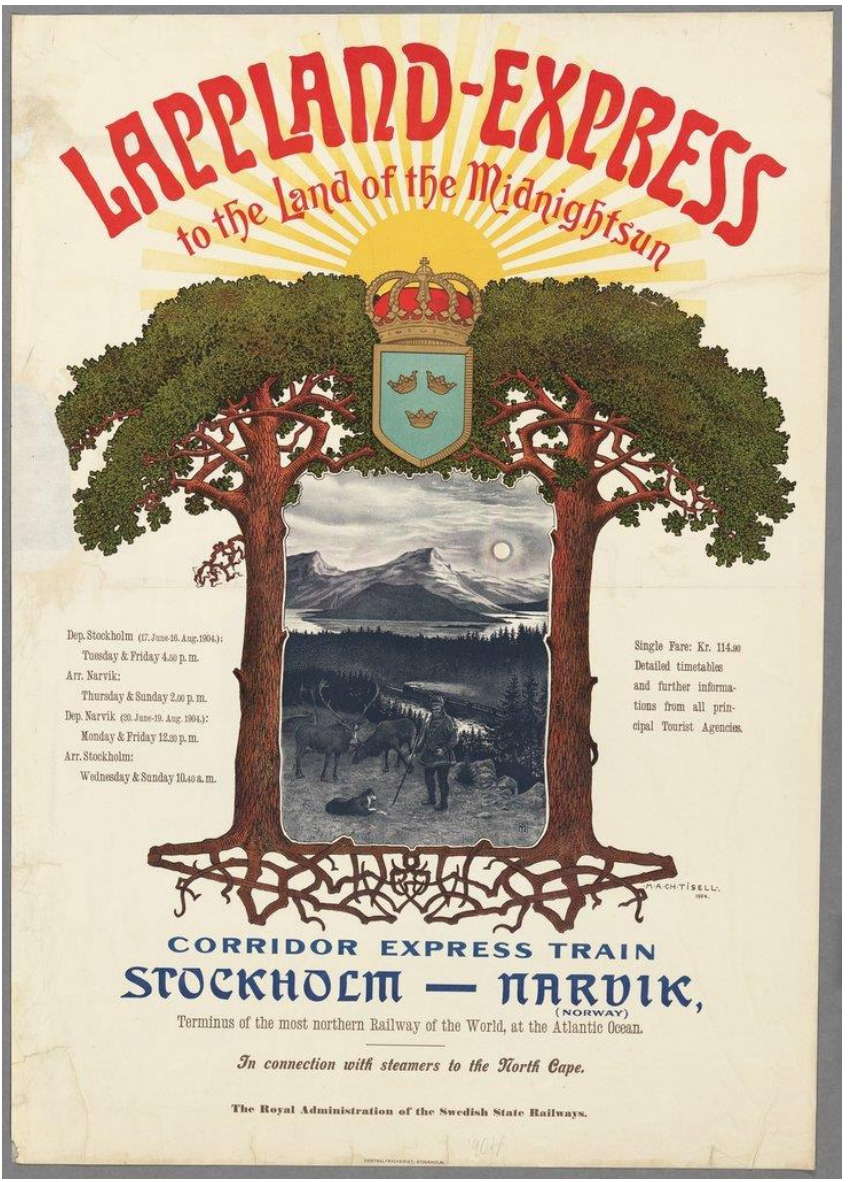

Fig. 5: Tourism advertisement for the Swedish Railways Lappland Express line from Stockholm to Narvik and North Cape, the northernmost point in continental Europe. Illustrated by Martin August Christian Tisell, 1904. *Source: Trafikverket/The National Library of Sweden.*

Kiruna, as I show in chapters three, four, and six has long been represented as a frontier, a place of both resource extraction and wild nature. Reindeer herding Sámi have for over a century been used as stand-ins for this exotic wilderness and authenticity. I take up the implications of these spatial and social productions most actively in chapters four and six. In chapter four, for example, I examine how 19th century settler colonialism and dispossession of Sámi land was legitimized through classifying reindeer herding Sámi as "children of nature" in need of colonial paternalism and administration. In chapter six, I examine how "wilderness" areas for outdoor tourism, which overlap with mountain spaces important for the Sámi reindeer herding social world, represent "colliding ecologies" (Kirsch 2014), and it is the overlapping, intertwining nature of these spaces which underpin the politics of space in Giron-Kiruna today. In the following section, I further explore the production of nature-as-wilderness through an imaginary I have only touched on so far: the frontier.

The Production of an Extractive Resource Frontier

The lands in which present day Kiruna was built have long been imagined as isolated, wild, and empty. This imaginary persists in views of the Arctic region as one of the largest "global frontier regions remaining" (Haley, et al. 2011, 54), and arctic lands as an "empty stage" (Young 1992, 6) where the interests of outside actors are played out. The ongoing production of Arctic "frontier" spaces of extraction reveal multiple material, representational, and conceptual processes at work in producing such spaces (Nuttall 2012, Reinert 2016). Industries like mining and oil – bound as they are to geological deposits – tend to be located in rural or sparsely populated areas, necessitating the creation of new settlements or other infrastructural arrangements to attract workers. Anthropologist Tania Murray Li argues that social and cultural tensions expressed in spatial terms – as mapped/unmapped, planned/unplanned, settled/unsettled– are key to the emergence of frontier spaces: "frontiers are characterized by lack. They are simultaneously coveted places, envisaged by various actors as sites of potential." (2014, 13-14). The spatial representations, abstractions, tensions, and potentials of the frontier is of relevance in the Ore Fields *(Malmfälten*), Sweden's most active mining area. Here, the two largest iron mines in Europe – LKAB Kiruna and LKAB Malmberget – produce ninety percent of the iron ore used in the European Union. The existence of the Ore Fields as a region not only depends on guaranteed

access to iron and minerals deposits, but imaginaries of wealth, desire, and success associated with their extraction.

Frontier periods and spaces periodically re-appear in the Ore Fields, emerging as opportunities to look "backward as well as forward in time energizing old fantasies, even as they embody their impossibilities." (Tsing 2003, 5100). When I arrived in Giron-Kiruna in 2012, the minerals boom underway provided no shortage of descriptors linking Kiruna to other extractive periods and places: Kiruna was "a new Klondike" (a gold rush), while mine workers were "the new Norwegians" (rich off-shore oil workers). Young local mine workers cruised central Kiruna's winding streets in expensive sportscars, while fly-in fly-out workers were packed into shipping container hotels and mobile homes in Kiruna's industrial neighborhood. Frontier imaginaries and potentialities were not limited to mining companies or mine workers. Metaphors emphasizing the relationship between society, minerals extraction, and unlimited space were formally inscribed in Kiruna Municipality's "vision" statement for Kiruna and its people (Kiruna kommun 2013, 6): "Our belief in the equal value of human beings is as deep and valuable as our ore. Our ambitions are higher than our mountains. Our industries make us a world leader. The vast expanses give space to originality and innovation. We are Kiruna."

State and corporate representations of space – both surface and subterranean – as anthropologist Douglas Rogers (2015) highlighted in the context of Russia's Perm oil producing region, works to re-orient resident's lived experiences towards symbolic ends, actively shaping people's expectations and imagined possibilities for the region around extraction. As geographer Doreen Massey further observed (1995), to understand the emergence of industrial regions, it is necessary to look at the "broader context of what is going on in society in general…the reproduction over space of social relations." (Massey 1995, 15). These social relations, as I show throughout this thesis, are both capitalist and setter colonial, as the needs of Sámi herding and society are rarely considered equal to the land needs of the mining industry when it comes to development (Raitio, Allard, and Lawrence 2020). Uneven and unequal land use in Kiruna, as I argue throughout this thesis, has implications for all residents. Land rendered unavailable due to extractive resource industries or tourism has serious implications for not only the ecology of reindeer herding, but to imaginaries and possibilities of for the region. In chapters seven, I discuss these configurations of extractive time, space, and expression of ideal,

desired futures as *uchronotopias* (Askland 2021; Sörlin 2021; Thisted, Sejersen, and Lien 2021).

Finally, Kiruna's history as a planned city built for mine workers was often highlighted both by institutional actors (corporate and municipal representatives) and non-institutional actors (residents) I interviewed. As I discuss in chapter three, early Kiruna reflected a specific production of space – and ideal town for workers – which entailed the regulation of urban inhabitants along strict lines of class, race, and gender (Hägg 1993). Scientific, legal, and ideological representations of space and people, as I show in chapter three, were key mean through which state power and ambitions for Northern modernity were spatialized, both inside and outside the city (Sörlin 1988). As in other colonial contexts, architecture and city planning played a prominent role, both as an expression of technocratic, modernist ideology and as a means of producing a morally and spatially ordered society amenable to governance (Rabinow 1985; Comaroff and Comaroff 1992; Scott 1998, McKenna 2017). Examining urban Kiruna's production, I unpack diverse residents' views of this city space and history in the present, newly prescient in the context of the urban transformation.

Recognizing that urban planning is a future-oriented activity and social practice embedded in cultural frameworks of the present (Mack and Herzfeldt 2020), I also analyze planning practices in chapter seven. Because spatial planning is a way of conceptualizing space and time, it is also a social practice imbued with deep tensions (Abram and Wezkalnys 2013). Utopic desires for a better, orderly future frequently crash with contingent, complex realities. But whose utopias, histories, and futures are given precedence? In the third and fourth chapters, I consider these questions in a historical context, while in the seventh, I turn my attention to the speculative futures for New Kiruna, a resettlement area for six thousand Kiruna residents displaced by mining deformations. Because state ambitions for a region tend to downplay present conditions and histories in favor of idealized futures and the "philosophy of the promise" (Abram and Wezkalnys 2013), I examine this tendency from both historical and contemporary perspective, in the latter focusing on the notion of sustainability. As I discuss in the following section, both settler colonialism and modern city planning can function as "aesthetic[s] of erasure and re-inscription", through which governments can tell particular national stories while excluding others (Holston 1989, 5).

Settler Colonialism

In this thesis, I further theorize spatial transformation in Kiruna through the lens of settler colonialism (in Swedish, *bosättarkolonialism*). Anthropologist Patrick Wolfe defines settle colonialism as process distinct from European colonial projects carried out by nations whose main aim was to extract native peoples for slave labor. Rather, the primary objective of settler colonialism is land itself, achieved through displacing, eliminating, and/or replacing existing Indigenous inhabitants (Wolfe 1999, 163). Wolfe importantly argued that that settler colonialism constituted an overarching logic, underpinning practices that "otherwise might appear distinct" (ibid.), and summarized in Wolfe's formulation, "invasion is a structure, not an event." (Wolfe 1999, 163). Wolfe's emphasis on the structural, rather than event-bound, nature of settler colonialism underscores the ways in which this "structuring force" shapes Indigenous realities historically and in the present and will continue as long as Indigenous lands are desired by state and economic actors.

In settler colonial contexts, the role of spatial imaginaries, representations, and abstractions like the "frontier" and "wilderness", of "wasteland" are central. Under British settler colonialism in Australia, for example, the doctrine of "*terra nullius"* was a legal and ethical imperative through which the appropriation of native land was justified. This imperative was based on an interpretation of Roman law, in which territorial sovereignty was established though occupation of "land belonging to no one". *Terra nullius* exemplifies a spatial abstraction particular to settler colonial projects enacted around the world, including Sweden, in which spaces described as "wilderness" or "frontier" legitimated a negative state vision (Scott 1998) – or negative recognition – of Indigenous people already existing on the land. In order to enact *terra nullius*, Indigenous people had to be categorized as a kind of humans without property, as in Western societies the concepts of *property and ownership* are fundamental for recognizing land claims, use, and relations.

For hundreds of years and well into the 20th century Swedish authorities viewed Sámi livelihood practices, forms of dwelling, and spiritual beliefs as proof of irreconcilable otherness (Pratt 1985). Already in the 16th century, Carl Linnaeus (1811, 328) reflected upon the differences he perceived between his Sámi hosts and the rest of Swedish society of his time:

> All laborious employments, such as directing the plough, threshing, cutting and hewing of wood, &c. render the blood thick, and the limbs stiff. Hence the flesh of a peasant is hard and tough, that of a young damsel soft and tender; nor can a peasant move with the lightness and flexibility of limbs that we see in a girl. How delicate are the muscles of children compared with those of an aged person! The Laplanders appear to be more nimble and active, in all their movements, because they undergo no hard or Herculean labours.

Linnaeus's assessment of Sámi livelihood practices as devoid of labor – defined as the application of agricultural techniques and practices – echoed emerging views of labor, production, and property developed by political theorists like John Locke and Adam Smith. Locke's theory of property (1690) argued that only labor could create property; that which did not *appear* to be mixed with labor was naturally alienable (Locke [1797] 2003, in Simpson 2014). Things became property, according to Locke, through *appropriation* – the process through which individual personhood is fused, vis-a-vis labor, with non-human objects and removes them from a chaotic "state of nature" devoid of law and rights (Olivecrona 1974, 224). Anthropologist Audra Simpson notes that Locke's foil for this reasoning was in fact "the wild Indian" of the settler colony "America", who, in Locke's view "knew no enclosure", and therefore had no private property (Simpson 2014, 101). Similarly, Adam Smith saw private property as a "sacred right" (Smith [1777] 2012, 239) borne from labor, "the original foundation of all other property, so it is the most sacred and inviolable." Tracey Banivanua-Mar and Penelope Edmonds further note that Smith's social theory of stadial progress – humanity's evolution from hunters, to pastoralists, to agriculturalists, to commercial actors –reflected a hierarchy "conceptualised in a progressive, teleological fashion, figuring European society as the highest 'stage". (2010,15, n15). This hierarchy, which was embraced as a part of Enlightenment thinking, was further conceptualized as reflecting distinct 'modes of production', and Indigenous people imagined as "ancient 'hunters' without rights in land." (ibid.)

Such ideas not only circulated throughout the colonial world but were repeatedly spatialized, "produc[ing]and locat[ing] – physically, historically, affectively and discursively – social relations, institutions, representations and practices in space" (Low 2016, 7). As noted, in Australia, one major expression of this was the legal doctrine and spatial imaginary of *terra nullius* (in Latin, "land belonging to no one"). *Terra nullius* justified the dispossession of Aboriginal land based on the idea that Aboriginal people were uncivilized and did not labor, and thus could not

hold land tenure (Anderson 1998; Moreton-Robinson 2004). These ideas would find similar expression in Sweden, justifying the gradual dispossession and appropriation of Sámi land to make way for settlers and extractive industries. Legal scholars, anthropologists, and political scientists in the Swedish context have drawn parallels cases involving Sámi land use (Svensson 1997; Sasvari and Beach 2011) and the landmark Australian case, *Eddie Mabo vs. the State of Queensland* (Hocking and Hocking 1999; Baer 2010; Lawrence and Åhrén 2017). Whereas in Australia *terra nullius* was eventually rejected as an argument for state land claims and paved the way for the recognition of native title in 1992, Swedish courts continue to maintain there was no time in which Swedish sovereignty did not extend to areas within present Swedish territory, an argument partially based on the logic that Sámi land use has never been considered an expression of ownership – rather defined as right of use, or usufruct rights – and that therefore these contested lands were ownerless (Lantto 2003, 10).

Race, Nature, and The Production of Settler Space

Encountering Indigenous societies with established social and political organization inhabiting desired spaces, settler colonists had to find different ways of appropriating land. Race became one means of either coupling *or* de-coupling native peoples (and racialized others) from lands desired by settlers. In settler colonial contexts like the United States, for example, legal scholar Cheryl I. Harris shows how the origins of American property rights are rooted in racial domination (Harris 1993, 1716). Property law was tasked with observing and enforcing racial classification, which was understood in the United States – as in Sweden –as a biological fact until at least the mid-20th century (ibid., 1738; Myrdal 1964; Hagerman 2015). Harris shows that whiteness, or being legally recognized as racially white, was the primary basis for the recognition of property rights in the U.S., excluding both black and Indigenous people from land ownership. Here, settler spatial imaginaries played a key role, as interpretations of Native American hunting and living practices served as proof that land "had been left in its natural state, untilled and unmarked by human hands", and that this land could be considered "waste" available for appropriation: "This interpretation of the rule of first possession effectively rendered the rights of first possessors contingent on the race of the possessor. Only particular forms of possession - those that were

characteristic of white settlement - would be recognized and legitimated" (Harris 1993, 1722).

Racially coded, settler colonial spatial imaginaries, as urban historians Tracey Banivauna Mar and Penelope Edmonds (2010) further note, are not only linked to conceptions of "empty" or "wild" land but persist in conflicts over ownership and belonging in urban spaces built on Indigenous lands. Ideas of race naturalized nineteenth century "narratives of extinction", in which the disappearance of Indigenous people and their ways of living was all but guaranteed in the face of stadial progress. These social attitudes justified the legal and physical removal of Indigenous people from lands desired by settlers, and upon which many cities around the world were built in the 19th century (Mar and Edmonds 2010, 2). As noted by Wolfe and others, the acquisition of land was not the end of the settler colonial project, but, as a social production of space, which continues to structure everyday realities and relations in settler colonial cities and landscapes. Through settler colonialism, and in a variety of contemporary spaces – cities, state land, national parks – "race has taken up residence", though statutes, policies, language, and other social infrastructures within settler colonial societies (ibid.)

In the Swedish context, this legacy persists in the many social, political, and spatial transformations forced upon Sámi society through settler colonialism. In Giron-Kiruna as in other parts of Sweden with large Sámi populations, late 19th and early 20th century acquisition of necessary for the production of settler space was enacted in range of ways. As I discuss in chapters three and four, this included the production of spaces meant to segregate Sámi with diverse livelihoods from each other as well as from settlers, through the creation of spaces like the "cultivation border" (*odlingsgränsen*) and policies like "Lapp Shall be Lapp" (*lapp ska vara lapp*). As with many other settler colonial projects, spatial and social control were central to their implementation. In Sweden, spatial and ethnic segregation of Sámi was supported by a system of colonial administration and officers (*Lappväsendet*) with wide-ranging power over nearly all aspects of reindeer herding Sámi life: the amount of reindeer a Sámi family could have, where they could live, when they could migrate to their seasonal pastures across newly established national borders, whether families would be forcibly relocated, or whether an Sámi individuals would be allowed to continue herding reindeer at all (Lantto 2012, Labba 2020).

Settler colonial interpretations of Sámi living spaces as "wilderness" and Sámi as "children of nature" would play a key role in legitimating the

"Lapp Shall Be Lapp" social policy"[23]. Urban space and domestic architecture were key arenas in which colonial authorities sought to enforce and materialize the separation between settler populations and reindeer herding Sámi, viewed as both a "pure" race and an "inferior" one in need of paternalistic state care. These views were shared by industrial elites like Hjalmar Lundbohm – the first mine administrator of LKAB Kiruna – and other proponents of race biology (*rasbiologi*) in early 20th century Sweden. In 1913, Herman Lundborg, a doctor seeking to quantify biological markers of race[24], proposed research in the Tornedalen villages of Masugnsbyn and Svappavaara. Lundborg intended to research the "high racial mixing" of Swedish, Sámi, and Finnish residents in the area, from which he received support from the Royal Swedish Academy of Sciences (Hagerman 2015). On his second trip to the north in 1914, Lundborg met Hjalmar Lundbohm, already an established patron of archeological and ethnographic research in the area. Lundbohm would go out of his way to facilitate Lundborg's research among the Sámi and Tornedalen people through his personal finances, social connections, and financial support from LKAB (Persson 2013). Hjalmar Lundbohm's contributions to the study of race biology were further recognized through his portrayal in The Swedish Folktype Exhibition of 1919, an exhibition intended to promote global interest in race biology. In the catalogue, Lundbohm is depicted as a prime example of a "Nordic mixed type"[25] (Fig. 6).

[23] That this policy was not actually legislated but enacted on a wide scale regardless is not unusual in colonial contexts. For example, see Alia (2006) regarding state re-naming schemes enacted upon Inuit populations in Canada.

[24] According to historian Curt Persson (2013, 45), phrenological skull measurements and a "skull index" were used in scientific research in Sweden until the 1940s.

[25] The 1919 Folk Type exhibition was a preliminary work leading up to the founding of the the State Institute for Race Biology in 1922. Lundbohm's classification as a "Nordic mixed type" – Nordic here referred to Swedish – is likely an earlier version of a category re-worked by 1922, the "purer Nordic type" (persons having a light eye colour and light head hair, with a stature over 168 cm, and a "cephalic index" under 78). The data used to categorize people consisted of body measurements, photographs, and eye and hair examinations, as these visual markers were thought to reflect degrees of racial purity (Kjellman 2013, 23). Historian Ulrika Kjellman notes that upper class, or attractive young people were often chosen to represent the Nordic races, while elderly, criminals, or others of low social status were photographed and chosen to represent the "mixed dark race types" (ibid.,194).

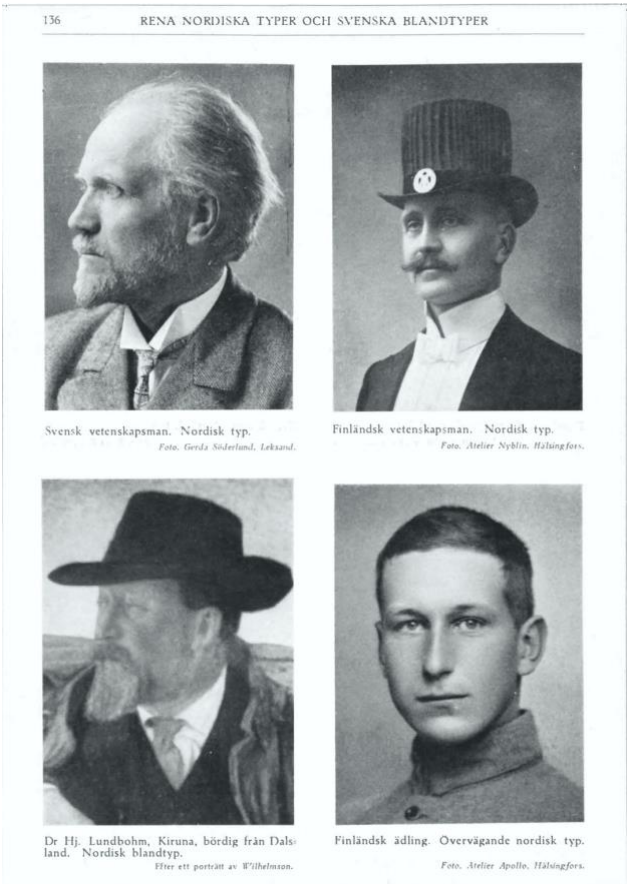

Fig. 6: Hjalmar Lundbohm (bottom left) in the catalogue for the Swedish Folktype Exhibition catalogue, organized by Herman Lundborg, 1919. *Source: Carolina Rediviva Library, Uppsala University.*

Enforced spatial segregation – between reindeer herding and agriculture, "settled" and "nomadic" Sámi, Sámi and urban space – was thus central to the production of extractive and settler space in Kiruna. A salient example I take up in chapter four was the ban on Sámi living in structures of a "non-Lapp type", which "in reality meant a ban against living in permanent houses (for the 'real Sámi'), and as a consequence a ban against combining agriculture and reindeer herding." (Lantto and Mörkenstam 2007:31, see also Torp 1992) These colonial policies, in combination with climate catastrophes and loss of grazing land and migration routes due to the establishment of the mine, city, and railroad, resulted in many individuals

leaving reindeer herding as a livelihood. Later, this dispossession of land was compounded through legislation which tied collective Sámi rights to land exclusively used by reindeer herders, creating new dilemmas and double binds. Today, Sámi in Sweden who do not have some connection – whether formal or informal – to reindeer herding and the *čearru* system do not have the formal Sámi right to fish or hunt in protected areas, nor any other claims to land or land use as Sámi. The spatial and political effects of settler colonialism thus functioned as means through which large numbers of people were dispossessed of both the right to herd and the right to land. Forced assimilation, displacement, and colonial notions of "repressive authenticity", or the romantic stereotyping of Indigenous people (Wolfe 2006, 402), severely curtailed the number of Sámi people with the "right" to herd, use land, and claim various forms of formal or informal belonging. The consequences of this have been substantial for Sámi self-constitution, political organization, and identification as a people, which is a fundamental right of Indigenous people under international law (Nilsson 2020; Össbo 2020). I examine the historic implications of settler colonialism in Giron-Kiruna, as well as their contemporary manifestations in chapters four, five, and six.

Swedish Colonialism and Whiteness

Historian Gunlög Fur (2006, 6) notes that Sweden's colonial history – and whether Sweden practice colonialism at all – is an active subject of debate in the country (see also Keskinen et al. 2016; Sehlin MacNeil 2019; Össbo 2020). The lack of attention given to Swedish colonies as a part of Sweden's national history, such as the New Sweden colony (present-day American state of Delaware/Lenape and Susquehannock territory) and the trading island St. Barthelemy in the Caribbean, has several causes. One is relatively little historical scholarship on the subject until the past decade, now greatly facilitated by access to French archives (Thomasson 2016; Pålssson 2017; Körber 2019). A second reason is the long-established view of Sweden's involvement in the Atlantic slave trade as "indirect". Swedish sale and production of bar iron, used as a form of currency in the slave trade (Evans and Rydén 2013) or the establishment of Swedish free-trading forts on the "Swedish Gold Coast" (present-day Ghana) where slaves could be bought and sold (Fur 2013), are popularly regarded as insignificant in comparison to the colonial activities of other (larger) European nations. A third argument views Swedish colonialism according to the so-called "salt-

water" or "blue water" principle, which defines colonialism and colonies as sites that must be situated in geographically distant territories (overseas), far from the imperial center (Robbins 2015; Lawrence and Moritz 2019; Össbo 2020). In concert, all three factors limit understanding of how these colonial activities, ambitions, and rationalities, impacted both the colonized and Sweden as a colonial "center" itself.

Sweden's colonial activities in Africa and the Caribbean have at times been labeled as distinct from the colonization of Sápmi, a process described by some scholars as *internal colonialism* (Lawrence 2014; Schorkowitz et al. 2019). My understanding of this history, in contrast, aligns with Swedish historians (Lindmark 2013; Fur 2013; Össbo 2020) who note that the concept of "internal colonialism" has limitations because it presupposes Sámi homelands in the north as always having been a part of Swedish territory, contradicting the historical record and the process through which the Swedish state gradually established control over land and people in the northern Arctic (Lindmark 2013). Historian Patrik Lantto's important argument against viewing colonialism on Sámi land as a solely internal process within a nation is worth quoting directly here (2003,11):

> There is no requirement that colonialism requires a journey over a sea or must take place outside what have traditionally been considered the limits of the mother country, no requirement for the colonized to have a different skin color or a clearly different appearance, no requirement that it should have happened with pronounced violence, nothing requiring that there must be a specific time that can be set as a starting point for the colonization process. Despite this, the colonization of Sápmi has almost consistently been regarded as an expansion within the given borders of the nation, without the government's treatment of and relationship with the Sámi being problematized.

These and other arguments have increasingly bolstered the scholarly application of settler colonialism as a framework for analyzing the relations between the Sámi as a people and the Swedish state (Naum and Nordin 2013; Larsson 2014; Keskinen et al. 2016; Ojala 2017; Ojala and Nordin 2019). In 2016, historian Gunlög Fur observed that while settler colonialism had been increasingly considered by some scholars as a possible analytic lens in the Scandinavian Arctic, it had not yet been extensively applied; such a project would require "studies that elucidate how colonialism has permeated societies that do not recognize their colonial complicity and how immensely complex and ambiguous its legacy is" (Fur 2016, 13; see also Gärdebo, Öhman, and Maruyama 2014). This

recognition seems to have surged and become more widespread in recent years, particularly in the work of Swedish historians and in the projects of Sámi scholars and activists, both within Sápmi, and in collaboration with other Indigenous peoples. In such work, the resilience of Indigenous culture, knowledge, and language revitalization is centered as well as calls for specific decolonial approaches, i.e., truth commissions, formal state recognitions of harm, updates to the national educational curriculum which communicates this history, and the improvement of Sámi participation in policy and decision making (Nutti 2016; Roche, et al. 2018; Kukkonen 2020; Dankersten 2021).

The usefulness of settler colonialism as an analytic within Sweden was recently highlighted in a special issue of the historical journal *Historisk Tidskrift* (2020) dedicated entirely to the topic of Swedish colonialism. In this special issue, historian Åsa Össbo (2020) uses the concept of settler colonialism (*bosättarkolonialism*) to analyze Swedish state displacement of Sámi populations through assimilation/settlement, compulsory changes in living arrangements, the creation of borders, forced relocation (*tvångsförflyttning*) and other means. In conversations with settler colonial theorists like Patrick Wolfe (2006), Lorenzo Veracini (2010), and Matthew Wildcat (2015), Össbo makes a strong argument for the usefulness of settler colonial theory and analysis in Swedish Sápmi, among other things for understanding its ongoing effects at the regional and municipal scales, and within specific relations between Sámi and non-Indigenous residents of Norrland (Össbo 2020, 443). One of Össbo's most important observations, following Wildcat (2015), is that specific histories of settler colonialism shape how "settlers" and "natives" are defined in specific contexts today. As Össbo points out, parsing identities in much of northern Sweden is complex, where hundreds of years of Fennoscandic group migration and colonial assimilation policy haves shaped internal and external group boundaries, as well as individual histories. Össbo argues for defining "settlers" as Wildcat does, using the term "non-Indigenous" in place of "settlers" to denote groups of actors who promote and/or benefit from settler colonialism, a definition intended to "counteract a tendency to use 'settler' as a transhistorical and racialized category that refers to (almost) all non-Indigenous peoples in the Anglo-American context." (Wildcat 2015, 394). Össbo builds on this by further arguing for the term "settler" as applied in Sweden as a way of defining an "actor's positioning that is rather the result of social relations than the result of a genetic inheritance" (Össbo 2020, 441).

Accordingly, I see the notion of "settler" as outlined by Össbo in northern Sweden as analogous to the concept of "whiteness" as articulated by scholars Tobias Hübinette and Catrin Lundström (2014). Hübinette and Lundström argue that "whiteness" in Sweden should be understood as a hegemonic structure, ideology, and system which both white and non-white people can uphold, regardless of their political views, and which "constantly reinscribes whiteness as the normative, yet unmarked, position that, for example, effectively forecloses, silences and excludes experiences of everyday racism among non-white Swedes." (Hübinette and Lundström 2014, 426). Sociologist Astri Dankertsen further shows that the complicated history of Sámi identity, in which Sámi were previously defined as racialized and non-white but today may be seen as white, shows that "whiteness is a political and cultural term that signifies status, power, and character as a social production of privilege" (Dankertsen 2019, 132). Accordingly, in this thesis I generally use the term settler, or settler colonial, to refer to discourses, social positions, politics, ideologies, ethics, and histories, rather than people or groups. Indeed, as I show in chapter five, such distinctions are problematic and create further dilemmas that affect different groups unevenly, such as Sámi reindeer herders in the mining industry. Understanding these double-binds, and my interlocutor's perspectives on them, as I will show, sheds light on how inequality is perpetuated in the Ore Fields through everyday experiences within spaces produced through processes of settler colonialism, like the mine and the city.

Settler colonialism as/and spatial production

A key point of departure in this thesis is the understanding that settler colonialism is a form of space production. It is a form of space making that requires the removal of Indigenous people from land desired by settlers, but it is not necessarily genocidal, and enacted differently in different contexts (Wolfe 2006, 387). However, the removal of native people from their lands, as political scientist Matthew Wildcat argues, can also be considered a form of genocide in some contexts, as settler colonialism "seeks to undercut or destroy the collectivity of Indigenous peoples, even if it does not always want to destroy the individuals within the collective or the collective in its totality" (Wildcat 2015, 394). Wildcat importantly argues that Indigenous people's own definitions of genocide need to be

taken seriously and at face value, including fears around social and political death which are closely linked to the loss of land/space for Indigenous peoples (ibid., 397). For the Indigenous First Nations of Canada, for example, these concerns center around not only the withdrawal of political recognition of treaty rights and lost land but what this dispossession of space further signifies: social harm through loss of subsistence, cultural practices, senses of belonging and home, and a breakdown of placed-based relations between humans and non-humans. In Sweden, the reduction of grazing lands for reindeer, as well as the destabilization of the ecosystems and migration paths necessary for reindeer's biological survival, similarly threatens to undermine Sámi rights to land, which are at present highly individualized and linked to herding (Labba 2016). However, the loss of land is always felt collectively and throughout Sámi society and culture. This is certainly true for Sámi reindeer herders, for whom the social relations of reindeer herding, as I show in chapter six, are central to notions of personhood and belonging.

The violence which underpins these fears within Indigenous communities, as both Matthew Wildcat and anthropologist Elizabeth Povinelli (2011) point out, can be difficult for both Indigenous and non-Indigenous people to recognize; Indigenous lived experiences of violence and marginalization are often normalized, hidden, or ignored in settler colonial contexts (Wildcat 2015, 406). Elizabeth Povinelli (2011a) argues that what is "eventful" – considered distinct, urgent, and/or worthy of recognition – is a key means through which active and passive violence is organized within late liberal societies like Australia and Sweden. Povinelli's research, situated in the settler colonial Australian context, shows how the diffused violence and inequality Aboriginal people face is often invisible, until the accumulation of suffering "at a certain tipping point lead[s] to death of not only individuals, but the alternative social worlds to which they belong". (Povinelli 2011, 132). Povinelli collects and names this diffused violence under the rubric of "quasi-events" (ibid., 144), everyday problems whose universality obscures their occurrences in socially differentiated worlds. This can range from seemingly everyday workplace bullying, the destruction of land for mining, or the killing and abuse of reindeer – as I discuss in chapter five – or in the mistreatment of Sámi memorial sites as discussed in chapter six. Harm of this kind is elusive, fragmented, and scattered across wide spatial and temporal scales; individually, one factor cannot be identified as the definitive source of oppression and the struggle Sámi people face, but in concert speak to long-

established forms of harm which negatively affect Sámi people and community, as evidenced in recent studies on mental health amongst Sámi reindeer herders (Stoor et al. 2015).

The role of violence in the production of space was also something Henri Lefebvre was committed to shedding light upon. Here we see a second confluence between theories of spatial production and settler colonialism, which inform my analysis of space as a means through which inequality is reproduced in Kiruna. Lefebvre saw violence as not only playing an important economic role – in the capitalist accumulation process – but also in the creation of state space itself: "Sovereignty implies 'space' and what is more it implies a space against which violence, whether latent or overt, is directed – a space established and constituted by violence" (Lefebvre 1991, 279-80). Lefebvre understood every state to be borne and sustained by violence directed at a space (ibid.), and that "each new form of state, each new political power, introduces its own ways of partitioning space, its own particular administrative classifications of discourses about space, and about things and people in space" (Lefebvre 1991, 281). The kind of spatial violence that settler colonialism represents as a "logic of elimination" (Wolfe 2006, 381), or the removal of Indigenous people from space to replace them with a new colonial society must therefore be understood as part of state making in sites around the world, including Sweden. I thus see settler colonialism, following Aihwa Ong (2007), as a historical "mobile technology" of governance – much like neoliberalism – available for application in diverse sites by states as a means of achieving specific political and economic goals.

Of further relevance for the Giron-Kiruna area is the role of what cultural studies scholar Kristina Sehlin MacNeil (2017, 23) terms extractive violence, or "a form of direct violence against people and/or animals and nature caused by extractivism, which predominantly impacts peoples closely connected to land." Sehlin MacNeil's use of this concept is particularly apt, as it was developed through research collaboration with Leaváš, one of the *čearru* most affected by LKAB's mining operations. Sehlin MacNeil and her interlocutors consider extractive violence as a direct form of structural and cultural violence that most affects people with deep spiritual ties to land (i.e., Indigenous people), and as acts of violence which are often ignored or trivialized (ibid., 17). I find additional resonance between Sehlin MacNeil's concept and the relationship between the production of settler colonial space and mineral resources as identified by political geographer Michael Simpson (2019). Simpson examines the

historical and discursive production of Athabaskan tar sands bitumen (oil) deposits into a national Canadian extractive resource commodity through the lens of settler colonial space making, particularly the ways in which technologies of mapping and surveying (spatial abstractions) produced sites as resources. In turn, the production of this scientific knowledge and resources as objects of desire, generated "new resource desiring subjects who projected their fantasies of a settler colonial future upon these resources' stored potentiality" (Simpson 2019, 3). Simpson terms this "productive relationship of desire" a *resource desiring machine*, through which both resources like bitumen and the settler colonial nation are produced and re-produced (ibid., see also Deleuze and Guattari [1983] 2014). Simpson's analysis of the spatial technologies which make possible this dynamic underscore the ways in which natural resources are "traumatically produced" (Tsing 2003, 5100) through colonial dispossession, concluding that "violence is thereby a foundational condition of the resource" and thus it is possible to conceive of *resources as violence* (Simpson 2019, 10-11). This violence is evident in the establishment and enforcement of state and property as institutions, legacies of dispossession which cause inter-generational harm and trauma, and the effects of environmental destruction caused by extraction on lands which are integral to Indigenous people's culture, health, economies, and political self-determination (ibid.)

As Åsa Össbo notes, "a settler colonial society is a traumatized society, encapsulating both the trauma of the victims and the perpetrators," the latter of which includes the continued denial of past and ongoing dispossession (Össbo 2020, 438). Claims that colonial policies such as "Lapp Shall Be Lapp" (chapter two and three) expressed a misguided, though ultimately well-intentioned, form of care toward the Sámi are continually undermined by the lack of political will to address these harms in the present. History, as settler colonial societies and spaces show, is never a closed matter, belonging to a safe and hermetic past. "We are never as steeped in history as when we pretend not to be," anthropologist Michel-Rolph Trouillot observed. "But if we stop pretending, we may gain in understanding what we lose in false innocence. Naiveté is often an excuse for those who exercise power. For those upon whom that power is exercised, naiveté is always a mistake" (Trouillot 1995, xix). Previously mentioned structural decolonizing efforts, such as truth commissions, formal national recognitions of harm, changes to education policy, and the strengthening of self-governing Sámi institutions and their inclusion in

governance and decision-making as equals are initial steps towards new understanding of history can that address this legacy of inequality and harm in Sweden today (Veracini 2010; Huuva and Blind 2016; Nutti 2016; Kuokkanen 2020; Össbo 2020; Dankersten 2021).

Min Biras (Our Environment): Making Sámi Space and Place

As noted, the analytic of settler colonialism helps shed light not only social processes of the past, but on the present. As anthropologist Audra Simpson (Kahnawake Mohawk) argues, settler colonialism can be explored in multiple ways, as an "analytic, as a social formation, as an attitude, as an imaginary, as something that names and helps others to name what happened and is still happening in spaces seized away from people, in ongoing projects to mask that seizure while attending to capital accumulation under another name" (Simpson 2016, 440). Understanding the production of space and place in Kiruna in relation to settler colonialism, as I do throughout this thesis, helps describe how the dispossession of Sámi space that *has happened and is happening* in Sweden is articulated and reproduced. Simultaneously, this approach makes it possible to apprehend how Sámi people understand, manage, resist, and rework these forces of oppression in the context of their everyday lives.

While reindeer herding Sámi are a minority within the greater Sámi community and occupy complex internal and external legal, political, and sociocultural configurations, reindeer herding is a Sámi cultural practice which consistently confounds state efforts to reduce it to another kind of agricultural industry. As I show, for many of my interlocutors, reindeer herding is both productive and reproductive: not only generating food and other raw materials (reindeer fur, horns) for use, but a practice that reproduces persons and social relations between humans and non-humans (reindeer). These social relationships of mutual autonomy, practiced on a regular basis between Sámi people and reindeer, are spatialized through oral histories, markers in the land, tasks, and architectures of herding (Anderson, et al. 2017). Here, I consider my Sámi interlocutors movement, labor, and dwelling with animals, articulated in the emic concept of *meahcci* (pl. *meahcit*, in English "forest"), as an example of Tim Ingold's notion of taskscapes (Ingold 1993; Mazzulo and Ingold 2008; Joks, Østmo,

and Law 2020) As I show in chapter six, Sámi spatial practices in the mountains articulate Sámi cosmologies, social relations, histories, and claims to land. I take care to depart from local understandings of these spaces, because as sociologists Solveig Joks, Liv Østmo, and John Law (2020) importantly note, *meahcit* are highly variable; there is no static, singular, or essential "Sámi culture" to which a universal definition of these spaces can be linked. Joks, Østmo, and Law (2020, 306), who also consider *meahcit* as taskscapes, point out that many Sámi people who did not grow up with *meahcit* practices may not be familiar with terms or vocabularies particular to these spaces (2020, 306), and I clarify the specificity of these terms for my interlocutors in chapter six.

Spaces of herding, the mining industry, and the city, as I argue throughout this thesis, "interpenetrate one another and/or superimpose themselves upon one another" (Lefebvre 1991, 88-87). In doing so, I seek to avoid reproducing binary oppositions between spaces, i.e., settler/non-Indigenous and Indigenous spaces – distinctions which do not fit my interlocutors' realities – but rather highlight and analyze how they produce and perceive space in this entangled landscape (Moore 2005; Miggelbrink et al. 2013; Todd 2014; Wildcat 2015). Geographers Judith Miggelbrink, Nuccio Mazzullo, Peter Koch, and anthropologist Joachim Otto Habeck (2013) similarly argue that the categories of "nomadic" and "indigenous" often imply different modes of living: "nomad" is associated with persons being at home in more than one location, while "indigenous" denotes permanent inhabitation and presence prior to the arrival of other groups (ibid., 13) The authors, writing and researching these topics in Arctic Fennoscandia, Canada, and Russia, however, note that in many of their case studies, "nomadic" and "indigenous" are one and the same. This is because in an environment characterized by extreme variability in climate and the abundance of plants and prey means that for many Arctic peoples, like the Sámi, flexibility and mobility is "virtue of life" (ibid.), a form of social resilience and sustainability (Whyte, Talley, and Gibson 2019).

As these authors and the research presented here shows, Sámi Indigenous space and place-making has long challenged state and religious authorities, who primarily viewed movement, multi-sited living, and multiple forms of belonging – or non-exclusive citizen relations to nation states – as threats towards national modernity and sovereignty. The assumed "rootlessness" of the nomad, and/or misrecognition of Indigenous ways of living and using land, as noted, was also integral to the logic and enactment of settler colonial dispossession (Wolfe 2006). Nevertheless,

mobility remains central to the Sámi production of space in Kiruna today. Reindeer herding architectures and infrastructure such as corrals and migration routes (Anderson et al. 2017), as well as place names and narratives, fishing, hunting, and plant foraging are just some of the ways in which Sámi space and society is made in Kiruna today (Basso 1996, Cruikshank 2007, Sköld 2015). The mobile, multispecies, co-productive relationships of reindeer herding, which involve not only specific herding tasks and migratory movement, but also diverse forms of labor, dwelling, and travel, continually re-affirm Sámi spaces of home and society (Mazzulo and Ingold 2008). Mobility connected to reindeer herding, in other words, is not just about transhumance and animal husbandry but about "robust social institutions that are developed in tandem with the movement" (Whyte, Talley, and Gibson 2019, 324). In attending to and sustaining these intimate multispecies relations, Indigenous humans thus re-produce and sustain themselves as complex social beings (Tallbear 2017).

Finally, Sámi Indigenous reindeer herding labor and human-non-human relations, as many scholars have observed, are frequently misrecognized by non-Indigenous people (Munn 1996; Povinelli 1993; Nadasdy 2007; Coulthard 2014; Todd 2014, 2018). This misrecognition is rooted in Western ontologies which primarily separate, commodify, and extract economic value from both land and the relations between people and animals (Burow, Brock, and Dove 2018). The Western Cartesian distinction between the concepts of nature and culture, as discussed earlier in this chapter, further sustains this divide, reflected in efforts to police the border between humans and non-humans, or, in other settings, between civilized and uncivilized. Even when Indigenous concepts are recognized – as can happen in conservation efforts in protected areas – attempts to "translate" Indigenous notions of the environment can be highly problematic. As anthropologist Paige West importantly notes, such translations are insufficiently recognized as political, and often also dominated by Western concepts and modes of explanation which do not align with Indigenous concepts (West 2005).

Sámi reindeer herders do not separate people and reindeer into incommensurable categories. Reindeer, as I show in chapter six, are recognized as animal "persons" (as having personhood), seen as possessing individual and unique personalities, intelligence, agency, knowledge, and active participants in inter-reindeer and human-reindeer social relations. In other words, reindeer are considered as equals in reciprocal and symbiotic

relationships with people (Stammler and Beach 2006, 12; see also West 2005). Here, I further echo anthropologist Paul Nadasdy's (2007, 26) insistence that anthropologists and other scholars recognize Indigenous ontologies, notions of space and place, and more-than-human sociality as literal, rather than symbolic, propositions (see also Povinelli 1995; Cruikshank 2006; Todd 2014). Paige West, in her ongoing research with Gimi inhabitants of the Crater Mountain area in Papua New Guinea, shows how notions of personhood in that community are understood as the outcome of transactive relationships between people, animals, and ancestors – these actors, in turn, produce the space of the forest. West's important observations – highlighting the role of non-humans in the production of space – I see as resonating strongly with Sámi understandings of space and place, such as forests (*meahcci*). Indeed, the dialectical relations between people and animals ensure both's "being-in-the-world", while also generating the socio-ecological world which people and reindeer inhabit (West 2005, 633; see also Ingold 2000).

Furthermore, as anthropologist Zoe Todd emphasizes in the context of Inuvialuit human-fish relationships in Paulatuuq, Arctic Canada, animals can be agents in complex political and social landscapes, and these relations are key sites of political and legal exchange within and beyond Indigenous community (Todd 2014, 218, 222). The "plurality" of fish for the people of Paulatuuq, or the recognition of fish as individual and collective entities, metaphors, biological specimens, and/or as food, are all ways of knowing and recognizing fish as non-human persons with agency. Acknowledging this agency, Todd argues, reveals how people and animals in Paulatuuq together not only actively experience colonialism, but also dismantle it (Todd 2014, 231). Similarly, in Giron-Kiruna reindeer exist as political and social agents a variety of ways, recognized both by Sámi people but also by non-Indigenous people, and sometimes becoming targets of violence themselves. This, I argue, reveal the extent to which Sámi social beings actively challenge settler colonial spatial orders, unsettling settler claims to space. As I discuss in chapters five and six, Sámi strategically use hybrid theories of nature and society "in the service of revitalizing relationships with the other-than-human world" (Burow, Brock, and Dove 2018, 68), The myriad ways in which herding is supported through labor, politics, knowledge, and practices, I argue, reveals a long history of Sámi resistance to settler colonialism and land ontologies (Poirier 2010).

Concluding remarks

In this chapter, I have outlined the theoretical tools I use to analyze the empirical material of this thesis, inspired by Akhil Gupta and James Ferguson's call to study the ways in which space and place are "imagined (but not *imaginary!*)" (Gupta and Ferguson 1992, 11, original emphasis). Analyzing the production of space in the ways I've explained in this chapter helps us not only to understand how spaces are generated through "conceptual processes of making" but also how the conceptual, representational, and material aspects of space illuminate relations between local, lived spaces and global political-economic conditions (ibid.). Settler colonialism and capitalist extraction are two globalized regimes which depend on the accumulation and production of space through dispossession for their reproduction (Harvey 2004; West 2016). Yet, these processes fail to completely efface or destroy pre-existing or alternative social-spatial histories and processes; rather, as Henri Lefebvre observed, they continually "interpenetrate one another and/or superimpose themselves upon one another". While both settler colonial and extractive capitalist space making seek to give the appearance of an orderly, logical separation between spaces – through borders, walls, or other enclosures – this is only an illusion, for what in fact exists between them "is an ambiguous continuity" (Lefebvre 1991, 88-87, original emphasis). Indigenous people do not lead a liminal existence "between" these settler spaces – in settler colonial contexts, all spaces are hybrid (Miggelbrink et al., 2013). With this in focus, I show ways in which Sámi space, place, and multispecies relations are imagined (but not imaginary) and the implications of these "conceptual processes of making" for residents of Giron-Kiruna. In the following chapter, I step back to contextualize what this "ambiguous continuity" in Giron-Kiruna looks like, delving into the social history of the production of extractive space and social difference which made the northern Ore Fields region, and Kiruna itself, possible in the first place.

Chapter 3: From "Lappmarks" to Ore Fields: A Social History of Northern Extractive Space

Relations between Sámi, municipal and country authorities, LKAB, and other land users in Kiruna today reflect intertwined, and often conflicting, spatial, and social histories. As briefly noted in the previous chapter, the establishment and expansion of settler colonial space has entailed profound disruptions to Sámi society and space. These disruptions – and displacements, and dispossessions – are still ongoing. How did northern lands become objects of extractive and settler colonial desire in the first place? What were the historic origins of this process, and what social-spatial legacies continue in the present? I begin first with a more detailed introduction to the diverse inhabitants of the Giron-Kiruna area, specifically groups who inhabited the area prior to the arrival of the mining industry, and with the focus on Čohkkiras Sámi community to which most of my interlocutors belonged. This is followed by a review of Sámi reindeer herding organization, laws, geographies, and institutions in that are relevant to the study. Finally, the last two section of this chapter introduces and examines two forms of 19th and early 20th century settler colonial spatial productions – the cultivation border and the national interests – that profoundly transformed social relations between Sámi and non-Indigenous people, and whose effects reverberate into the present.

Settling the Ore Fields

Historians of Swedish colonialism often mark the 17th century as a period when Swedish royal interests and efforts to settle northern area intensified (Fur 2006; Ösbo 2020). During this time, the kingdoms of Denmark-Norway, Sweden-Finland, and imperial Russia were in active competition for control over the residents and resources of the north. For the Swedish

kingdom, settlement would become a key means of establishing this territorial sovereignty. The first large-scale efforts to attract settlers to the "Lappmarks"[26] in the 1600s was motivated by the Swedish Kingdom's need to finance ongoing wars on the continent. Encouraged by the discovery of silver at Nása (Nasafjället) and Huhttán (Kvikkjokk) (among other sites), the primary aim of settlement of the Lappmarks in the 17th century was the establishment of mining (Arell 1977, 16; Nordin 2015; Össbo 2020). Settler migration to these areas was a means of establishing infrastructure necessary for extraction, and further encouraged in the 1673 Lapland Proclamation (*Kongl. Plakat den 27 september 1673, angående lappmarkernas bebyggande).* Settlers were invited to develop as much land as they could through the construction of farms, mines, mills, and works (*bruk*), in exchange for fifteen years free of taxes (for land possession and use) and exemption from military conscription[27].

Early on, the Sámi were seen as indispensable to northern development, particularly as sources of transport and as food producers when crops were insufficient, echoing a dependency on Indigenous resources found in other settler colonial contexts (Hansegård 1978, 148; Mar and Edmonds 2010). In 1670, governor of Västerbotten County Johan Graan wrote to the Swedish Board of Mines emphasizing the necessity of Sámi resources to industrial development (Arell 1977, 71):

> The Lapps with their reindeer are so necessary in the Lappmarks themselves, to the continuation of the mines established there that there is no other means at hand, to transport the supply of provisions, ore, and wood, so long as no reindeer are in storage, with which the Lapps, and no one else, knows (to) associate with ....

At this time, Swedish claims to sovereignty did not deny the recognition of Sámi land claims, as taxes – which the Sámi had long paid to the Swedish crown to guarantee their use of hunting and fishing lands – formed the legal basis for land possession and right of use in 17th century jurisprudence (Lehtola 2004; Fur 2006). Court documents from the period show that Sámi rights to land and water were recognized as a right of possession equivalent to that of peasants, with individual Sámi households

26 This term originated in the Middle Ages, and was used by Swedish merchants, church authorities, and state administrators about areas primarily occupied by Sámi well into the 19th century.

27 These would be expanded in subsequent proclamations from 1695 through 1749 (Kvist 1994).

considered "tax lands" – such as the "taxed mountains" (*skattefjäll*) area in Jämtland and Harjedalen – and "as such enjoyed the full protection of the legal system" which included protection of possession as well as hereditary succession (Fur 2006, 53). Additionally, Sámi villages managed common lands and collective activities like hunting and fishing in these areas. These rights were further strengthened in the spring of 1751 with the creation of a legal document known as the Sámi Magna Carta, or the "Sámi Codicil"[28]. The drafting of the codicil was informed by views at that time that the right of ownership of *non-cultivatable* land could be legally acquired through occupation and use, and to reduce conflicts between Sámi and settlers in coastal areas through the creation of a region called Lapland (see map on page 26, Introduction chapter). The Codicil further ensured the "special rights" of Sámi to cross-border migration, including free choice of citizenship, free migration over state borders with their reindeer herds, and obligatory neutrality in the case of war between Norway and Sweden (Koch 2016, 124).

State views of the Sámi in the 17th and 18th centuries evolved rapidly and often in parallel to state military objectives and/or need for resources, for example King Karl IX's efforts to establish Swedish sovereignty over lands extending to the Arctic Ocean (present day Norway). Until 1751, this region, called Finnmarken, "in reality belonged to no nation and remained contested ground" (Fur 2006, 56), and in Sweden this became a source of increasing concern for state authorities. Historian Gunlög Fur notes that state oppression, such as forced labor in mining areas, was countered most easily by the reindeer herding, or mountain Sámi (*fjällsamer),* who could move with their reindeer to another jurisdiction (Fur 2005, 56).

These efforts to create state space and national borders in the north in the 17th century were accompanied by new ways of conceptualizing land use amongst northern peoples. These were borne from concerns over reindeer herding Sámi defecting to Denmark-Norway and possibly divulging military secrets (Fur 2006, 57). Accordingly, the Swedish- Sámi governor of Västerbotten Johan Graan proposed a "parallel theory" of relationships between groups in the north, which considered Sámi and agricultural peasants in the Lappmarks as not in competition with each other, because they used different resources. Graan believed reindeer herding Sámi were "true" nomads whose inhabitations of the mountain regions was vital to national security (ibid.). Graan believed reindeer

28 The full title of the document is: *Första Bihang eller Codicill till Gränse-Tracraten emellan Konunga Rikerne Swerige och Norge Lappmännerne beträffande*.

herders only needed areas in which reindeer lichen (*Cladonia rangiferina*) grew on the forest floor and advocated for land surveys, arguing that cadastral mapping was necessary to ascertain "which places could serve for settling Swedish people, where there is grass and deciduous trees, [and] which the Lapps with their reindeer need nothing of" (ibid.). The "parallel theory" was a particular "construction of reality" (Fur 2006, 58), which inaccurately presumed that the reindeer had no need for foods besides lichen (reindeer also need grass), and Graan, according to Fur, was thus first state authority to link reindeer herding Sámi and reindeer as one in policy, "so that that the two, human and animal, became virtually indistinguishable". Furthermore, persons were to be recognized as belonging to a group not by ethnic marker or language but by subsistence activities (ibid.). Notably, Graan was also a harsh critic of the forest Sámi, whose mixed economies, periodic struggles with poverty (possibly due to onerous taxes), and tensions with settlers he viewed as evidence of their "laziness", and he encouraged forest Sámi to take up agriculture as their main livelihood (Fur 2006,57). According to Graan, if each group stuck with its defined subsistence practices and paid taxes –" peasants" in agriculture and Sámi in the "Lappmark trades" (hunting, fishing, reindeer keeping) – the state could avoid considering them land users in conflict. This categorization of people according to occupation would henceforth come to play an important role in who was seen as having a right to northern space.

In the 17th and early 18th centuries, state visions for the northern regions of the country were oriented towards promoting agricultural development focused on the production of grain and minerals, as practiced in southern regions of the country. Individual farm settlements (i.e., not connected to an industrial works, or *bruk*) were encouraged in northern Sweden, but were often far away from commercial centers and required to be self-sufficient, with settlers allocated defined amounts of timber and arable land to grow food for themselves and their livestock (Andersson, Östlund, and Törnlund 2005). However, soil and growing conditions in the subarctic climate zone often produced insufficient fodder for livestock, resulting in "wedge-shaped" settlements along rivers, to maximize the production of hay in wetlands and access to fisheries as a critical resource (ibid., 304). The need for supplementary food sources like fish led to many conflicts between Sámi and agricultural settlers, who did not want to compete with the Sámi for fishing grounds (which settlers did not pay tax on, while Sámi did). Settlers also poached the Sámi's reindeer when crop

yields were insufficient. Carl Linnaeus recounts conversations with Sámi regarding such conflicts with settlers in *Lachesis Lapponica*, his field journal from the 1732 *Flora Lapponica* botanical expedition (Linnaeus 1811, 62–64):

> It is certainly very unjust that these people, settled more than eight miles down the country on the other side of Lycksele church, should drive out the native Laplanders and be allowed to fish these upper regions, which have no communication with the sea shore, and this without paying any tax to the crown or tithe to the curate of the parish, which the fishermen of the country are obliged to do, or to farm the fishery of the land holder, who pays tribute for his land, and who justly complains of the hardship he suffers in various respects, without daring to make any open resistance.
>
> When any of these complaints were made by the Laplanders in my hearing, I asked why they did not seek redress in a proper manner. "Alas!" replied they, "we have no means of procuring access to our sovereign. Nobody here exercises any authority to protect us, or to prevent these interlopers from doing with us just as they please. We cannot procure witnesses in our favor, scattered about as we are in an unfrequented desert, and therefore we are robbed with impunity. We can never believe this happens with the approbation of our gracious Sovereign. If we were assured that it was his will, we should submit with dutiful resignation.

One notable aspect of Linnaeuss' re-telling is the portrayal of Sámi as noble but silently resigned natives who did not openly resist the incursion of settlers and accepted Swedish state rule with "dutiful resignation". This portrayal resonates with later representations and rhetoric of Sámi as primitive "people of nature" (*naturfolk*) in need of colonial state paternalism to protect them from settlers (encouraged by the same colonial state), justifying the curtailment of Sámi autonomy in 19th century policy. I will return to the origins and consequences of these views shortly, but for the moment wish to simply point out how such views, which were already in circulation during the 16th century, would continue to play an important role in the production of Northern Sweden as a particular kind of place – one inhabited by people with clearly defined occupations and livelihoods over the course of the next five centuries.

19th Century Colonial Administration

In the mid- to late 19th century, the Sámi began to be viewed both as a "primitive" *and* "foreign" people by both Norwegian and Swedish authorities. The mobile, cross-border Sámi presented challenges to the emerging modern Nordic states, now seeking to solidify their distinctive national identities. The Nordic states thus turned to increasingly oppressive measures to extend their control over land and people in the northern regions. In Norway, this found expression in the policy of forced assimilation known as Norwegianization (*förnorskning*), which denied Sámi who did not speak Norwegian as their primary language or had Sámi (non-Norwegian) last names the right to own property (Minde 2003a). In Sweden, policy was expressed under a doctrine known "Lapp Shall be Lapp" *(lapp ska vara lapp),* which, rather than focus on widespread assimilation of Sámi as in Norway, sought to segregate reindeer herding Sámi – considered the "true" Sámi – from Sámi with more mixed economies (forest Sámi) and settlers.

New institutions became necessary to enforce these social and spatial boundaries. In late 19th and early 20th century Sweden, these were supported through colonial law, science, and administration. Government investigations, scientific studies, and government committees to investigate the "Lapp question" were created to collect information about Sámi reindeer herding, community migration patterns, and other livelihood practices, many collected by ethnographers, church authorities, or others (SOU 2006:14). This work was particularly intensive leading up the "closing" of the Norwegian-Swedish border and was to inform state-level negotiations around the right of Sámi whose winter lands lay on the Swedish side of the border to retain access to their summer lands in Norway. While the 1919 Convention regulated where herders could live – Sámi families were forcibly relocated from the border to southern areas upon its signing, the 1928 Reindeer Pasturage Law codified state views of "true", or authentic Sámihood: land use, forms of dwelling, gendered division of labor and property, and work organization. These were articulated within law under the concepts of "good reindeer herding" or "good reindeer herders", i.e., those who belonged to and conducted reindeer herding within a *čearru* (in Swedish of the period, *lappby*, or "Lapp village", pl. *lappbyar)* (§7), prevented their reindeer from damaging settler property (crops, timber plantations) lest they be fined, and "dutifully" participated in the collective work of the *čearru,* particularly meat production.

The *lappby* – the precursor to today's *čearru* (in Swedish, *sameby*) – reflected settler colonial ideology in several ways. The administrative and geographical unit of the *lappby* traces its history to the first 1886 Reindeer Herding Act, which coincided with a period of intensive settlement and development of northern Sweden. Anthropologist Hugh Beach summarizes the purpose of the *lappby* as essentially "designed to maintain decent relations between herders and farmers, to police their activities, and to settle their conflicts" (Beach 1981, 361). Sámi legal scholar Kristin Labba also notes that the legal organization of the *lappby* made it possible for authorities to "more readily assign blame for damages caused by reindeer... In every village, all reindeer herding individuals became jointly and severally liable" (Labba 2015 148). The system of taxed lands and the recognition of family or *siida* use of specific areas was also abolished, and grazing lands were collectivized, with members gaining uniform rights to land within the *lappby* geographical area (Beach 1981, 361; Labba 2015, 148). The internal organization of the *lappbyar* was entirely regulated by the Country Administrative Board until 1971, when the *lappby* replaced with the *sameby* and the current Reindeer Herding Act came into force.

Labba points out that the legislative processes which have led to the adoption of the Swedish Reindeer Herding Acts so far have failed to acknowledge Sámi reindeer herding traditions and ambitions. For example, the state's early misinterpretation of *siida* organization – perceived as "unstructured" – justified the state's construction of the *lappbyar*, as well as the forced collectivization of individual reindeer herding rights (Labba 2015, 144). These early colonial transformations remain in the structure of the *sameby* system today. The administrative and organizational form which the *čearru-sameby* follow, for example, is based on the Swedish industrial cooperation model, as it was believed that this would improve the organization of reindeer herding (Labba 2015, 148), and lead to a "self-rationalizing" *čearru-sameby*, in which the ratio between the "resource" (scarce grazing lands) and "consumers" (herders and reindeer) would not exceed a critical limit (Beach 1981, 379). This system has at times tended to favor "big" herders with larger herds and squeezed out those with smaller herds, or who cannot commit to herding full time (for an in-depth discussion on this complex topic, see Beach 1981, 360-393). However, it is important to point out that herders view the modern *čearru* form in a more expansive way. The *čearru-sameby* is both a "judicial person" and an economic corporation formed in 1971 by the Reindeer Herding Act, and the main perspective from which the state considers Sámi herding rights

and goals (Beach 1981, 364-365). Sámi herders, in contrast, emphasize the traditional origins of the *čearru* and its importance as a cultural and social form, one which exceeds the state's definition and is not limited to it (ibid.). I further examine individual herder's views on the double binds these entail in chapter five.

Returning to late 19th century, the ambition to preserve nomadic, mountain reindeer herding (as in the "*lapp ska vara lapp"* policy) may at first seem to contradict settler colonialism's aim of native removal (Wolfe 2006). As noted above, the Swedish settler imperative to remove Indigenous people from land to appropriate it – was enacted through the elimination of Sámi social and spatial orders, justified by the notion that Sámi were not capable of managing their own affairs (Minde 2003b; Lantto and Morkenstam 2008; Burnett 2021). The ramifications of this upon Sámi society were profound. In the wake of the 1928 Reindeer Herding Act, only men were considered as the head of households and as reindeer herders, with women and children relegated to dependent positions. Sámi herding women who married non-reindeer herding men would also lose the right to herd reindeer, but a reindeer herding man marrying a non-herding woman could confer his rights (Beach 1982). While this discriminatory position was later removed in the 1971 Reindeer Herding Act, the ramifications of this law resulted in a drastic reduction in the number of full-time reindeer herding women (ibid.), as well as the number of animals in women's herds and later in the 20th century, as voting rights in the modern *čearru* are weighted according to number of animals a herder owns (ibid.). Anthropologist Audra Simpson has similarly traced similarly gendered impacts of settler colonial governance in Canada, where Mohawk Indian women who married non-Indian (or non-status Indian) men lost rights to live on tribal territory and tribal membership (as did their children), but Indian men who married non-Indian women did not (Simpson 2014, 2016). In both Canada and Sweden, settler colonialism manifested not only spatial dispossession but a gendered biopolitics, in which settler heteronormativity, gender relations, and identities were enforced on Indigenous people, further contributing to the weakening of both individual and collective autonomy (Morgensen 2011).

The "Lapp Administration" (*Lappväsendet*)

The colonial office of The Lapp Administration (*Lappväsendet*) and their officers, *Lappfogdar* (s. *Lappfogde*; "Lapp bailiff") played a key role in the expansion and institution of settler colonial society in northern Sweden. The *Lappväsendet*, which formally existed from 1885 to 1971, was the primary institution through which colonial state ambitions for "good reindeer husbandry" and "good reindeer herders", as well as attempts to transform reindeer herding into an economically rationalized form of animal husbandry was enforced (Beach 1981). Historian Patrik Lantto (2005, 2012, 2014), who has written extensively on this institution notes that the colonial officers, the *Lappfogdar*, had considerable power regarding decisions on all aspects of Sámi life in the three northernmost counties (Norrbotten, Västerbotten, and Jämtland). This system, originally intended to be temporary, lasted until 1971 and was created to administer the state's relocation of Sámi from the border with then-Russian controlled Finland in 1889. Forced relocation, as well as forced slaughter, increased during this time, culminating in the 1919 Cross-Border Convention with Norway and efforts to reduce the number of reindeer and herders that migrated each year to their summer pastures in the Tromsø area (Lantto 2014). This forced relocation (*tvångsförflyttning*) of Sámi along the border areas to southern districts and to other *čearru* across Sweden was operationalized in the four northernmost reindeer districts[29]. The effects of this forced relocation significantly impacted Sámi in the Giron-Kiruna and Gárasavvon (Karesuando) areas, and remain a painful chapter for many Sámi, who were forced to leave living places, grazing lands, burial sites, and spiritual places as a result (Labba 2020).

Lappfogdar were recruited from universities, the Swedish church, other government agencies, or even industries like forestry (Grubbström 2005). In the early 20th century, the *Lappväsendet* evolved into a warden-like role, with reindeer herding Sámi increasingly confined to their designated "districts" in a manner mirroring the native reservation system of the United States (Tuori 2015). Sámi political scientist Rauna Kuokannen notes that unlike North America, in which Native peoples were transformed into "wards of the state", Nordic colonialism often sought to further absorb the Sámi, who were "constructed as an integral part of the state, tightly consolidated, and integrated into the nation as any other citizen" (Kuokannen 2003, 708). This is evident in the institution of the

29 These four *čearru* today are: Könkämä, Lainiovuomma, Saarivuoma, and Talma.

Lappväsendet and the resources invested in such a system. For example, one aim of the institution was enforcing state views of "good reindeer husbandry", as outlined in the 1928 Reindeer Pasturage Act. *Čearru* now needed permission to migrate or do reindeer work (such as separate herds or conduct slaughters) according to specific times of the year decided by state authorities. *Čearru* were also sometimes forced to slaughter large amounts of healthy animals if they exceeded allowed quotas (Idivuoma 1990). The *Lappfogdar* furthermore oversaw taxes paid by the Sámi and decided which Sámi children should be sent to "nomadic schools", where children were forcibly separated from their parents and forced to live in boarding schools, often receiving a "a lower grade of civic education than other Swedish children" (Ruong 1967, 78; see also Huuva and Blind 2016).

In the following section, I introduce two examples of settler colonial space that were introduced in the late 19th and early 20th century and still exist today. As I will show, these two kinds of spatial productions – the so-called cultivation border and the national interests – entailed a transformation of not only physical, conceptual, and representations of space in this area, but also relations between Sámi and non-Sámi groups.

The Cultivation Border

As noted, the expansion of mining, agriculture, and forestry settlements increased tensions between Sámi and settlers. The Härjedalen region of Jämtland was one area where conflicts between settlers and Sámi were particularly violent, corresponding with state sale of large areas to private forestry and mining companies. In one well-known incident from 1891, the owner of the Ljusnedals copper mine and mill encouraged his workers – and any farmers in the area – to shoot and kill any reindeer that came onto private property (Idivuoma 1990, 38). This incident received national attention and was commemorated in a painting by the local artist Johan Tirén (Fig. 7), strengthening ongoing political work towards establishing local and national organizations to advocate for Sámi rights. These conflicts, however, were also seen as further proof by state authorities and other actors involved in the "Sámi question", of the need to isolate Sámi from settler society, strongly supported by, among others, Hjalmar Lundbohm, the first mine manager at LKAB Kiruna.

Fig. 7: Johan Tirén, 1892. Samer tillvartar skjutna renar (Sámi Collecting Reindeer Which Have Been Shot). Oil on canvas, 150 x 241 cm. Source: Nationalmuseum, Stockholm, Sweden.

Another way colonial authority sought to manage conflicts between Sámi and settlers was the introduction of a new kind of space, the so-called "cultivation border" (*odlingsgränsen*) formally established in 1890[30]. Already in 1867, the Riksdag decided that a "provisional boundary would be drawn between the Lapland cultural area and the mountain countryside", to demarcate lands to the north west of the country in which no agriculture was allowed, and where mountain reindeer herding *čearru* lived and kept their animals year-round (year-round grazing lands). A 2006 report in connection with the negotiation of a new Norwegian-Swedish cross-border herding border convention (SOU 2006:14, 19) summarized the history of this space as follows:

> The land above this boundary line would in principle be the land of the Sámi and no more new buildings would be built there. However, many years of discussions took place about where the border would be drawn, which *inter alia* meant that the expansion of cultivation in Lapland could continue and reformulating the boundary line was unclear in the first reindeer grazing law [1886]. The location of the cultivation boundary was definitively determined in 1890 and a clear description

[30] Made into law 1872 via Parliamentary Act.

> of it could thereby be made in the 1898 reindeer grazing law. The Sámi have according to this, and all subsequent laws, the right to stay with their reindeer all year round above the cultivation border in the counties of Västerbotten and Norrbotten, and on the reindeer grazing mountains in Jämtland County.

The new cultivation border effectively replaced the boundaries of the Lapland region, which already demarcated the colonized Bothnian coast areas from the "Lapland cultural area", established in the 18th century in parallel with the settlement of the Norwegian-Swedish border. However, the cultivation border marked a considerable reduction of areas recognized as "Sámi land", and as the *čearru* map (Introduction chapter) shows, limited it to the far north of the country (Lundmark 2006, 137). As noted in the 2006 summary, there was an initial lack of clarity about this new boundary. In the Riksdags 1867 decision, it was stipulated that a surveyor and agronomist would collect information from residents and draw a provisional, local cultivation boundary that could be specified on maps "without having to be demarcated on the ground" (SOU 2006:14, 131). Such meetings were held in the parishes during the summer of 1868 (and in Jukkasjärvi and Enontekis summer 1869). Sámi were apparently only present at a few of them, as many of the mountain herding groups were in their summer pastures in Norway when the meetings were held. In some cases, it appears that settlers attending the meeting were listed as Sámi in the records (ibid.). However, the creation of the cultivation border did not stop the westward expansion of farming or extractive industries, nor diminish complaints from settlers that reindeer were causing damage to forests, fields, and other settler "property" (Arell 1977; Åhlstrom 1967; Össbo and Lantto 2011). Settlers continued to build homesteads, and mining companies like LKAB received permission from the state to build Kiruna and Gällivare as towns for mine workers. As Åsa Össbo notes, "the cultivation border came too late for its real purpose… and instead deepened the settler colonial state's policies and views of the Sámi as exclusively nomadic reindeer herders." (Össbo 2020, 428). Livelihoods associated with settlers and peasants – farming, timber production, mining – were increasingly viewed by authorities as markers of irrevocable cultural differences between groups. Sámi whose primarily livelihoods included reindeer herding, and Sámi who hunted, fished, or farmed in addition to keeping reindeer were also increasingly seen as distinct groups (Brännlund 2018). Settlers cultivated, Sámi did not; "real" Sámi were exclusively mobile nomads, not people who combined diverse livelihood strategies

according to need. Sámi who drew their livelihoods from agriculture, fishing, or hunting were thus increasingly portrayed as less "authentic" Sámi or not Sámi at all. This "occupation-cultural split", as anthropologist Hugh Beach termed it, made it possible for the state to speak of "preserving" Sámi culture while at the same time altering relations between Sámi groups and between Sámi groups and Swedish society, doing so "as if culture were composed of the elements of culture alone, such as language and handicrafts, to the exclusion of those relations between people and between people and the environment which creates these more tangible things" (Beach 1981, 290).

Such views were not unique to Sweden; indeed, they were commonplace within Enlightenment ideology, science, and colonial societies across the Continent. The distinction between cultivation and non-cultivation, for example, was one of the earliest manifestations of Enlightenment ontology, which considers nature and culture as separate spheres (Haraway 1989; Knobloch 1996: Saltzman, Head, and Stenseke 2010; Descola 2013). Humans were divided between these binary categories: the terms used from this period and well into the early 20th century were (in German) *Naturvölker* ("nature people" or "primitive people", in Swedish *naturfolk*) and *Kulturvölker* ("culture people", in Swedish, *kulturfolk*). In 19th century Sweden, Sámi were further infantilized by colonial authorities and described as "children of nature" (*naturbarn*). This label was often used by the authorities in the descriptions of "poor" (*fattig*) Sámi, typically the elderly and/or Sámi who had lost their reindeer, or left reindeer herding, for a range of reasons (Össbo 2020, 436). Legal articulations of such views were widespread. In connection with the preparation of the 1886 Reindeer Herding law, for example, Justice Knut Olivecrona[31] wrote (Lantto 2012, 26):

> A condition above all of higher civilization that applies, unchanging conditions among every people, is the same, permanent residence. Those tribes who do not want to leave nomadic life must necessarily stay at a lower level of culture and give way to the more civilized resident groups, before they after a languid life, die out. The history of mankind shows that such has been the case in all parts of the earth, and the nomadic Lapps must be subject to the same law and undergo, notwithstanding, in case they do not wish to engage themselves in

31 Knut Olivecrona was the grandfather of Karl Olivecrona, an influential legal philosopher known for his scholarship on Locke and judisprudence known as "Scandinavian Legal Realism", which argued for an empirical, scientific approach to law.

> agriculture or occupational pursuits, which are compatible with permanent residence.

Echoing a Lockean view of agricultural labor as pre-conditions to property and other rights, Olivecrona further argued that permanent residence was a pre-condition to "higher civilization", emphasizing that those who were construed as doing neither of these (nomads) "must give way to more civilized resident groups". In this, Olivecrona's formulation was exemplary of Swedish settler colonial ideology. As Patrick Wolfe (2006) observed, in settler colonial ideology whether Indigenous people practiced agriculture was beside the point; they were represented as rootless and unsettled, with the term "nomad" assigned as the primary label and example of Indigenous rootlessness, or lack of ties to specific spaces (recall that they were children of an abstracted "nature"). Wolfe saw agriculture, "with its life-sustaining connectedness to land" as a significant and potent symbol within settler colonial identity. For this reason, he argued, "settler-colonial discourse is resolutely impervious to glaring inconsistencies such as sedentary natives or the fact that the settlers themselves have come from somewhere else…. The reproach of nomadism renders the native removable." (Wolfe 2006, 396). Similar to religious conversion – from "heathen" to Christian – Olivecrona's formulation left room for those Sámi who left the "nomadic" life to be "saved" or ascend the civilizational hierarchy through assimilation. If they did not, however, their doomed fate was to "after a languid life, die out."

The cultivation border thus reflected a production of settler colonial space in several ways. First, authorities' concerns about the "end" of land (Wolfe 2006, Li 2014), and conflicts over land and resources, motivated the creation of the cultivation border as a spatial means of managing tensions and inequalities that were generated by settler colonialism. Second, the aim of the border was purportedly to "protect" the "true", authentic Sámi from settlers, and to separate less "authentic" Sámi, those who did not exclusively herd reindeer or had to leave herding. This "repressive authenticity", as anthropologist Patrick Wolfe observes, is closely linked to assimilationist efforts, as romantic stereotyping "eliminates large numbers of empirical natives from official reckonings and, as such, is often concomitant with genocidal practices." (Wolfe 2006, 402). At the same time, the cultivation border would fulfill colonial nostalgia, through the creation of a designated space for romantic, authentic, and inevitably vanishing Indigenous Sámi culture (Raibmon 2005). Finally, the cultivation border represented the production of large

areas of state space. The cultivation border is a spatial abstraction through which people and land were rendered legible and governable in new ways (Scott 1998). North of the cultivation border, policing, and restrictions not applicable in other parts of the country were instituted. Other areas, like Dalarna and Jämtland – the site of the incident commemorated in Tirén's painting – were purposefully excluded from the cultivation border, and the government had to take later measures to ensure herders in these areas could retain access to winter grazing lands. In sum, the spatialization of settler colonial social and cultural hierarchies, assigned to different modes of production, caused much hardship for Sámi people as it restricted free movement and choice of labor practices, strictly enforced by colonial authorities. These had disastrous consequences for many families in the Čohkkiras area, as I discuss in the following chapter. I return to this analysis shortly and in the subsequent chapters, but for now pause to introduce a second spatial production of relevance in the Giron-Kiruna area: the national interests.

The National Interests (*Riksintressen*)

The national interests (*riksintresse*) are a form of national resource management through spatial planning, intended to protect public interests from a general standpoint (in Swedish, *allmän synpunkt*). The national interests emerged from the expansion of urbanization and building across Sweden between 1950 and 1970, and state ambitions to centrally regulate and standardize the development of coastal, mountain, and river areas on a national scale (Boverket 2013), gaining legal force in 1987. The values associated with the twelve national interests[32] are wide-ranging, encompassing everything from the economic value of minerals ("valuable

32 The twelve national interests (and their respective national authorities) are: Reindeer herding (The Sámi Parliament), Commercial fishing (Swedish Marine and Water Authority), Nature conservation and outdoor life (Environmental Protection Agency), Conservation of cultural heritage environments (National Heritage Board), Mineral deposits (Swedish Geological Survey), Industrial production (Agency for Economic and Regional Growth), Energy production and distribution (Swedish Energy Agency), Nuclear waste storage (Radiation Safety Authority), Communications (Transport Administration and National Post and Telecom Agency), Waste management (Environmental Protection Agency), Water sources (Marine and Water Authority), and National defense (Armed Forces and the Civil Contingencies Agency).

materials") to cultural heritage preservation. Areas of national interest are spaces in which protections related to one of the twelve interests apply. Several legal frameworks regulate the protection of the national interests. Among these are the Planning and Building Law (SFS 2010:900) and sections 3 and 4 of the Environmental Code (*Miljöbalken*, SFS 1998:808), which stipulate how national, regional, county, and municipal actors should account for the national interests in the development of land and water in their jurisdictions. Like the cultivation border, the intent behind these spatial designations was to reduce the risk of conflict between land use interests, with further emphasis on proactive identification and negotiation (Solbär, et al.. 2019, 2148). As Kiruna Municipality is home to both the largest reindeer herds and the largest iron deposits in Sweden – as well as major national parks and popular recreational areas – it is therefore a place national interests overlap in 64.7 percent of the total land area (Sölbar, et al. 2019, 2156).

This density is not limited to unbuilt areas in the mountains or forests but applies to urban space as well. Colorful maps depicting the national interests (Fig. 8) were familiar features of public information meetings and planning in the urban transformation. My housemate Roger recalled seeing a map of this kind in the early stages of planning the urban transformation:

> One thing I remember very clearly, is that they had this map of Kiruna, like 'this is Kiruna' and then they had this plastic see-through paper where they had drawn, 'this is where we have mineral findings [deposits]...and they put it on the map. And they said 'we cannot build on these things, because then we would have to move again.' And they said this is where the Sámi people are, and their reindeers need to eat, so then they put that on the map as well, and it kept going, and going, and going...and when they were done the entire map was just a blur of colors. And they said 'and now we have to decide where to move'. And it seems like everything was filled up, there wasn't any spot that was ideal.

These maps had the effect of quickly dispelling any lingering notions of Kiruna Municipality as a place with unlimited expanses of empty wilderness space. Residents knew this intimately; spaces in and outside of the city were highly valued and perceived as being in short supply, rather than as vast, abstract areas on national maps or as glimpsed from the windows an airplane. One municipal politician presenting the New Kiruna resettlement project to a Stockholm audience in 2019 summed up the

situation in a few short words: “Kiruna is a big municipality with little land to build.”

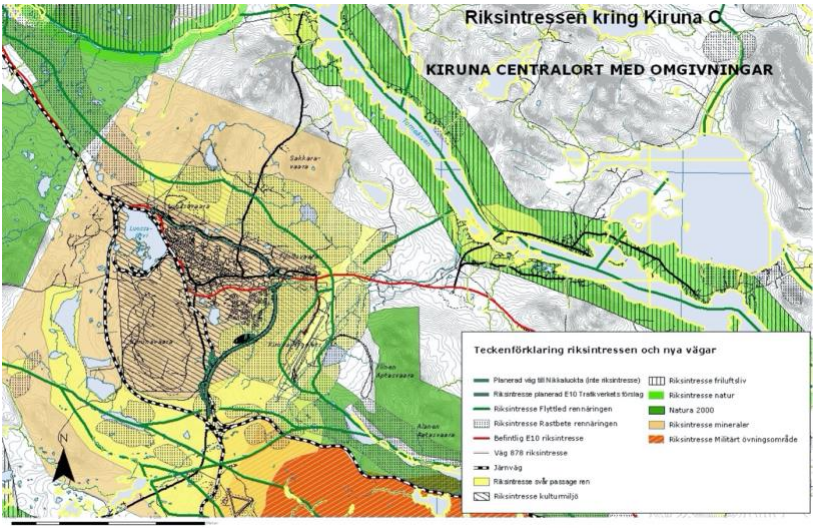

Fig 8. Map of Kiruna city with the applicable national interests depicted. The peach-colored areas denote the area of national interest for minerals, and the striped lines cultural environmental interests. The dotted areas within the peach areas around the city are grazing areas for reindeer, while the yellow zones denote areas of “difficult passage” for reindeer migration. Finally, the green lines represent reindeer migration paths (Kiruna kommun 2020)

However, representations of space in the national interests also have the effect of flattening more complex cultural meanings, particularly for the Sámi culture and society. Only areas for the use of reindeer husbandry as recognized as a national interest. While protections for grazing areas and migration routes are no doubt valuable and necessary, other culturally valuable aspects are ignored. Thus, a similar spatial-social effect is reproduced as when the cultivation border was established: reindeer herding is considered as one of the most important, if not the most important, aspect of Sámi culture – the one worth protecting.

However, whether these protections are applied in practice is questionable. Central to the Environmental Code is the provision that “land and water areas shall be used for the purposes for which the areas are best suited in view of their nature and situation and of existing needs. Priority shall be given to use that promotes good management from the point of view of public interest” (1998:808 § 3:1). Additionally:

> Land and water areas that are important for reindeer husbandry, commercial fishing or aquaculture shall, to the extent possible, be protected against measures that may significantly interfere with the operation of these industries. (ibid., 3:5)

In the national interests, as well as in mining legislation, planning, and permitting processes, reindeer herding is primarily as an industry, on par other industries like mining and tourism (Raitio, Allard, and Lawrence 2020). A recent study assessing the regulatory gap between Sámi rights and mining permitting practices in Sweden underscored that "When balancing opposing land-uses concerning the mining concession, Sámi reindeer herding is treated as an "industry" and as a public interest, but not as a Sámi property right; this factor significantly weakens Sámi reindeer herding status vis-à-vis mining" (ibid., 12). The authors further note they know of no cases in which a mining permit has been rejected in Sweden because of a proposed mine's incompatibility, or harm, to reindeer herding; in other words, Sámi reindeer herding as a national interest has always lost against minerals mining as a national interest. One reason for this, as anthropologist Hugh Beach (1981, 242) observes, is that the concept and phrasing of what constitutes "vital importance from the public perspective" leaves the question of whether reindeer herding is in the "public interest" open to interpretation:

> If, in constructing a scale for the assessment and comparison of vital interests, cost-profit calculations rather than cost-benefit evaluations are given priority, then the [reindeer] herd-management industry must accept a very subordinate position in relation to the great industrial giants.

When the economic value of a reindeer is compared to the economic value of a ton of iron, the reindeer will always lose. For Sámi people, however, reindeer far exceed their economic value: they are also vital members of a social community, integral parts of Sámi history, social relations, ecology, and cosmologies beyond herding as a rationalized industry, "designed to maximize the profitability of resource utilization for the State" (Beach 1981, 277). The national interests, however, are representations of space, or spatial abstractions, primarily reflecting the values of authorities, planners, and economic actors. They are also highly complex legal productions, which generate further complexity when applied within specific planning contexts (Sölbar et al., 2019). This complexity of such state processes, anthropologist Paul Nadasdy argues,

should be recognized as the true source of state power (Nadasdy 2003, 4). Rather than conceive of "the state" as an all-seeing, all-powerful entity, it is more useful to analyze state processes through people's everyday interactions with them, to gain a more nuanced understandings of encounters and relations, for example, between governments and Indigenous groups (ibid.).

Nadasdy's observation strongly resonates with double binds that the national interests generated for Sámi people and organizations in Sweden. The Sámi Parliament[33], for example, is the authority responsible for reindeer herding as a national interest. This means that the Parliament must "observe objectivity" as an administrative authority, while at the same time, it has weak political influence or power – no right of participation in decision-making, no veto-rights, and no legal status as a body to be consulted when proposed measures that would impact Sámi are planned by other administrative authorities (Lantto and Mörkenstam 2008, 39). Instead, "its status as a consultative body with expert knowledge in questions concerning reindeer herding is emphasized" (ibid.). The Sámi Parliament thus has a duty to consult with actors and activities linked to the national interests, such as mining exploration. Among other things, this includes providing information and maps about reindeer herding to mining companies who may conduct test drilling or other development in reindeer herding areas. While at first glance, informing mining companies about how the land is used for reindeer herding may seem like a positive thing, this puts Sámi people who work with these issues in difficult ethical positions. As one employee of the Parliament involved with GIS (Geographic Information Systems) put it:

> I'm also supporting the ones that want to exploit the Sámi. I hand out material not only to the Sámi villages, but also to the mining companies and wind power companies. And they call me, and ask about who they should call, who they should contact, what they should think of when they meet the *čearru*. So, I'm kind of a support function for the exploiters too, not just for the *čearru*.

33 The Sámi Parliament (Sametinget) is both a representational body of publicly elected officials and a government agency, founded in 1993. The responsibilities of the Parliament are outlined in the Sámi Parliament Act (SFS 1992: 1433), and include the distribution of funds for cultural projects, Sámi organizations, language development, and reindeer herding issues. As Patrik Lantto and Ulf Mörkenstam (2008) note, the creation of the Parliament was significant in Sweden as it reflected a recognition of the Sámi as an Indigenous people. As noted, however, the Parliament's legal powers and action as an administrative authority are limited (Lantto and Mörkenstam 2008, 39).

That there is no mention of the Sámi status as an Indigenous people recognized within Swedish, European Union, and international law within Sweden's mining legislations creates further problems. Foreign mining companies, already attracted to Sweden due to one of the world's lowest effective taxes on mining (Hojem 2015), receive information and assistance and are courted through agencies responsible for minerals as a national interest, such as the Swedish Geological Survey (SGU) and who actively promote northern Sweden's "attractiveness" to foreign mining companies (Tillväxtanalys and Copenhagen Economics 2016). As in the case of the proposed mine in Gállok, Jokkmokk Municipality, this has created situations in which mining companies have claimed that they are unaware of Sámi land rights or downplay them significantly (Cocq 2014). In the Gállok case, a response to the question of what local people thought of the project by chairman of British mining company Beowulf Mining Plc – "what local people? – fueled intensive political resistance and demonstrations against the project, nearly on par with those against the Alta Dam in the 1970s and 1980s. (Persson, Harnesk, and Islar 2017; Jannok n.d.). As the meeting attendees in the Introduction chapter who also referred to Alta made clear, disregard for local lifeways and interests by powerful economic interests like mining is something both Sámi and non-Indigenous people are unhappy with.

The cultivation border and the national interests are thus spatial products which, in different ways, materialized dominant orders – settler, extractive, and capitalist. The cultivation border, a geographical boundary applied only within a specific region of Sweden and created with the intention of managing relations between Sámi and settlers, artificially divided northern mountain and forest areas into spaces of cultivation (i.e., production) and non–cultivation (i.e., non-productive), and this was also mirrored in the social separation of people, those who did not cultivate (reindeer herders) and those who did (everyone else). Today, the cultivation border also artificially divides reindeer pastures. For several of the most northern *čearru* – such as those in and around Giron-Kiruna – pastures stretch for hundreds of kilometers, from the northwestern mountain summer pastures to the eastern winter forest pastures. In lands "above" the border, reindeer herding may be carried out year-round, but not so "below" the border. *Čearru* whose reindeer are on the "wrong" side of the cultivation border or certain forest areas at the "wrong" time of the year are classified as "wandering reindeer" (*strövrenar*), and *čearru* also face fines if their animals are not removed before a certain date (SFS 1971:437 §71).Sámi

reindeer herders remain usufruct users of "Crown land" rather than actors with equivalent property rights, and nearly all land use decisions and development of state-subsidized extractive industries in these areas, such as mining and wind power, re-enforce views of Sámi as land users – rather than owners – with legitimate claims to space and formal negotiating power this recognition would entail (Lawrence 2014). Likewise, the national interests reinforce conceptions of spaces as belonging above all to the "nation" or the "public interest", effacing active Sámi contestations to such claims and spatial practices which challenge such representations. As James Scott (1998, 3) observed: the "simplification" of contested space through such spatial designations (abstractions) and representations are a key aspect of modern statecraft, which together "enable much of the reality they depic[t] to be remade" (ibid.). These spatial abstractions facilitate flows of both capital and of state power, while presupposing their national "communality of use" (Lefebvre 1991, 57). I analyze conflicts over the use and value of mountains amongst national interests – including Sámi reindeer herding – and how Sámi have ensured these have remained sites of negotiated ownership (Mar 2010, 76), further in chapter six.

Concluding Remarks

In this chapter, I have examined spatial, social, and legal histories relevant to the people and places under discussion in this study. While produced over the course of several hundred years, what the Lappmarks, the cultivation border, and the national interests share is that they are spatial productions which articulate and materialize state actors' ideal relations between people and the environment, or nature. The three spatial regimes discussed in this chapter are all concerned, to varying degrees, with regulating Sámi practices – working, herding, migrating, hunting, fishing – in relation to settler interests and preventing conflict. I have therefore sought to show how these spaces constitute the socio-spatial terrain within which unequal relations between Sámi and non-Indigenous actors are continually reproduced. The creation of regions and borders to manage conflict generated from settler expansion, as I've shown, disproportionately limited Sámi movement, labor, and self-determination. As such, these spatial forms represent key examples of the ways in which state power is manifested in the everyday lives of people in Giron-Kiruna. In the following chapter, I examine how state and corporate actors sought

to manage the social effects of extractive spatial production – the frontier– through ambitions to build Kiruna as "model city". As I will show, Sámi segregation from urban space was integral to the realization of this ideal industrial city. Simultaneously, these social and spatial transformations generated new spaces and social relations within which Sámi could articulate alternative futures for themselves and their communities, inaugurating a new chapter of Sámi space and place-making in Kiruna.

Chapter 4: The Model City in the Wilderness: Domesticating Space and Society in "The Land of the Future"

Kiruna's reputation as a "model city" (*mönsterstad*) has long been a part of the city's identity and brand. The establishment of Kiruna city in 1900 is popularly attributed to Hjalmar Lundbohm, the first mine manager (*disponent*) at LKAB, the product of his oft-cited ambitions to achieve "the world's best community" (SBL n.d.). These visions not only shaped Kiruna's urban built environment but remained meaningful for residents I spoke with during my fieldwork about the urban transformation. Lundbohm's original visions for the community were frequently referenced when I arrived in the field in 2012, as were hopes that New Kiruna would be a "model city 2.0" (White 2013, 1). In this chapter, I examine these resident perspectives of Kiruna as a "model city" alongside Hjalmar Lundbohm's ambitions for early Kiruna, and how these were materialized in the city's early built environment.

As I will show, Lundbohm's ideas for a model company town for workers were closely linked to ambitions to bring order to a "disordered" wild, frontier. As such, an important part of Kiruna's early urban spatial production was the regulation of spatial and social orders, both within the city as living place for workers but also as an outpost of "civilization". As I will show, colonial and corporate authorities' ideas of the period included the segregation of reindeer herding Sámi both from settler society but also urban space. These ideas, which I discuss under the rubric of settler colonialism, I argue are part of the historical production of space in Kiruna and have left deep impressions on the way nature, space, and difference is imagined in around the city. Accordingly, the first part of the chapter introduces Lundbohm's local reputation as a cultural benefactor, visionary urban planner, and benevolent patron, as well as how these positive associations have been symbolically embedded into the built environment of this city. This is followed by a review of historical material and

Lundbohm's own reflections on his work as an urban planner, tracing how, in the tradition of 19th century industrial towns, he conceptualized social and moral issues as spatial issues. I will then turn to how Lundbohm's ambitions for a modern, model city was partially manifested through Sámi exclusion from Kiruna's early urban space and colonial ideas about architecture and civilization. I conclude the chapter with examples of how Sámi responded to colonial policy restricting Sámi living practices, in conversation with a Sámi Elder who lived through part of this early period and was active in establishing Sámi space in the city.

"He Built this City out of Culture"

In summer and fall, the slope below the Falu-red[34] Kiruna Church and its onion-domed belltower burst with mountain birches, grasses, and flowers, almost obscuring a stone circle arranged around a large stone monument. A nearly four-meter-high tall chunk of granite is carved in a shape reminiscent of the Bronze Age rune inscribed tablets found on the graves of Viking era nobles, and marks the resting place of Hjalmar Lundbohm, geologist and first mine administrator (*disponent*) of the LKAB Kiirunavaara mine, who passed away in 1926. It is the sole grave located on the church grounds[35] . Lundbohm is depicted seated upon a boulder, as if taking a rest while hunting in the alpine mountains, wearing a cape, and holding his hat in his hands with a rifle between his knees. Lundbohm's shoes, of Sámi-Tornedalen design with pointed tips and woven bands wrapped around the ankles, emphasize his affinity for local cultures. The poetic inscription on the headstone, penned by the artist Albert Engström (1869 – 1940), reads:

From
Hjalmar Lundbohm
Man of national virtue
Friend of mankind
Lover of beauty
B. 1855 D. 1926

[34] The large and entirely wooden building is painted deep red with pigment from the Falun copper mine, a traditional color of Swedish country homes and agricultural outbuildings known for its longevity.
[35] Kiruna residents have typically been buried in the cemetery nearby in the village of Kurravaara, or in their family parishes if originally from elsewhere in the municipality.

To
The benefit of the motherland
He laid bare
The treasures of the mountain
and founded the city

Nearly one hundred years after his death, Hjalmar Lundbohm remains a larger-than-life figure, an integral part of Kiruna's history as a city. Lundbohm's name emerged in discussions I had with both current and former residents of Kiruna, from teenagers to the elderly. Many held positive associations with the architectural heritage of the city, the first city plan and old buildings from the early 20th century. For many, this urban space represented not only an aesthetically pleasing living environment but as I would come to learn, the ethos and values it was symbolized: a city for living, not *just* for working, where inhabitants' quality of life was equally important as a booming mine. The city's first urban plan was innovative; the winding streets which hugged Haukkivaara mountain, on the eastern shore of Lake Luossavaara, were said to be designed by LKAB's architects to reduce the strong gusts of northern winds. This technical, urban expression of Lundbohm's – and by extension, LKAB's – care for residents' well-being remained so meaningful for residents that over a century later, urban planners emphasized wind-studies and wind-reduction in the street plan for the New Kiruna resettlement area[36].

Lundbohm's contributions to the creation of Kiruna's built environment also gained him the reputation of having an "artist's soul", as described in a 1993 exhibition of sculpture, paintings, and drawings featuring Kiruna and its surroundings, *Kiruna: Staden som konstverk* ("Kiruna: City as Artwork", Brummer and Brunnström 1993, 10)

> From the beginning, there has been an insight and awareness of the importance of art and culture in community building – thoughts that were formulated and practiced by Kiruna's founder and the mining companies' first manager Hjalmar Lundbohm. The Lundbohmic visions have lived on.

When I asked Helge – a man in his fifties whose family had lived in the area for generations – what he liked about Kiruna, he pulled out his phone

36 I discuss this further in Chapter 7, whose thematic focus is the planning of the New Kiruna resettlement area.

and showed me a scanned image of an old, black and white photograph, depicting a group of orchestra musicians standing alongside Hjalmar Lundbohm. Helge, like his relative in the photograph, was a fiddle player, and appreciated that there had once been opportunities for workers to play classical music in Kiruna. Helge recounted that orchestras from Vienna had even visited Kiruna, made possible by Lundbohm and LKAB, providing rare cultural opportunities for residents so far from Stockholm, the financial and cultural capital of Sweden. Indeed, for many 21st century residents I spoke to, including Helge, the image of Kiruna as a cultured city set it firmly apart from other northern towns. Thanks to LKAB, generations of workers and their families could immerse themselves in innumerable leisure activities, become educated in the city's schools, receive scholarships to study, take in art exhibitions by renowned artists like Pablo Picasso, and partake in opportunities most residents in the rural villages and towns of Norrbotten could not, neither in the early 20th century or today.

These powerful links between Lundbohm, and the founding of the city, as historian and Lundbohm biographer Curt Persson (2015, 2) notes, are widespread for many who grew up in Norrbotten, and especially the Ore Fields. Persson, who was born and raised in Kiruna himself, describes the "traditional image" of Lundbohm as the "confident leader who arranged everything for the good of his people" (ibid.):

> So it was it for me too. His greatness was obvious, it was never questioned in my surroundings. That the streets, schools and public places in the Kiruna community bear his name only further fortifies the image of the one who, to the benefit of the motherland, laid bare "the treasures of the mountain and founded the city

Kiruna's built environment, as Persson observes, also "fortifies" the image of Lundbohm as a great leader. Hjalmar Lundbohmsvägen (Hjalmar Lundbohm Road) is one of Kiruna's major thoroughfares, lined with businesses, homes, hotels, and public offices. Not far away, Hjalmar Lundbohmsskolan (Hjalmar Lundbohm High School) is the only municipal high school for hundreds of kilometers around, and which most people I interviewed attended. Down in The Company Neighborhood (*Bolagsområdet*) is Lundbohm's first house in the city, a small two-room log-cabin built in 1890 officially listed as B-1, the first building in Kiruna. Next door, the modern home Lundbohm lived in until his retirement in 1920 is Hjalmar Lundbohmgården (Hjalmar Lundbohm Homestead). This

building is listed as B-2 – the second building in Kiruna – and is considered a National Romantic "artist's home" on par with the homes of painters Carl Larsson and Anders Zorn (also friends of Lundbohm's). Today, all three of these homes are popular museums, highlighting the romantic affinity shared by cultural elites of the period for vernacular local architecture, an "ideal originating from an existing, unassuming cabin built in local building traditions" (Nyström 2014, 3). Lundbohm's grave, the only one on the grounds of the Kiruna Church, is also a meaningful site. Lundbohm was not a lifelong resident of Kiruna and left the city after his retirement. After his death in southern Sweden in 1926, however, his body was transported back to Kiruna by train. There, a second funeral was held at the Church where he was buried (in the Swedish of the period, *jordfästes*, "bound to the soil"), linking Lundbohm and the urban space he founded, physically and symbolically, for eternity.

In interviews, several residents spontaneously invoked Lundbohm in reflections upon what they liked about Kiruna as a place to live and grow up. For nineteen-year-old Vilma, the appreciation for art and beauty in the built environment was something she viewed as a local tradition started by Lundbohm, and one that should also exist in New Kiruna. "If there's one good tradition that we have here, it's that Hjalmar Lundbohm thought that we must have some kind of artist's view on the city. So I am very, very thankful for Hjalmar Lundbohm and his paintings," she said one afternoon over coffee in Stockholm, where she now lived. We'd been discussing the long-awaited re-opening of the Kiruna swimming pool, which had been closed for a year and half due to mold problems and other needed renovations, postponed for years due to uncertainty about the city move. Vilma slid her phone over to show me a photo of the renovated pool, with a cleaned-up, bright modernist mosaic by artist Johan Wipp, "Jungle Interior" (*Djungelinteriör*) from 1958 dominating one wall. The mosaic, according to Vilma, was an example of the presence of art in "real environments" that she felt was an extension of Lundbohm's humanistic ethos:

> It's pretty nice because we had really nice art in school, and the hospital – real environments – but you didn't think about it because no one talked about it. Like in my school we had pretty famous art, we had art in real places. And that's something I think we should have in the new city also.

Frederika, a project leader at LKAB, also saw culture (*kultur*) as a positive aspect of life in Kiruna. She pointed to the hundreds of interest clubs and associations (*föreningar*) in Kiruna as an example of the quality of life the city offered, and credited Lundbohm for this:

> We can't just have a city with mine workers. We have lots of culture here. We have theaters, we have music clubs, movie clubs, sports clubs – lots of activities, more than equal cities of this size. And I think it's because of Hjalmar Lundbohm. He built this city out of culture, and he wanted it to be a good city for everyone, and this has worked here.

For Helge, Vilma, Frederika, and many other residents, Lundbohm is inseparable from the experience of what Henri Lefebvre termed *representational space, "*space as lived through its associated images and symbols, and hence the space of inhabitants" (Lefebvre 1991, 39). Representational space, in Lefebvre's framework, are the spaces everyday people live and experience. A key aspect of such spaces is that they obey "no rules of consistency of cohesiveness"; they are "alive", capable of speaking, and contain an "affective kernel" that encompasses lived situations and time in a "qualitative, fluid, and dynamic" way (ibid.). After my conversation with Vilma, I reflected on the powerful connections such representational spaces could facilitate, not least across time: though Wipp's poolside mosaic did not appear until years after Lundbohm's death and was installed in municipal rather than a company building, for Vilma it was nevertheless firmly linked to a local "tradition" of appreciation for culture and art credited to Lundbohm. Although the swimming hall piece did not depict mining, miners, or the arctic landscape as many of the public artworks in the city did, for Vilma it nevertheless belonged to the "symbolic ecology" (Nas 1992, Nilsson 2009) of Kiruna, within which Lundbohm was a core element. Absent from company or mining symbolism, the colorful, abstract mosaic literally represented another world – one far away from the arctic city – but nevertheless comprised an urban environment understood to nurture and enrich the lives of Kiruna's residents, many of whom, like Vilma might move away and never return.

Domesticating the Frontier

These early conversations about Kiruna's history also provided new perspectives on Lundbohm's reputation as a benevolent corporate leader

and city builder. As we chatted in his kitchen over a bowl of reindeer meat stew, Helge surmised that Lundbohm's interest in providing culture (music, art), entertainment, and education for workers and their families was not solely about fostering a general appreciation for the humanities, but a means to materialize his "model city" (*modellstad).* Lundbohm, according to Helge, didn't want to Kiruna to become "a Klondike" like the first Ore Fields town, Malmberget: a rough frontier town consisting of a mostly male population, social problems (gambling, alcoholism), and rough worker's shacks built out of leftover industrial materials.

Helge's reflection on Lundbohm's interest in culture as an ingredient in the production of his model city were thought provoking. What role could culture play in producing a "model city in the wilderness", or "wasteland" (in Swedish, *ödemark*)? This latter phrase, which I'd encountered in a 2014 article in the pop-sci magazine *Populär Historia* about Kiruna's founding, had stuck with me throughout the years. While I knew that many non-Northerners saw the arctic environment as harsh and challenging, the word "wasteland" conveyed an uninhabited and undesirable emptiness, a view emphasized throughout the article: Until the 1890s and the establishment of Kiruna's first settler society, we learn, "the area had been a wasteland", until the discovery of iron ore revealed the economic importance of the area (Tjarnlund and Henningsson 2014). In the article, we are reminded of Lundbohm's ambition to create "the world's best community", and that it was Lundbohm who "had the last word" in all aspects of planning and building Kiruna. Lundbohm, we read, "was driven by care [*omsorg*] for good housing conditions" and provided education for the worker's children. When I reached the end of the article, I realized that the people who lived in the area where Kiruna was built were mentioned at all; not the Sámi, nor the Tornedalers who lived and worked in the lands of the present-day city. Having first visited Kiruna to get to know more about the urban transformation on local people, including Sámi reindeer herders, the magazine's representation of Kiruna's history didn't seem to tell the whole story.

As I will show in the rest of this chapter, the production of Arctic nature and environment as a "wilderness" and underused "wasteland" were as necessary to the production of early Kiruna as buildings, city plans, and incentives for workers (Voyles 2013). Indeed, for Lundbohm's ideal city to be realized, there was a need to engage in the production of spatial imaginaries reflective of settler colonial frontier ideology: a land imagined as simultaneously empty, wild, and lacking, but also highly desirable and

full of potential (Tsing 2003; Wolfe 2006; Li 2014, 12–13). As historians of early Kiruna's have observed, earliest Kiruna shared many similarities with other 19th century frontier towns which were being established around the world (Brunnström 1993). Both in the 19th century and today, Kiruna is often referenced alongside other frontier spaces and temporalities: as "Sweden's California", "Norrland's India", "The Land of the Future", and "The Promised Land" (Hecksher 1907; Bäärnhielm 1976, Sörlin 1988; Hägg 1993: see also Brunnström 1993).

These representations of northern space and its potential as a resource froniter were integral to attracting the specialized settler workforce that LKAB needed to build and operate the mine and railroads. No housing had been provided for these workers, however, and many lived in tents or other improvised housing. While three hundred buildings were erected between the city's official founding in 1900 and 1904, many residents still lived in crowded conditions, rented peat huts from local people, or shanties made from old dynamite boxes and other repurposed materials as in Malmberget (Brunnström 1981, 184). Kiruna's early settler society was also rife with immoral behavior that Lundbohm and others in the company leadership saw as negatively affecting their workforce: gambling, alcoholism, ether addiction[37], and crowded housing. This disordered space was a major concern for Lundbohm, and for many others in Sweden who had become aware of the situation in Malmberget. Neither the provincial government nor the companies developing the Gällivare Ore Fields had supported the development of permanent housing for workers, and this was seen as a leading cause of illness, dangerous and crowded living conditions, and lower access to social services compared to the rest of the nation (Forsell 2015).

The city of Kiruna as envisioned by LKAB, and Lundhohm as first mine administrator, was as an orderly, civilized, moral, and socially harmonious town for workers, a chance to correct the mistakes of early Malmberget. In this, Lundbohm's ambitions for Kiruna were by no means unique. For hundreds of years, the owners of Swedish mills and mining estates (*bruk*) had provided paternalistic care for workers and their families unavailable to non-industrial laborers. Specialized knowledge and skills in iron and metalworking was highly valued, and the earliest forms of pensions, unemployment, health care, and education for workers and their families

37 A popular drug at this time were "Hoffman's drops", or compound spirit of ether, a painkiller and narcotic sold at pharmacies. The drugs popularity was bolstered by early temperance campaigner's advocacy of the liquid as a substitute for alcohol.

in Sweden can be traced to ironworks, which were co-managed by the employers and guild-like (proto-union) workers organizations (Hecksher 1954, 234). One prominent example from Bergslagen – from which many of Kiruna's miners later came – is the 17th century Lövstabruk ironworks, which industrial historians Mats Ahnlund and Lasse Brunnström (1992, 79) consider the world's first known model industrial town. Swedish Mine and mills estates like Lövstabruk were not only centers of industry and technology, but also transnational material culture, due to their commercial links to the colonial world from the 17th century (Nordin 2012).

Lundbohm was also inspired by Anglo-American company and mill towns like Port Sunlight, England[38]; New Lanark, Scotland; Quincy, Massachusetts; and Pullman, Illinois, which Lundbohm visited on as a geologist for the Swedish Geological Survey. In these communities, corporate leaders had begun to implement many of Lundbohm's own ambitions for Kiruna. These modern company towns deeply impressed Lundbohm, and in a letter to his mother in 1891 wrote of Quincy, Massachusetts: "It seems clear to me that heavy manual labor need not necessarily be accompanied by a meager way of life and a dirty home" (Åström 1964, 41). In such towns, progressive social reforms of the modern Industrial age were also underway: child labor below the age of twelve was banned, and nurseries and compulsory schooling made available for children (New Lanark), public rail transportation made available for citizens (Quincy), as were single-family homes for workers equipped with modern amenities, such as indoor plumbing and running water (Pullman). Some towns created by industrialists, such as Rockdale, Pennsylvania, also were underpinned by beliefs in "Christian Industrialism", where corporate paternalism and strict regulation of urban and living spaces was seen as a means of "safeguarding" communal and individual morality, while also preserving harmony within the labor structure centered around a Protestant work ethic (Gardner 1984, 53-54). Such towns were also expressions of social reformist views which would characterize the mid- and late 19th century Victorian period (in Sweden, called the Oscarian period). Beauty and culture, materialized in the arts, architecture, and a particular appreciation for "nature" were increasingly understood as a means to achieve a progressive, liberal, and orderly society, with "beauty for all" (Key [1899] 1913). This social change was reflected through a strong

38 A town for workers built between 1899 and 1914 by the soap company Lever Brothers. In 1930 Lever Brothers merged with the Dutch firm Margarine Unie to become Unilever.

spatial dialectic. The social ills associated with "the dark Satanic mills" of early 19th century European industrial capitalism (Blake [1804] 2002, 211) were now seen as active dangers to both the morality and physical health of industrial workers, and to their morale as laborers. Rather than associate the poor health and low standards of living amongst working families to the exploitation of workers by industrial capitalism, domestic space (and to an extent working space) were perceived as playing a more important and immediate role.

In 19th century Sweden, the bourgeoise middle and upper classes to which Lundbohm belonged were similarly concerned with social spaces within which individuals, groups, and classes moved (Fryman and Löfgren 1987, 88). This period was characterized by rapid social change and active class struggle, in which a new class structure was emerging in Sweden (ibid.). Ethnologist Jonas Frykman and Örvar Löfgren (1987, 142) argue that the concerns of the Swedish bourgeoise were accordingly reflected in efforts to "domesticate" both the working classes and ideas of nature. In this changing social climate, nature was increasingly understood a primitive sphere, or evolutionary stage, that social groups had to transcend to become modern and civilized. Simultaneously, there was a deep longing to remain connected to an authentic, romantic, "natural way of life", as an antidote to becoming "overcivilized", to perceive nature as something purely something to exploit for profit (ibid., 86). This shift in the Oscarian social relations between nature and culture also generated new spatial practices, such as recreation (ibid.; see also chapter 6). This bourgeoise middle-class to which Lundbohm belonged also sought new social anchors for their intimate and communal relations in this new class structure. Among the anchors Frykman and Löfgren identify are couplehood (heterosexual, romantic, married), parenthood, and the nuclear family (patriarchal, moral, grounded in parental and filial love), and the home (as a private sanctuary, as a social stage, and as a moral and virtuous space). The physical space of the home, the authors note, was of particular importance; the layouts of houses, apartments, interiors, and other household goods were central to the realization of these ideals in everyday life (Frykman and Löfgren 1987,126).

Domesticity and domestic space would be key in producing Lundbohm's ideal town. In 1899, the state allocated 178 hectares of land for the municipal (non-company) development of housing in Kiruna. The city development plan, designed by planner P.O. Hallman and LKAB company architect Gustav Wickman, was approved on April 27th, 1900.

Kiruna's first city plan was divided into three areas: the "municipal" part of the city, subsidized by the Swedish state, the SJ Railway Company area, and LKAB's Company Neighborhood (Bolagsområdet, "The Company Neighborhood"), located on the south shore of Lake Luossajärvi, directly across from the Kiirunavaara mountain and mine. This area, which used a rectangular block grid plan, included not only Hjalmar Lundbohm's own home and those of engineers, mine managers, and company doctor but also a larger area for worker housing and a hotel for travelers. The homes were built of lumber, tended to have more rooms, and were generally considered of a higher standard than those "at city level" ("*på stadsplan*") (Hägg 1993, 4), which was being developed much more slowly. By 1910, the Company Neighborhood included 144 houses for workers – 230 single room apartments and 255 two room apartments – as well as a clinic, sanatorium, library, and schools, all with running water and indoor plumbing by 1905 and electrified by 1913 (Bedoire 1974).

The aesthetics of the city plan, as well as of homes and architecture, played a prominent role in areas built by LKAB, and contained the majority of urban elements associated with Lundbohm's model city (Persson 2015, 203). Here, landscaping and the bright colors of houses was intended to combat "barrenness and the winter darkness", and Wickman's Arts and Crafts style (in Swedish, *Jugendstil*) interiors and exteriors, in concert with the city plan, sought to produce a modernist city, to "create a Garden City[39] in the Lappmarks" (ibid., 144). The city plan, designed by P.O. Hallman, also made use of principles inspired by the work of Austrian art historian and architect Camillo Sitte (1843-1903). Sitte was best known for his 1889 text *City Planning According to Artistic Principles* (sometimes also *The Art of Building Cities*). In this work, Sitte argues that buildings, and indeed cities, can be seen as works of art because they are the "spatial embodiments" of artist and poetic thought (Sitte 1965, 12). Sitte notably eschewed the modernist preference for strict grids, preferring the meandering, curving streets of old European cities. In Kiruna, Hallman would implement this in the urban plan: the city blocks were situated on curving streets to break up the northern wind, with small, protected spaces within the city (Forsell 2015). Urban planning – elevated to an art form –

[39] The "Garden City" urban planning movement was popularized in the late 19th century by Ebenzer Howard in the U.K. and involved incorporating "green" elements (parks, "greenbelts") associated with the countryside and nature with self-contained urban areas (see also Hall 2014).

would aid the development of cultured, moral, and dutiful inhabitants and workers.

Lundbohm instituted several company programs to promote the development of domestic space, both inside and outside The Company Area. To address the housing shortage, for example, Lundbohm created a system for people to build their own homes through buying plots from LKAB, the so-called "Kiruna system" (Lundbohm 1910, 5). This was a form of urban planning whose guiding principles intended "to induce workers to construct smaller buildings, containing a home for a single family" an ambition that at the time of writing in 1910 had "not been fulfilled (ibid.), Lundbohm notes that during the first year, development "went in a completely different direction" in that those who built accommodations "speculated" on rents, building as many rooms as possible, and that "only in recent years has there been a greater tendency towards the construction of what can be called one's own home", i.e. a home for a single family (ibid.,6).

Lundbohm, LKAB, and state agencies also sought to shape Kiruna's social environment through controlling who could settle in the early city. Sociologist Kerstin Hägg (1993) notes that prior to 1903, "government agencies wanted to prevent Kiruna [then called Luossavare, the pre-Kiruna settler community] from becoming a new Malmberget" and would tightly control who could ride by train there (Hägg 1993, 40, see also Brunnström 1981). Because the railroad to Luossavare at this time was mainly for freight transport, local police checked that all who wished to travel there had special permission to do so. For men, this meant work either building the railroad or mining, while women had to have a ticket certifying they had the right to travel or had "someone who was responsible for them" – married or closely related to one of the male passengers (ibid.). A second aspect of this social production was encouraging the production of nuclear families in the settler community. At first, the company attempted to recruit married working men who could bring their families, rather than bachelors, but this faltered in the early days of the city (Brunnström 1981, 14; 54). To remedy this, Lundbohm offered a cash prize to the parents of the first child born in Kiruna's settler community (Overud 2019). Though this family – the Söderbergs – lived in a shack made of leftover industrial materials, Lundbohm was acutely aware of the need to support the relations of (re)production (nuclear families) that would stimulate the demand for domestic spaces, rather than barracks style housing for single workers. At Lundbohm's suggestion, the child was named after the city – Kiruna –

symbolically linking the reproduction of the family and domesticity with the young city itself. Lundbohm's ambitions for Kiruna as a city for workers thus required a production of space that supported a desired social order: one that would reproduce the relations of industrial production and family reproduction (see also Engels 1884 [2010]), an ideal that would be mirrored in domestic and urban space.

Victorian-Oscarian views which saw domestic spaces as key ingredients in the development of a modern, civilized society were not only widespread in Europe, but also within European colonial societies (Raibmon 2003). As anthropologists Jean and John Comaroff observed in the South African settler colonial context (1992, 293):

> Colonialism was as much about making the center as it was about making the periphery. The colony was not a mere extension of the modern world. It was part of what made the world modern in the first place. And the dialectic of domesticity was a vital element in the process.

The moral, intellectual, and economic development of social groups, on both the frontier and in the colonial metropolis, were to be enacted in and through domestic space, in "the habits of hearth and home" (ibid.). For European elites, the bourgeoise home was a crucial step in the civilizational ladder, with important connotations of social groups with hierarchical roles (including the nuclear family) which "duly sanctified and naturalized, comprised the division of labor at the core of "civilized" economy and society", but also "presupposed a physical space (the "private" house) that was in principle, clearly marked and bounded." (ibid., 272). Anthropologist Paul Rabinow notes that in French-occupied Morocco, native architecture and building traditions were, "in good disciplinary fashion", sometimes adapted by the colonial authorities and "moralized for city life". This included the production of individual domestic units with their own entrances and no shared spaces with neighbors, to limit the "immoral" mixing of people and animals that characterized European peasant and non-European native societies (Rabinow 1995, 99).

In the following section, I explore how colonial notions of domesticity and space were similarly promoted by Lundbohm and colonial authorities in relation to the Indigenous residents of the area, the Sámi. In these encounters, colonial views of space, nature, and culture would come to legitimate Sámi exclusion and segregation from Kiruna's emerging urban space. In doing so, I show how, following historians Tracey Banivanua

Mar and Penelope Edmonds (2010), the frontier "sat at the very heart" of early town and city production, including Kiruna's.

The Western Shore

In 1906, Selma Lagerlöf published *The Wonderful Adventures of Nils (Nils Holgerssons underbara resa genom Sverige*), one of the most beloved works of Swedish literature. Lagerlöf's classic tale centers around a boy who is magically miniaturized by a farm elf, and accidentally flies off on the back of a goose on its annual migration. Readers follow Nils as he gains a literal "bird's eye view" of the nation, as he observes people, places, and animals as they go about their daily tasks down below on earth from the goose's back. When the pair reach the far north of Sweden, they are greeted with the following sight (Lagerlöf 1989, 58):

> On the western shore of Lake Luossajaure, a small lake, which lay many miles more northerly than Malmberget, was a small Lapp camp. At the lake's southern end stood a huge lump of rock, called Kiirunavaara, that was said to consist of almost nothing but iron ore. On the northeast side was another mountain, called Luossavara, and this was also a rich ore mountain. Up to these mountains men kept on building the railway from Gällivare, and near Kiirunavaara built a railway station, hotel for travelers, and a lot of housing for all the workers and engineers, who wanted to stay here, and soon ore mining came in time. It was a great little town with happy and friendly houses, which was being erected in a place that was so far to the north that the small, stunted birch trees that covered the land could not get the leaves from the buds until after midsummer.

Lagerlöf's sketch of this "new land", intended for younger readers, provides a glimpse into popular representations of Kiruna in early 20th century Sweden. The book was commissioned by the National Teacher's Association as a geography text for use in Swedish public schools, and the primary aim of the work was to teach young readers to know about Sweden's land and peoples. Through Lagerlöf's skilled storytelling, Sweden is represented through a kind of magical realism, a nation in which folk beliefs and magical beings exist alongside humans. In Lagerlöf's idyllic narrative, however, when Nils and the goose reach the far north of Sweden, readers are transported to a different kind of land from the rest of the country – exotic and unknown. During a study trip to the city in the

summer of 1904[40], Lägerlof wrote to a friend that "darkest Norrland" was, above all, a place completely different from the rest of Sweden; "It is a new land, unlike any I have ever seen." (Sörlin 2000,10). This new land was also one of contrasts: new industries and towns filled with settlers (*nybyggare*) eager for work were being quickly established in the "Land of the Future[41]" (*Framtidslandet*), as northern Sweden had come to be known (Sörlin 1988).

When Nils arrives in Kiruna, we also arrive to a scene of encounter, not unlike those recorded by 19th century European travelers in colonial frontiers across the world (Pratt 1985). On the western shore of the lake, we read, the "land is free and open" and there a few Sámi families have set up camp (Lagerlöf 1989, 57-58).:

> They had only had to cut down some willow bushes and level some tufts to get their plot ready, and when they had put down the tent poles and hung up the tent canvas the house was ready too! There wasn't any trouble with the interior – some spruce twigs and reindeer skins on the floor and a chain attached to the top of the tent poles. Here the pot would hang over the fire when they cooked their reindeer meat.

From the western shore of the lake the Sámi wonder "…at the new settlers giving themselves so much needless, hard work, when nothing more was necessary to live comfortably than a few reindeer and a tent." The settlers, in contrast, "wondered at the Lapplanders, who had lived in the far north for centuries without even thinking that better protection was needed against cold and storm than thin tent covering." (ibid.). Neither group can make sense of the other's efforts: Sámi seem to perceive the settler's work – building homes for the winter – as unnecessary, while the settlers can't comprehend how Sámi could live "without even thinking that better protection was needed" against the cold. Not only do the Sámi and settler occupy separate spaces, but they also have seemingly opposite views of work, housing, and standards of living. In contrast to the industrious settlers creating something new – a city – the Sámi occupy an anachronistic

40 Selma Lagerlöf was a personal friend of Lundbohm, who was an established patron of, artists, authors, and intellectuals. He invited many of these contacts to visit Kiruna via the newly completed railway at the first opportunity.

41 The 1867 famine, one of the worst in Sweden's history, spurred the creation of an organization to promote the economi development of the north and its resources, the Society for the Development of Norrland (Sällskapet för Norrlands väl). Historian Lasse Brunnström (1981) traces the first appearance of the slogan "Norrland - The Land of the Future" to the Society's first magazine issue in 1867.

space, inhabitants from an older, pre-modern time, evidenced by their ways of dwelling, working, and believing[42] (Pratt 1985, Storfjell 2003, MacClintock 2013).

The 19th century state efforts to develop northern Sweden's resources necessitated the production of legible environments and populations (Scott 1989). Swedish authorities' views of the area's native Sámi people as northern agents useful to the development of northern industry in the 17th and 18th centuries (chapter 3) changed as conflicts with settler populations increased. In the later 19th and early 20th century, state focus shifted to regulating Sámi spatial practices of labor and dwelling. Assimilation was seen as both a desirable and inevitable end, to be administered in a regulated fashion on behalf of the Sámi, viewed as "children of nature" of a lower civilizational order, incapable of managing their own affairs and dependent on the state to do so. These efforts, enforced by colonial authorities (*Lappfogdar*), were also highly spatialized: efforts to prevent the combination of reindeer herding and other kinds of work – specifically farming and industrial labor – required an actual separation enacted in and through space.

Margareta Huuva Stenberg, a Sámi Elder born in 1926 whom I got to know between 2012 and 2014, once mentioned to me that the Kiruna Church was built on a hill that had been used as a living place for her family and others of Gábna *čearru* until the arrival of industrial settlers. Margareta recalled family stories about migrating across Luossajávri (Luossa Lake) and setting up camp on the hill, just the right distance away from where the reindeer calves were born in spring on Gironvárri (Kiirunavaara) mountain. The completion of the railroad and the blasting for the establishment of the mine beginning in 1902, however, increasingly made migration and calving in these areas impossible. By 1912, both the reindeer calves and *lávvu* (Sámi temporary dwellings) had been replaced by LKAB mine and the Kiruna Church, also designed by company architect Gustaf Wickman. Indeed, a well-known aspect of this church – voted in 2001 by Swedes as

42 Lagerlöf's tale was published in a variety of edited (and abridged) formats and languages, with some editions omitting particular storylines. One of these is found in an English translation titled The Further Adventures of Nils (1922). Here, we find a parallel storyline of two orphan children (Åsa and Mats) who travel to the north of Sweden looking for their father after the death of their mother and siblings from tuberculosis. They are brought to the north by an elf who has lived with the Sámi "who camped west of Lake Luossajärvi" (Lagerlöf 1922, 255) and who help the children in their search for their father, who has taken work in the Kiruna mines. It is notable that the magical elf is said to have lived with the Sámi, who themselves had long been associated with magic and witchcraft by the time Lagerlöf published her tales.

the country's most beautiful building – is that Lundbohm directed Wickman to design the structure to resemble Sámi architecture, either a *goahti* or *lávvu* (Bedoire 1973). The decorative arts on the exterior and interior also make extensive use of Sámi figures, including the twelve gilded bronze sculptures created for the church by the sculptor Christian Eriksson, mounted on three sides of the sloping stave roof. Each figure – a blend of men and women – represents affective states: Despair, Arrogance, Inspiration, Love, Grief, Humility, Piety, Melancholy, Ecstasy, Devotion, Shyness and Trust. Three of the figures depict Sámi: a woman with a bowed head and hand covering her face as Shyness (*blyghet*), a Sámi man with a bowed head with his hand inside his jacket as Trust (*förtröstan*) and a Sámi boy with an uplifted head and gaze as Devotion (*andakt*). Additionally, a scene carved in relief above the entrance doors depicts settlers and Sámi, separated by God depicted emerging from a cloud. Directly below, two young people hold each other in the center – between the two groups and with their backs turned to us – facing a barren landscape. The group of seven Sámi and a dog (to the right) are depicted seated on the ground inside a *lávvu* around a man reading out loud from a book, while a reindeer leans on a *seaidi*, a Sámi sacred stone marker. On the left side of the panel, a group of eight settlers under a tree similarly gather before an elderly man as he reads to the group from a thick book.

Upon learning from Margareta that actual *lávvu* had once occupied that hill – only to be displaced and replaced with a church designed to resemble a *lávvu* – I realized that this iconic building was also a prime example of settler colonial space making. Lutheran Christianity was another way in which state and religious authorities exerted power over Sámi for hundreds of years, punishing those who refused to give up Sámi gods, goddesses, shamanism, and cultural practices like *jojk*, a Sámi musical-narrative tradition and art form (Stoor 2007). As represented symbolically in Christian Eriksson's statues, the ideal Sámi place within early Kiruna's settler society seemed above all unobtrusive and demure: Shy, Trusting, and Devoted. And yet, in the scene carved in relief above the door, both settlers and Sámi seem to occupy the same kind space: a wilderness, away from which the two figures in the center (ambiguous and difficult to identify as either Sámi or settler) walk towards God. Curiously, in the carving the Sámi space of "wilderness" – in contrast to the natural tree and stone around which the settlers have gathered – is represented by an architectural form: the *lávvu.* Were the Sámi, like the settlers, equally devoid of shelter, or was the *lávvu* also a part of the wilderness?

Spaces of Civilization and Non-Civilization

As noted in the previous chapter, a key aspect of the "*lapp ska vara lapp*" policy was the spatial and social segregation of reindeer herding Sámi. While children of the Kiruna settler community attended the newly built Company School (*Bolagsskolan*), Sámi children from reindeer herding families attended so called "nomad schools" (*nomadskolor*). Hjalmar Lundbohm, as well as church authorities, ethnographers, and colonial administrators[43] involved in the development of the nomadic schools viewed schools available to Swedish children (*folkskolor*) as unsuitable for reindeer herding Sámi, whom they believed had lower educational needs (Lindmark and Sundström 2016, 10). While "settled" Sámi could attend regular public schools as other Swedish children, reindeer herding Sámi children had to attend so-called "nomad schools" located in villages outside of Kiruna.

A striking feature of the nomad schools was the role that architecture "in good disciplinary fashion" (Rabinow 1989, 99) was marshalled toward colonial authorities' visions of "good reindeer herders". The earliest nomad schools were mobile, following *čearru* seasonal migrations with the reindeer. Sámi children received instruction in "school tents", either in *lávvu* in the summers, or peat huts (*goahti*) in the winters (Dynesius and Stenberg 2004, 65-75). A key argument for organizing schools in this way was the idea that exposing Sámi children to "modern" environments and architecture for extended periods of time – as well as eating a table, using cutlery, and sleeping in beds – would negatively affect not only the "nomadic character" of the Sámi children but the entire Sámi culture (Torp 1992, 110, Lantto 2005, 101). To maintain the environment considered optimal for the maintenance of an authentic, "nomadic character", early nomad schoolteachers were also recruited from both Sámi non-Sámi residents of Tornedalen, who could often speak, write and/or understand the three languages of the area (Finnish, North Sámi, and Swedish). Later, the nomadic schools transitioned into boarding schools, where Sámi children were forced to live apart from their families for much of the year.

43 The phrase "Lapp shall be Lapp" ("*lapp ska vara lapp*") was popularized by Vitalis Karnell, a church administrator active in the creation of the nomad schools. In 1906, Kernell wrote: "Feel free to benefit the Lapps in every way in their nourishment, make them moral, sober and needy educated people, but do not let them sip on civilization in general […] it has never been and should never be a blessing. Lapp shall Lapp be" (*lapp ska lapp vara*)" (Lundmark 2008, 155), In 2016, the Swedish Church published a book about the nomad schools and the Church's role in the colonial oppression of the Sámi, for which the church formally apologized the same year (Huuva and Blind 2016).

Children at these schools reported many abuses, and later investigations found that the schools provided "a lower grade of civic education than other Swedish children" (Ruong 1967, 78; Huuva and Blind 2016). Despite complaints submitted at the national level by the Sámi as early as 1918, these concerns were largely ignored into the 1960s.

Domestic space was further used in a disciplinary manner with the 1886 and 1889 reindeer herding laws, which made it illegal for reindeer herding Sámi to live in permanent, year-round homes, such as wooden cabins (*stugor*) without permission in reindeer grazing areas, i.e., above the cultivation border (Torp 1992, 110). Legal scholar Eivind Torp (1992) shows that the state's concern around the Sámi "housing question" at this time was closely linked to conflicts between reindeer herding and forestry and agricultural settlers (ibid., 108). Torp observes that the increased presence of "poor" Sámi in villages was explained to growing northern proletariat class as the result of the Sámi's lower mental and social capacities, rather than a consequence of land reforms in reindeer herding areas such as the establishment of the cultivation border and large areas of state land through delineation surveys (*avvittringen*). The purpose of these surveys was threefold: one, to establish boundaries between state and private land; two, to encourage new agricultural settlements in the north; and three, to ensure that as much of the valuable timber forests as possible would become property of the state (Axelsson, Sköld, and Röver 2019, 127).

Beginning in the late 19th century, Sámi who had to leave herding due to decreased resources for the reindeer or other circumstances would be classified by the colonial authorities as "settled" (*bofast*). They would accordingly, and permanently, lose the right to herd reindeer. Considering these harsh policies, in the Čohkkiras area the Sámi "nomad" (i.e., reindeer herding) population dropped by approximately twenty percent between 1800 and 1890, while the "settled" population in the same area increased fivefold (Wahlund 1932 16-18, 17-18). Church population registers from this period list "settled" Sámi (i.e., non-reindeer herders) who'd left their "nomadic tribe" (i.e., *čearru*), according to the name of the village, hamlet, or farmstead where they moved, as well as term "settler" next to the name of the father of the family (ibid., 16-17). In many cases, these non-herding Sámi would also receive new last names which followed Swedish naming conventions (Frändén 2010). Furthermore, colonial authorities misrecognized established Sámi strategies for living and working practiced as needed to overcome crises such as illness and mass death in reindeer. In

the Čohkkiras area, for example, periods of reindeer illness could be so devastating that herders would a times settle and become fishermen and farmers in the Norwegian fjords, using migration areas and pastures for other activities until the herds were healthy again (Ruong 1937, 25; Hansegård 1978, 29; Torp 1992).

Debates in the Royal Council (*Kunglig. Maj:t,* the highest judicial court) in preparation for the 1919 Reindeer Herding Convention (Prop 1917, 169) reveal the extent to which these issues were debated at the highest levels of government. One proposed amendment to the 1898 Reindeer Herding Convention concerned the "elimination of the misconception" regarding "the Lapp's right to settle in the Lappmarks and reindeer grazing areas without special permission" (ibid., 21):

> In connection with this, such an adjustment is proposed in §1(3), that it is clear from this that timber may in no case be used by Lapps for the construction of a dwelling other than a peat hut (*kåta*), and it is also proposed that in this as well in other sections that this does not concern other Lapps besides reindeer herders.

Regulations on the types of housing reindeer herders could have was legislated in the 1928 Reindeer Herding Law (§41,33). This law stipulated that reindeer herding Sámi could only erect a "tent or other peat hut (*kåta*) with a Lappish fireplace (*árran*)" to live in. They could build small storage huts of wood – necessary for the seasonal storage food and other belongings on the migration routes in reindeer grazing areas – but only with the permission of the Crown or other landowners. Sámi could also only engage in limited agriculture with permission of the authorities (§43) with households permitted a maximum of five goats, all under penalty of fines (§44, 59:3b). This aspect of the 1928 Reindeer Herding law "in reality meant a ban against living in permanent houses (for the 'real Sámi'), and as a consequence a ban against combining agriculture and reindeer herding" (Lantto and Mörkenstam 2008, 31). Exceptions were made for reindeer herding Sámi unable to migrate, such as infirm persons (*orkeslösa*) or the elderly, who could be allotted plots and rights to harvest timber, fish, and hunt with permission of colonial authorities (ibid., 59). According to the law, these permissions could also be revoked by the colonial authorities if a family's activities appear to stray too far from the ideal of "good reindeer herding".

These spatial manifestations of the "*lapp ska vara lapp*" ideology thus saw not only settled lifestyles, but specific architectures, as antithetical and

harmful to nomadism. At the same time, they upheld the stereotype of Sámi ways of living as "simple, fragmentary and ephemeral", something also reflected in their homes and architectures (Wishart 2013, 2). Sustained exposure to "non-Sámi" architectures, buildings forms, and society were considered as moral and cultural hazards by colonial authorities, which would entice Sámi away from reindeer herding (Oscarsson 2016). On a further level, these policies reflected ideological associations of Sámi with non-civilization and wilderness, reflecting a Western ontological separation between nature and culture. This dualism, according to geographer Neil Smith, reflects an "ideology of nature" in the West. Smith argues that this ideology of nature not only was integral to the development of capitalism and the concept of "raw materials" – like iron – but also gave rise to notion of "wilderness", the antithesis of civilization (Smith 1984, 20). Smith noted that in this ideology, wilderness is framed as an external, repulsive thing to overcome, represented as "barren, terrible; even sinister…" (ibid.), and that this conception of nature had a clear social and political function: "The hostility of external nature justified its domination, and the spiritual morality of universal nature provided a model for social behavior" in a capitalist society. Wilderness was also "not just the home of the savage but his natural home…wilderness and the savage were as one". Accordingly, both wild nature and "savage" Indigeneity were seen as obstacles to be overcome in the "march for progress and civilization" (ibid., 20). Smith further observed that this drive to overcome wilderness "emanates directly from the frontier itself, where the externality of nature is most acutely felt" (ibid), the flip side of the frontier imagined as a site of potential and transformation (Tsing 2003, 5102; Li 2014, 13-14). The very production of a frontier space which drew hundreds of workers north with promises of riches simultaneously constructe a space of non-civilization; in turn, Indigenous people associated with the "wilderness" were assigned a lower hierarchical status, justifying the need for separation and exclusion. This construction of social difference via the concept of nature, in turn, allowed authorities to "den[y] responsibility" for doing so (Abu Lughod 1996, in Sanders and Moore 2006, 475).

However, despite authorities' purported ambition to preserve reindeer herding, in some areas Sámi families were actively pressured to abandon herding, particularly after the closing of the Swedish–Finnish/Russian border in 1919 and the influx of Sámi from the Karesuando area, now shut off from their eastern pastures, into northern Sweden (Axelsson, Sköld, and Röver 2019, Labba 2020). Measures to reduce the number of reindeer and

herders through assimilation, forced slaughter, a forced relocation were introduced accordingly (Labba 2020). Margareta Huuva Stenberg recalled how this pressure was exerted upon her family, whom colonial authorities wanted to encourage to leave herding and to relocate and resettle as farmers:

> It was the *Lappväsendet* (Lapp Administration) who really wanted us to move. I remember when the *Lappfogde* (Lapp administrator) said [during a visit at Margareta's home in Rensjön]. "It will be so good for you, we'll build you a house, give you some cows and be able to start farming". Then my mother said: "That's strange – people from the outside come here to work on the railroad but it's our people who have to move – and be farmers? We don't know anything about farming; we've been working with reindeer all our life." It was really backwards, so it's hard to describe.

Sitting in the kitchen of her home, Margareta laughed as she recounted how plots had already been created for Sámi families the authorities wished to become "colonists":

> They had already set aside land near Svappavara, Koianiemi the place was called. Father said, "My God, what do you think we'll live off there? Because those from there come here to Kiruna and to the railway – why then should we move there? There is not even clean water there," father said. "Never in my life will I move there," said mother. "Here at least we have clean water, we have fish in the lakes, and we have grouse we can hunt." I have grown up with such discussions at home. That's why I'm still having a bit of a hard time with them over there, the Country Administrative Board gentlemen [laughs].

Depending on their individual circumstances, some Sámi families took up these offers, while others, like Margareta's, did not. Families in Rensjön and other *storvisten* would instead seek ways to remain at home despite the encroachment of settlers. These strategies included the diversification of economic activities to supplement herding (i.e., tourism, transport) but also the innovation of housing forms suited to permanent settlement withing the bounds of the Reindeer Herding law. Among these innovations were eight-sided peat huts or rectangular peat huts with wooden roofs, doors, windows, floors, walls, gas lamps, and iron stoves inside. By the 1930s, half the houses some in *storvisten* were made of wood, while in others there were more seasonal structures (*lávvu* and *goahti*), particularly in *čearru* that still had grazing lands in Norway but were not allowed to build homes

there (Ruong 1937, 43). These structures reflected both creative responses and survival strategies for Sámi families, without incurring penalties from *Lappväsendet*. People kept the maximum number of goats and cows allowed, fished, hunted, and took different kinds of work as necessary, all with the goal of being able to stay at home. For herders, "home" involved not only specific living places and structures but also mountains, fjords, forests, lakes, and swamps (Brännlund and Axelsson 2013, 120).

In the 1930s and 40s, colonial authorities began relaxing their strict grip on Sámi building houses in their year-round lands. At the same time, Sámi children from reindeer herding families were still forced to attend nomad schools in "traditional" architectures (*lávvu* and *goahti*). Margareta's memories of this time, and her experiences as a student in the nomad schools in the 1930s and 40s, appear in a book by historian Maja Hagerman (2015). Margareta recalled the experience of at the age of seven having to leave her family home – with bedrooms, beds, kitchen, and toilet – to attend the nomad school in Jukksjärvi in rudimentary single-room wooden "school tents" built by the state, where a dozen or more children would study, sleep, eat, bathe, and relieve themselves in buckets (Hagerman 2015, 107-108).

The insistence that Sámi people perform the ideal of "good reindeer herders" makes sense when considering the intensive interest from Oscarian-Victorian colonial society on domestic spaces and romanticized nature. While in many areas authorities pressured Sámi to assimilate, anthropologists, ethnologists, race biologists, and tourists were simultaneously fascinated and drawn to Sámi material culture considered "traditional" and "authentic". As historian Paige Raibmon observed in the context of the North American Northwest Coast, colonial societies "brought Aboriginal domestic space into the public domain as never before", even as Indigenous people were pressured to adopt the norms and living habits of settlers (Raibmon 2014, 69). The bans on houses and the enforcement of Sámi nomad schools reveal how domestic space and architectures were crucial in narrating and materializing not only settler colonial ideology but also Swedish modernity (ibid., 71): gazing into Sámi homes and nomadic schools through race biologists or tourist photographer's lenses, the Oscarian bourgeoise could feel reassured about how far their own society and "race" had come. Domestic space and domestic goods, interpreted as the pre-eminent material markers of civilization (Frykman and Löfgren 1987), was the visible and irrefutable proof of difference between groups, and in colonial authorities' eyes, proof

of Sámi inability to look out for their own interests, justifying their colonial administration and control.

Making Sámi Space in the City: Girona Sámesearvi (The Kiruna Sámi Association)

These difficult conditions would also come to play an important role in the establishment of Sámi space in the city. The years 1925 to 1936, known as the "years of famine" or the "harsh years" (*nödåren*, alternately, *kärvåren*) was a period of extreme hardship, remembered as both a traumatic period and turning point in Čohkkiras community history (Ruong 1991, Nordin 2002). Born at the timber line near Rensjön in 1926, Margareta recalled the famine years with clarity. "There were many very tough years for the reindeer herding", she said of the 1930s. Bad weather and grazing conditions led to the starvation of animals in the villages west and northwest of Tornedalen, where on average only ten percent of reindeer survived, and during which nearly all draft reindeer, necessary for hauling a family's goods during migration died, or had to be killed for meat (Hansegård 1978).

While some herds in the *čearru* of Čohkkiras were decimated during the 1930s, the number of reindeer continued to grow others, particularly to the northeast of Kiruna in Tornedalen. Here, the *Lappfogde* demanded forced sale and slaughter of reindeer to limit the size of some *čearru* herds (Whitaker 1955, 73). Per Idivuoma, politician, author, and former chairman of the Swedish Sámi Association (SSR) from Lávdnjitvuopmi (Lainiovuoma) *čearru* in Tornedalen recalls how these policies harmed his family in his autobiography, *Memory Pictures* (1990:15):

> I remember an event which hurt my heart deeply. I was twenty years old and in the beginnings of my working life. The number of reindeer in the northern districts was decided by the [Border] Convention, and not the available grazing lands. My family, consisting of seven persons, was forced to sell one hundred and fifty reindeer. My father was law abiding and it was he who decided in the family. In February 1935, when the last reindeer was sold, and the herd was released from the corral I could no longer hold back the tears. Mine and my family's future seemed as if it was completely falling apart. I was both sorrowful and bitter, I couldn't understand whatsoever why these laws existed, that one couldn't decide for themselves how many reindeer one needed in order to live.

As noted, the authorities justified such measures in several ways. One was the purported need to reduce reindeer to reduce conflicts with settlers, who perceived the reindeer as destructive to settler infrastructure and property. A second was the state's self-imposed responsibility to foster "good reindeer herding", as defined in the 1928 Reindeer Herding Act. Punitive measures included fining and suing *čearru* or individual herders, or imprisonment at the central jail in Luleå for herders who failed to pay fines or compensate settlers for property damaged by reindeer. In combination, these factors drove some Sámi to abandon reindeer herding, lest they fall into poverty and destitution.

Two things are important to note about policies like "*lapp ska vara lapp*", forced slaughter, and the coercion of families to leave herding permanently. One, is how they reflected an assimilationist policy towards native people, which is "the other side of the coin" – and not antithetical to– removal (Wolfe 2011). In colonial authorities' views, nomadism "naturalized removal", as the "image of the wandering Indian, forever passing through, endlessly surveying the horizon" diminished native ties to land and space, while also "assuaging the violence that removal did to common-sense understandings of property." (Wolfe 2011, 18). As in northern Sweden, allotment – in which some members of native communities would remain behind as proprietors of individual parcels of land as agriculturalists – was a feature of native colonial policy in North America. This ideologically worked to minimize the appearance of overt oppression or violence that outright removal might raise from critics (ibid.).

Second, are the ways both efforts – removal and assimilation – made Sámi space available to settlers. Reducing the number of reindeer and herders cleared space for the mine, the railroad, housing plots for industrial workers, and for the construction of Kiruna. Indeed, a characteristic of settler colonial society, as anthropologist Patrick Wolfe argued, is the elimination of Indigenous people and their claims to land as an organizing principle (Wolfe 2006, 388), a project fundamentally concerned with the acquisition of land: "settler colonialism destroys in order to replace" (ibid). Historians Tracy Banivanua Mar and Penelope Edmonds further define settler space making, or settler colonial space, as "a process of production through oppression, resistance and accommodation, and as both a material place and phenomenon of the imagination" (Mar and Edmonds 2010, 15). Urban space, these authors argue, are part of "colonial frontiers as the classic 'frontier' of the prairie, pastoral zone or borderland" (ibid.). As

evidenced in the "*lapp ska vara lapp*" policy and the intensive focus on Sámi on the part of race biologists, in settler colonial contexts race becomes integral to the production of space. It takes up "permanent residence" in settler colonial landscapes, cityscapes, and conflicts over the ownership and belonging of space (Mar and Edmonds 2010, 2).

In the 1930s, Margareta's and other Sámi families of the Čohkkiras areas countered this spatial and social exclusion by founding the Girona Sámesearvi (Giron Sámi Association) in 1937, the first organization for and by Sámi people in the city of Kiruna. "So many big events that happened that we were actually forced into it, though it had been tried two times before", said Margareta of the founding of the Association. Over coffee in the kitchen of her house in Orusjohka (Årosjåkk), Margareta recalled key moments in the history of the Association, for whom she worked as a "culture worker" (*kulturarbetare*) – conducting archival research, collecting oral histories, producing publications and maps, updating lists of reindeer owner's marks, and teaching and preserving Sámi traditional knowledge – until her retirement. As we talked together with her grandchildren, who translated from North Sámi to English, she'd occasionally step into her small home office filled with boxes of research and writing to fetch documents of interest. She recalled that Per Andersson Huuva, a herder from Gábna *čearru*, had tried to start a local Sámi association already in 1934, but that many Sámi at the time "didn't see the point of it". "Per said, 'that day we will have a Sámi association will come,' but we were not ready for it then", she said. Though many local people began to question the policies of the *Lappfogde* and authorities' response to mass reindeer death by seemingly punishing the Sámi, Margareta remembered that the *Lappfogde* also actively worked to prevent the establishment of a Sámi Association:

> M: He had explicitly said so, the *Lappfogde* – when we were forming an association – that 'as long as I am the *Lappfogde* there will be no Sámi association'. And they spread lies that the Sámi were communists. Communists were very dangerous people then. They said they were communists – that is, they scared the people. And those who knew nothing believed in it. So, it was very courageous to start an association.
>
> H (M's grandson): That was why you were a little afraid of the *Lappfogde* too, that was why you were a little unsure of forming an association.

> M: Yes of course, he made threats, you know. And Per had replied "And I will work towards it as long as I live." But then they denied the Sámi work, we were not allowed to work on the railway. You know, in 1936, and it started as early as 1932 - it continued with the number of reindeer dying, there were bad grazing lands.
>
> M: The fodder was locked [under layers of ice covered by snow, preventing reindeer from smelling the fodder] because of the rain. In 1936 when they moved as usual, they had decided that they should have had a corral in Sitnuhin, opposite Laukkuluspa – there they had to make a new corral. The people had come there and then there was a terrible snowstorm (*guoldu*) that scattered the herds, so that they couldn't get them into the corral. And the people then thought, as they usually do, that they were going home and thought they would come back in a few days, so they left their backpacks there. But they never retrieved their backpacks, the herds went to the mountains and died there. It was horrible. It was so awful... they did not understand at all what was happening and received no help.

The conditions were so bad that the year 1935 was the last year Margareta's family followed the reindeer "in the old way" (migrating with the reindeer), settling in Vittangi village for a period. It was here that she notes that they were encouraged by Tornedalen villagers in Vittangi and Masugnsby, "those who knew something", to start a Sámi association. "For us, everything like this was so unfamiliar. They said, you have to create an association so that you get past the county administrative board". By "knowing something", Margareta meant Swedish language and administration: many Sámi did not speak Swedish in the early 20th century. Margareta recalled that the *Lappfogde* preferred that they learned Finnish, as it was also a commonly spoken local language in Tornedalen and Kiruna, and within the same Finno-Urgic language family as North Sámi. Not speaking Swedish, however, put Sámi at a great disadvantage when engaging colonial authorities, administration, and law not from the local community, reinforcing dependence on the *Lappfogde* as representatives of Sámi interests:

> Father thought it was awful that they didn't even get to know their own countries' language – they got to know Finnish instead! Can you understand that? They thought the Sámi were so stupid that they couldn't learn Swedish. But then of course – the Finnish and Sámi language are related so it was easier to learn.

It was also easier for the *Lappfogde* to manipulate outcomes, or decisions, in meetings with *čearru*. During the meetings – held in Finnish – the *Lappfogde* had a secretary named Stålnacke, recalled Margareta. The meeting protocols between the *Lappfogde* and the *čearru*, however, were written in Swedish:

> One time, father said: "How are we supposed to know what you're writing there? We can't check if you write the same things we discuss." There was no one to control and read the documents. Father said: "You can write something else than the things we just discussed. We discuss in consensus but what are you writing down? There is no one checking it!" Then during the 1950's we got a control reader (*justeringsman*). Before that no one controlled or checked the documents so the *Lappfogde* could do whatever he wanted – and he did a lot of awful things.

During this tough period, Sámi relied on their relations with the Tornedalen community – farmers as well as fellow members of the Laestadian Lutheran church – to help them navigate the new colonial policies and restrictions. In doing so, they made use of a long established, cooperative system of relations between Tornedalers and the Sámi, known as the *verdde* system, or friend-guest relations (*gästvänsrelationer*). This system of reciprocal exchange existed throughout Sápmi and was seasonal, activated both during journeys of migration and sedentary periods (Eidheim 1966; Kramvig 2005). The *verdde* system consisted of long-term relationships between families passed on through generations, enacted through both cooperative animal care and economic trade. During these guest periods, Sámi and Tornedalen farmers would trade goods (meat, cheese, handicrafts, tools) and temporarily live together, with Sámi erecting seasonal housing on the farms of the Tornedalen friend-relations for as long as the reindeer were in the winter lands. These relationships were also strengthened by language similarities and spiritual beliefs shared between the two groups in the area, Laestadian Lutheranism (Hansegård 1978). Family and kin relations were sometimes established through intermarriage[44], or strengthened through godparenting, as the godparents of Sámi children were selected from the wider network of both Sámi and non-Sámi relations the family encountered during the year (Kramvig 2005, 56;

44 The "high rate of racial mixing" of the peoples of Tornedalen was a factor in attracting early race biologists to the Čohkkiras and Tornedalen areas (Hagerman 2015), and the Finnish-Swedish Tornedalers, were also subjected to racial biology research (Persson 2013).

Pehrson 1957). Some of these friend-relations persist between families today, as they can be inherited and passed down through generations (Huuva and Blind 2016, 39).

The difficult years of the 1930s had widespread effects both upon the Sámi and the Tornedalen farmers, due to the importance of reindeer as a general food source for both groups. Per Idivuoma (1990,16) recalled that during this crisis period, Tornedalen farmers surprised a visiting lecturer from the National Farmers Association by answering, in response to why they were so concerned with the condition of the Sámi's reindeer, that they were an integral part of survival for northern farmers:

> We in this area live partially from the Sámi's reindeer and partially from our small farming, so why shouldn't the conditions of the reindeer herding concern us?'...They [from the south] didn't understand that reindeer herding and farming must go hand in hand if farming is to exist at all in these territories.

Some of *verdde*-friends may also keep a few reindeer with a *siidas* animals[45], sometimes taking part in herding work themselves. *Verdde*-friends may also lend their recreational cottages (*stugor*) to Sámi herding friends in the winter lands – something I and my hosts were certainly grateful for after a cold day's work.

The *verdde* friendships would also help Sámi re-claim space in urbanizing Kiruna. Access to city/village space and markets has consistently been important for the Sámi economy. In Kiruna, some local merchants worked with Sámi as brokers, re-selling reindeer meat, fish, and other Sámi goods to shops and restaurants in southern Sweden (Hägg 1993,49). However, Sámi were not allowed to rent accommodations in Kiruna while in town, so they turned to their *verdde* relations who'd come to work in the mine or other occupations in the city. "Before Kiruna came, we had our *verdde*-friends in the villages around the area. But in Kiruna Municipality the Sámi were not allowed to stay at hotels", Margareta explained. "Some of the *verdde*-friends had moved into Kiruna and they were still friends. But it was hard for the Sámis to find a place to stay at in Kiruna". She recalled several community stories of *verdde*-relations in the

45 This latter type of reindeer keeping – of animals belonging to non-Sámi – may be organized informally or formally under a second long-standing cooperative system, known as "skötesrenar". See: Nordin, Åsa. "Relationer i ett Sámiskt samhälle: en studie av skötesrensystemet i Gällivare socken under första hälften av 1900-talet." PhD diss., Institutionen för arkeologi och Sámiska studier, Umeå universitet, 2002.

city. One Sámi woman Margareta interviewed recounted putting up a *lávvu* in the yard of a Tornedaler *verdde*-friend who lived in the Ön[46] neighborhood on her visits to town. Another account involved a Tornedalen widow whose husband had worked in the mine and regularly opened her home to Sámi lodgers when they needed to stay Kiruna.

In response to these circumstances, the Girona Sámesearvi was formally established in 1937, with Per Andersson Huuva as the first chairman. Margareta's family helped create the organization from the start, providing financial support to early activities, such as fixing places for Sámi to meet and stay in Kiruna. In 1940 the Association petitioned and received approval from Jukkasjärvi County Municipality (*länskommun*)[47] and LKAB to build an inn in the central part of the city, and Lapphärberget (the "Lapp Shelter") opened on February 6th, 1942, located in a building called Storgården on Föreningsgatan, Echoing settler views of the city as a non-Sámi space, however, the colloquial name for the inn re-enforced stereotypes of Sámi as rootless, impoverished wanderers: *härbärge* is the word commonly used to denote a hostel or shelter for houseless people (or, alternately a type of storage shed).

Nevertheless, the inn was an important step towards re-claiming Sámi space in Kiruna. The inn offered lodging and a kitchen on the second floor,

46 Ön – short for Djävulsön, or the Devil's Island, was a small neighborhood adjacent to Lake Luossajärvi. In the 1970s, early ground deformations began to damage the area and the population was evacuated, and all buildings demolished. At its height, it was home to around four hundred people.

47 Prior to 1948, Kiruna was a so-called municipal community (*municipalsamhälle*), with Jukkasjärvi County Municipality being the larger administrative unit for the area, a predecessor to Kiruna Municipality. The Kiruna Church was offered as part of a one-time payment package47 from LKAB to Norrbotten County –along with a hospital, fire station, and other city infrastructure – in exchange for keeping Kiruna as a municipal community rather than a market town (köping), as some residents wanted (Persson 2015, 176-179). Hjalmar Lundbohm lobbied both the county and the King of Sweden for this outcome as it favoured the company, who would have had to pay ongoing taxes to Kiruna's local government and reduce company control of how land and other resources were used. In 1908, the County voted for Kiruna to remain a municipal community, a decision which would prove fateful: LKAB still pays no taxes to Kiruna Municipality today, and the only taxes that remain from company activity in the municipality is in the form of taxes on wages from registered residents who work for LKAB. As Persson (ibid., 178) notes, LKAB had a majority of votes in the County as a major landowner already, guaranteeing a positive outcome for the company. When the first municipal government was instituted in 1909, the chairmen of both the municipal council and municipal planning committee were both senior executives from the mine, securing company influence in city planning outside of the official "company area" (ibid.).

plus a cinema (and later, a conference and study center) on the first. Recalling the festivities of the inaugural event in an essay written in celebration of Kiruna's centennial anniversary in 2000, Margareta notes that the Tornedalers who had provided hospitality in the city to Sámi were celebrated and invited to the opening; though the Tornedalen widow could not attend the dinner due to illness, a basket of food was delivered to her as a token of thanks. Storgården was demolished in 1970, and the Association relocated to a provisional locale across the city until 1973 when the new building, the Kiruna Samegården, was completed (Fig. 9). Today, it is still a functioning inn – twelve rooms with a shared kitchen – as well as houses the offices of the Kiruna *čearru* and a small museum. Ann-Catrin, Margareta's daughter, became the chairwoman of the Girona Sámesearvi the year that it celebrated its 75th anniversary in 2012.

Fig 9: Postcard depicting the present Kiruna Samegård cultural center, museum, handicraft shop, and hotel, ca. 1975. Photograph by Börje Rönnberg.

Other notable Sámi institutions in the city today include the Giron Sámi Theatre (*Giron Sámi Teáhter*) and the headquarters of the Swedish Sámi

Parliament[48], both founded between 1992 and 1993. Kiruna is also home to one of five Sámi elementary schools (preschool through sixth grade) in Sweden, where students receive a comprehensive education which centers Sámi language and culture. These building up of these institutions and organizations has been an important response to the social and spatial transformation that the establishment of Kiruna as an extractive and settler space represented for Sámi residents of area. As Canadian scholars David Newhouse and Evelyn Peters note, Indigenous institutions and organizations play key roles as "invisible infrastructures" in settler cities. Sámi community institutions like Girona Sámesearvi not only meditated the experience of urban life for Sámi but made possible the creation of urban space that Sámi could use to access a variety of resources (Newhouse and Peters 2011, 252). Access to temporary accommodations with a *verrde*-relation or at the Samegården, for example, offered more than just a place to sleep in Kiruna. These accommodations facilitated the development of Sámi political, economic, and social networks, within and beyond Kiruna, and that people could use to advocate for themselves and their communities. One example was highlighted in a June 10th, 1947 issue of the northern socialist worker's newspaper *Norrskensflamman (The Flames of Aurora)*. The front-page piece featured a photo of Margareta as a "stylish Sámi youth representative" at that year's annual meeting held at Margareta's home in Rensjön, organized to request the municipal construction of a bicycle path and electric lighting in the village. This grassroots effort is one of the many projects local Sámi families like Margareta's undertook over the years to improve Sámi political, social, and technical infrastructures. In doing so, they not only challenged harmful stereotypes of Sámi reindeer herders as rootless and impoverished, but also strengthened existing Sámi spaces of belonging in and around the city.

Concluding Remarks

In this chapter, I've explored Kiruna's history as a planned, ideal city, and how these associations persist into the present. I've also explored how representational spaces associated with Hjalmar Lundbohm, LKAB's first mine administrator, sustain some residents' positive associations between

48 Kiruna was chosen as the site of the Parliament by plenary in 1993. In 2019, the council voted to move the headquarters to Östersund, where a new Parliamentary building will be constructed.

Lundbohm's ambitions for a planned, "ideal" city and experiences in the city itself. I have also attended to the contested nature of Kiruna's modernist urban history: specifically, I've shown how Oscarian ideas of nature and culture were spatialized, materialized, and inscribed in the lands in an around Kiruna city. Late 19th and early 20th century views of reindeer Sámi as "vanishing Indians" justified exclusion and segregation from Kiruna's early settler society, and these ideas were also a part of producing Kiruna as an ideal city. In situating settler colonial transformation as inseparable from Kiruna's establishment, I have fore fronted "silences" apparent in popular representations of Kiruna as a model city, and aspects of its emergence which have been largely "written out of settler memory" (Trouillot 1995; Mar and Edmonds 2010, 11). The reflections and memories of Sámi Elder Margareta Huuva Stenberg provide an important Sámi counter-history of Giron-Kiruna, and the effects that the establishment the city had on Sámi residents of the area. Colonial authorities' ambitions to transform reindeer herding Sámi into wards of the state and occupants, rather than recognized owners, of their homelands were consistently challenged, as I've shown here, through Sámi activation of social and kin networks with other minority groups, political organization, and re-claiming the right to Sámi space, now overlaid with a settler city. In the wake of crisis, Sámi re-domesticated the urban space of Kiruna for their own needs. In doing so, they so strengthened Sámi infrastructures of dwelling and reindeer herding, the latter of which I now turn to in the next chapter.

Chapter 5: Out of Place at Home: Extractive Space, Sámi Labor, and the Reproduction of Inequality in Mine City Kiruna

As I discussed in the previous chapter, herders from Čohkkiras responded to the expansion of settler space in diverse ways. Strategies included the activation of social relations from the countryside in the space of the city, political organizing and organizations, and architectures that refused colonial categories of "settled" versus "nomadic". In this chapter, I examine how social-spatial inequalities with roots in settler colonialism and racial logic sustain Sámi alienation and marginalization in the present or being "out of place at home". I begin the chapter by re-visiting the memories of Giron Sámi Elders who lived through the period of crisis that was a key turning point for the Čohkkiras Sámi community. This period, which I partially introduced in the previous chapter, led to not only to the establishment of Sámi community institutions in urban Kiruna, but eventually Sámi labor in the mining and rail industries as a means of supporting reindeer herding. In the second part of the chapter, I thus turn to stories of Sámi "double work", or reindeer ownership combined with work in the mining industry. Noting how settler colonial matrices of race and space contribute to contemporary Sámi double workers feeling "out of place at home", I also show how these workers also refuse alienation, navigating challenging double binds as they compose their own narratives of work, home, and belonging (Gross 2019a).

Reindeer herders and *rallare* (rail workers)

The "emergency years" (*nödåren*) of the 1930's were a major turning point for the Čohkkiras Sámi reindeer herding community. Margareta's *čearru*, Gábna – which in 1926 counted fifteen thousand head of reindeer – saw

their herds decimated during the 1935-36 winter, where only a thousand animals survived (Hufva 2000, 193). In the late 1920s, reindeer in the southern *čearru* of the Čohkkiras district had thrived to an extent that the authorities often fined herders for reindeer transgressing on settler property, and as a result planned to institute the forced slaughter of nearly five thousand reindeer (Nordin 2002, 135). However, the forced slaughter never came to pass, as infrastructure (fences) erected by settlers to protect hay fields from reindeer in the autumn and winter lands blocked the animals from reaching these crucial seasonal pastures, triggering mass starvation. Between 1931 and 1940, the total number of reindeer in Sweden declined by approximately 115,000 animals; in the Čohkkiras area, the number of reindeer declined by half (ibid.) Sámi Elder Lars Hufva recalled that county and colonial authorities (*Lappväsendet*) only solution for this crisis was that "all Sámi without reindeer should be *deported below the Lappmark border*, so that they could be settlers and agriculturalists. For them there was no place over the *Lappmark* border." (ibid., original emphasis). For those struggling yet not willing to leave – as with Margareta's family – the county offered relocation to so-called agricultural allotments (*jordbrukskolonat*) closer to the city, near villages in Tornedalen.

These crisis conditions hit the Čohkkiras community hard, with starvation and new forms of poverty becoming widespread in the 1930s. Margareta recalled this as the origins of the so-called "wandering Sámi" (*vandrande samer*), herders who had lost all their animals and were starving: "One was forced to go somewhere because there was starvation, after all." This destitution added to the stereotype of "poor Sámi" (*fattiglappar*), and which the authorities interpreted as willful abandonment of reindeer herding in the 19th century and early 20th century (Torp 1992, see also Össbo 2020). Many families, like Margareta's, refused to give up reindeer herding or their living places for the agricultural allotments, despite the difficult circumstances which affected many people. She recounted that during the famine years, some Sámi families with children did receive municipal food aid as conditions deteriorated. However, some families had difficulty accepting this aid after the decimation of their livelihoods:

> There were probably families who did not take the food coupons who had needed them. But they were proud, they had been rich. Many of those here who had large families had lots of reindeer. There were many

> who had a thousand reindeer in Rensjön. And all of a sudden, they were poor. It must have destroyed their pride.

These circumstances were key factors in the formation of Girona Sámesearvi, who in 1938 approached the municipal board with a request that reindeer herding Sámi be allowed to work on the Ofoten Railway (also known as the Ore Railway, *malmbanan*) to survive. This railway – built between Kiruna and Narvik, Norway –was completed in 1902, and had also been built directly near to several Sámi *storvisten,* large summer camps that became permanent, or year-round villages. Three of these *storvisten* – Krokvik, Rensjön, and Rautas – grew around stations built by Swedish Railways, which included housing for rail employees and depot warehouses. These *storvisten* quickly grew into busy hubs of activity as settlers connected to the railway – engineers, station masters, tourists, and maintenance workers –shared the space alongside Sámi inhabitants.

Despite Sámi physical proximity to the railway and great economic need, municipal and county leaders, under the guidance of the *Lappfogde*, initially resisted allowing reindeer herding Sámi men to take this or any other work outside of reindeer herding. One board member responded to the request that Sámi be allowed to work on the railway with the claim that Sámi "neither could nor would work" (Stenberg 2000, 198). Reflecting on these attitudes, Margareta expressed skepticism that such views came from the "regular" people of Kiruna:

> We've always been friends with the regular working people (*fotfolket).* That's what was so strange. But just this with the discussions [about Sámi not being allowed to work on the railway], it was the *Lappfogde* who was behind it."

She recalled an occasion when the *Lappfogde* cited the physical stature of the Sámi as proof of their inability to take rail work:

> The *Lappfogde* said, 'They [the Sámi] are so small and tiny – they can't work.' Mother answered: 'I've seen the men at the railroad – just standing there leaning over the shovel! Of course, our men can do that too!'

Girona Sámesearvi representatives actively challenged the authorities' efforts to characterize Sámi as incapable of taking, or unwilling to do, non-reindeer herding labor. At a municipal meeting in 1938, Girona Sámesearvi representatives came prepared to argue that "the Sámi both can, will, and

are in pressing need of work", and submitted a work certificate testifying to the quality of labor by Sámi roadbuilders hired by an engineer to build the Kiruna-Holmajärvi road[49] (Stenberg 2000, 198). Though the county board approved the resolution, conflicts persisted with the *Lappfogde* who was set against reindeer herding Sámi working in non-reindeer herding occupations, arguing that there were non-Sámi people in Kiruna who needed the work, or that experienced herders were needed as hired hands by other reindeer villages or farmers in Tornedalen (ibid.).

In 1941, one employee of the Swedish Railway, trackmaster[50] Oskar Selin defied the *Lappfogde*'s ban on employing Sámi from the Čohkkiras reindeer herding families and hired four Sámi men from Rautas and Rensjön to assist with track maintenance on the Ore Railroad. Margareta's father, Gustav Eriksson Huuva, was involved first-hand in negotiating these positions. Margareta recalled:

> At the railway station in Rautas lived the track master of the Kiruna-Bergfors line named Selin. And Dad made a courtesy visit to him, it was in February, I remember it well as I was at home because I had finished school, and this is probably 1940. I remember Dad getting dressed – it was terribly cold – he put on his coat and fur hat, and gloves and everything, then he went skiing. But before he left, he had put a reindeer steak in his backpack. I did not understand then at all why one should bring a reindeer steak in your backpack. But it was like a gift to Selin. And he asked Selin to hire them, because "we are so many here who have lost our reindeer and we have no work and can do nothing".
>
> And in the spring, he first hired one, a man he had become acquainted with in Rautas – Lars Pingi, and then the other – and observed how they worked. And so, he hired two in Rensjön, yes, they were first. And after a few years he had more than thirty Sámi employees. Then the chief engineer in Kiruna received a letter from the *Lappfogde*: "You must not hire Lapps - because there are Lapps that need hired hands." But who needs hired hands when we are extinct? Riiiight [sarcastic tone].
>
> Do you know what the old man [Selin] said? He said so himself: "It doesn't matter to you who I hire – if I want to hire Sámi women, that's my business!" And he opened the way, this man, and then the others also dared to start hiring Sámi on different stretches of the railway.

49 Today, road 870 to Nikkaluokta.
50 A railway manager, or banmästare, was a rank below that of railway engineer and involved the supervision of the railroad and track maintenance in each area.

Several decades later, in 1978 Lars Andersson Pingi (Fig. 10) recounted the experience to Margareta and her sister Anna in a research interview for Ájtte, the Swedish Mountain and Sámi Museum (Dynesius and Stenberg 2000,79):

> That's how it was. They day after we went to work on the railroad, and there I stayed until I retired a few years ago.

Selin told Pingi and the other workers later that the *Lappfogde* had contacted him personally regarding his hiring of Sámi. Selin's answer was:

> – Get them reindeer, so that they can support themselves. Then, and not before, will I dismiss them.

Norrskens-
flamman

— Norrbottens äldsta arbetartidning —

Heta strider rasar ånyo
Inga eld-upphörorder

TOKIO, torsdag.

(TT-Reuter) FN-trupperna i Korea, som tydligen väntat sig e
på stilleståndsförhandlingarnas slutliga genomförande, underrättad
order utfärdats om att skottlossningen skulle inställas.

När nattkylan hänger kvar på morgonkanten måste man ibland som banarbetaren Lars Pingi i Rautas ta till blåslampan för att få någon fart på borrmaskinen.

Livlig utbyggnad efter malmbanan
för att klara ökad gruvbrytning

Fig. 10: Lars Pingi in the Ore Fields socialist worker's newspaper *Norrskensflamman* ("The Flames of Aurora"), November 20th, 1951. The photo's caption reads: "When the chill of night lingers at daybreak, one must do as Lars Pingi in Rautas does and take a blowtorch if one is to get any speed on the drilling machine."

I'd heard Margareta tell the story of Selin a few times in different settings, either when I or someone else asked about Giron Sámi history. In each telling, Margareta always emphasized how Selin resisted the *Lappfogde* by hiring Sámi men, challenging colonial authorities' belief that reindeer herding Sámi were ill-suited, or unwilling, to take non-herding occupations – the very reason *Lappväsendet*, or "Lapp" Administration, was said to be necessary. While Hjalmar Lundbohm was convinced that

Sámi had "become increasingly tempted to adopt the comfortable living habits of the peasants or industrialists, which least of all suits nomadic people" (Lantto 2012, 16), others, like Selin, did not see Sámi as suited to only to one kind of labor. On the contrary, Selin's decision to hire Sámi workers on the railroad actively challenged a colonial spatial and social imaginary which did not exist in reality. Despite the rhetoric of colonial authorities and the popular desire for romanticized reindeer herders, represented as frozen in time and living in a desolate wilderness, the construction of the railroad itself had obliterated any pretenses of distinct settler and Sámi spaces. As a vital settler infrastructure, "at once imperial and intimate", the railroad facilitated not only the expansion of colonial space but new entanglements between Sámi and settlers (Cowen 2020,470-471). Unlike the colonial authorities, who saw the reindeer crisis and people going hungry as a confirmation of the ideas of race biologists and the "*lapp ska vara lapp*" policy, Selin was a sensitive to their plight. Margareta's father's gift of a reindeer steak, a generous offering during a lean period, likely carried additional significance, as Selin would have witnessed the hardship of the crisis years up close living in the station house in Rautas. As both a Swede and as a representative of the national Swedish Railways, he also wasn't as beholden to *Lappväsendet*, and would not have been alone in adopting a critical stance toward colonial policy at the time, as did many Sámi authors, activists, politicians, and non-Indigenous sympathizers (Laula 1904; Stenberg and Lindholm 1920: Turi 1931; Idivuoma 1990; Lantto 2012**)**

Employment on the railroad would become of great importance to the Sámi communities in Rautas and Rensjön. By the early 1970s, a third of all households in Rensjön counted rail work as their main source of income (Lundmark 1973). Jobs on the busy railway included operating switches, repairing the tracks, and electrical maintenance to keep the ore trains moving, which were also used as public transit for tourists and residents in villages along the line. As no roads reached these areas until 1984 when the E-10 highway was completed, post was delivered by rail, and children attended school in Kiruna thanks to a special school train which stopped at the train station in Rensjön (now closed). For a time, Gábna *čearru* also transported reindeer between their seasonal pastures by railcar (Ruong 1991, 111). These animals not only provided an important source of food but social activity in these villages: the autumn slaughter was an event attended by many from around the municipality, as stories from former

Swedish Railway workers stationed in Rautas and Rensjön attest (Mattis 1996, 1998).[51]

Herders in *čearru* further west of Kiruna similarly sought work on the railway or the mines. A 1970 book penned by two Stockholm journalists (Reichwald and Svenlund 1977) documented twenty-three life histories by members of Leaváš *čearru*, nearly all of whom described personally working, or having a close relative in the immediate household – brothers, husbands, sons – take work at LKAB or with Swedish Railways (all but six interviewees were men). The interviews reveal the extent to which mine and rail work became a way for herders to support themselves while they rebuilt their herds during times of personal or collective crisis, as they had done with agriculture, fishing, or hunting in earlier generations. A shorter but earlier text, *Sámi in Mine City* (*Samer i Gruvstad,* 1973) compiled by the Sámi-Swedish scholar Bo Lundmark for Norrbottens Museum, makes note of this transition as well. An image of Sámi man working in a mine is accompanied by the caption: "Reindeer herding cannot provide income for all Sámi. One can thus choose to support oneself through devoting oneself to handicrafts or tourism in the villages, or also by moving to where jobs are offered for example, within the mining industry" (Lundmark 1973, 15).

In taking work on the railroad and in the mines, Sámi who supplemented household economies with industrial wage labor expanded the capacity for themselves and their families to remain in place, at home, as *reindeer herders*. Čohkkiras families with diversified economies were more readily able to resist assimilation, possible forced relocation, and loss of the right to herd by becoming *both* reindeer herders and industrial workers. In doing so, they claimed a right to space – the space of home – in lands increasingly represented and defined by minerals extraction (Westman, Joly, and Gross 2019). Early Sámi rail and mine workers in Kiruna also challenged centuries of hegemonic thinking that represented Indigenous non-agricultural livelihoods as devoid of labor, and agricultural or industrial forms of labor as the sole means of claiming rights to land (Linnaeus 1811, Locke [1797] 1993). Through dwelling and working in ways that supported the needs of the reindeer, they challenged stereotypes of nomads as

[51] A woman whose husband worked for Swedish Railways in Rensjön in 1958 recalled the family's time there: "There were about ten Sámi families with houses near the station. In several of the reindeer herder families one of the men were seasonal staff at the railroad. We had a daily visit from members of the Sámi families, as I often helped with contact with the authorities by telephone or via letters. I also provided help with tax declarations. I am very grateful for that trust they showed me. The time in Rensjön has a lot shaped me into the person I am today." (Mattis 1998, 27)

rootless, unsettled, and lacking ties to specific spaces prominent in settler colonial discourse (Wolfe 2006). Finally, their labor represented a claim to settler infrastructure – rail being perhaps the single most important piece of infrastructure necessary for extractive and urban space in Kiruna – and appropriation of its use for alternate possibilities. Mobilizing this settler infrastructure for their own ends – earning wages to invest in herding, moving animals between pastures, and travelling to strengthen pan-Sámi political organizing across Sweden and Sápmi – rail labor supported Sámi strategies of resistance and refusal beyond the local (Simpson 2014), through "reuse of the rail as an infrastructure that might take the polity elsewhere" (Cowen 2020, 480).

However, keeping in mind that settler colonialism's power to reproduce social and spatial relations is not a past, historically bound event but rather an existing social structure (Wolfe 2006), Sámi herders must continuously navigate spaces under this structural pressure. In the following section, I turn to the experiences and dilemmas of Sámi reindeer owners in Kiruna who divide their labor between reindeer herding and waged work (known colloquially as "double work"), specifically work in the mining industry. The people whose stories I discuss for the rest of the chapter constitute a specific group within the broader category of "reindeer herders" whom I refer to here as "reindeer owners". These individuals are active in reindeer herding, but do not draw their main economic livelihood from reindeer husbandry and are therefore not officially considered "reindeer herders" (*renskötare*) under the Reindeer Herding Act of 1971, a law which stipulates that individuals defined as full-time reindeer herders cannot derive more than fifty percent of their income from non-herding sources (SFS 1971:437, §11). The people I discuss in this chapter thus belong to two of the membership categories defined by the Reindeer Husbandry Law (SFS 1971:437, §11-12): "reindeer herding member" ("*renskötande medlem*"), typically members of a reindeer herder's family (spouse, children) registered as living at the same address; and "other member of the *čearru*" ("*övriga medlemmar i samebyn"*); people who have inherited the right to own and herd reindeer in the *čearru,* and/or have been granted membership by the *čearru* board. As I will show, occupational categories and spaces with settler colonial roots – such as mine space and mine labor – remain fraught arenas for Sámi people, as they raise difficult dilemmas around notions of belonging, relations with non-Sámi, and the future of reindeer herding in the area. How Sámi industrial workers negotiated this fragmented social-spatial landscape I now turn to below.

“What am I doing here, anyway?”

About five months into my fieldwork, my housemate Ante became involved in a workplace dispute that took us all by surprise. Ante had worked at LKAB for no more than two weeks and was still undergoing training but had begun to experience discriminatory bullying from a supervisor. My fieldnotes (edited for clarity) document what happened next:

> Today Ante came home from beginning his second week of work at LKAB in a tense mood. He was on the phone when he came in and set down the worker’s safety training books and neon safety vest on the table while he finished his official sounding conversation. Sensing that something was wrong, I waited until he was done to ask if everything was okay.
>
> It turns out that one of the safety instructors at LKAB had been making racist jokes and comments since the start of their training last week, and today things came to a head when they were a much smaller group (from twelve to six). The instructor seemed to focus his attention more specifically on Ante, perhaps identifying him as Sámi by his first and last names, which locals would recognize as from the Sámi naming tradition. Among the things he said was:
>
> “Oh, so we have a [derogatory term for Sámi] on the railway! I better call the rail operator, so they don't run you over!”
>
> Other students/trainees began to notice, too. Today, Ante lost his patience and snapped at the instructor, telling him he needed to stop with the offensive talk. “There's a line with this kind of thing, and you crossed it a long time ago!”, he said. The instructor didn't apologize and brushed it off, but afterwards a woman in the same class came up to him and said “I just wanted to say that the instructor was wrong, and you did the right thing. My boyfriend is Sámi, you know, he is the father of my children...he can't speak Sámi and he took my last name, so people don't discriminate against him like this...”

Within the span of a few hours, the months Ante had put into getting a job at LKAB’s seemed to hang in a delicate balance. The instructor’s bullying, centered on Ante’s presence as a Sámi person in the space of the mine and specifically the railway, threatened to undermine all the studying and occupational training he’d completed. A friend’s father who worked in the administration at LKAB rushed over to offer help as soon as he heard

about the incident, promising to personally contact Ante's supervisor right away and providing temporary relief from the stressful situation. The next day when Ante rang to follow up with his supervisor, however, he was told that there was "nothing to be done". When confronted, the instructor had accused Ante of not paying attention in class, implying he had made up the incident to cover up for what would be a serious dereliction in a safety training. The supervisor thus concluded what happened was "no one's fault", as it was "one word against the other" (*ord mot ord*). Worryingly, Ante faced an upcoming evaluation and test with the same instructor, who was now aware that Ante had lodged a complaint. Our reaction to this turn of events, as reflected in the next day's fieldnotes, was one of dismay:

> We are all sitting here being quite shocked and sad for the moment, while Ante decides what to do and running around making phone calls. Ante was so happy earlier when he walked in from work, saying what a beautiful day it was, and how happy he was to work with the people he was to work with. Such a sudden change of mood – from hope and excitement to fear.
>
> Now Roger has rushed over to try to comfort Ante and give him advice about what to do and who to call… By the end of the day, Ante had joined the metalworker's union and talked to them to see what kind of help they could provide for him in this situation.

Roger, Ante's childhood friend from their village in Tornedalen, had long been an active member of Gruvtolvan, the Kiruna chapter of the national metal workers union IF Metall. As part of his union responsibilities, Roger travelled between LKAB and Boliden's mines in Kiruna and Gällivare, as well as to other sites further afield, like the SSAB steel works in Luleå. In each place, Roger and his union colleagues learned about workplace issues of concern from employees, provided advice and information, networked with their union counterparts, and attended to organizational matters. They also hosted events aimed at recruiting workers in the mining and metals industry who had yet to join the protective umbrella of the union. Several recent high-profile accidents at LKAB and SSAB's works had brought to light the precarious position of subcontracted laborers in the mines and steelworks and had inspired Roger to become more involved in worker's issues. "The company", as Roger put it bluntly, "is not your friend". Drawing on his knowledge of worker's rights and the responsibility of LKAB to ensure an equitable workplace, Roger's advice to contact the metalworker's union proved successful:

Gruvtolvan's representatives informed Ante's supervisors that this incident was a clear case of harassment within the workplace and were prepared to put pressure on the company until it was addressed. After meeting with the union, Ante's supervisor found alternatives so that he would no longer have to train with that instructor – who would also be formally reprimanded – and ensure Ante was given the same fair chance to pass the test as all the other trainees.

The rapid shift in the supervisor's response – from dismissal to action – underscored how this discriminatory treatment was most effectively recognized when filtered through the framework of labor rights and relations. While in Sweden experiences of racial discrimination are often marginalized, labeled as "exceptional" or not indicative of greater inequalities (Pred 1997, 2000; Hübinette 2012; Loftsdóttir and Jensen 2012), in Ante's case the supervisor's accusation that Ante was an ineffective (inattentive) worker were recognized by the union as grave – it could threaten Ante's ability to continue working at LKAB. The supervisor's accusation, however, also went beyond this retaliation against a subordinate. The supervisor's counteraccusation implied that Ante was an ineffective worker *because* he was Sámi, claiming Ante had made up the supervisor's racist abuse to cover up for his inattentiveness. The union's recognition of this abuse of power – whether the discriminatory talk was a decisive factor in finding in Ante's favor – was doubly necessary considering the circumstances: nearly seventy-five years after Lars Pingi took a job on the railway, Ante was still being stereotyped as ill-suited to rail work because he was Sámi. This time, however, his rights as a unionized worker trumped the supervisor's bullying, protected by well-established labor relations and mechanisms in place to do so. There were also other colleagues at the workplace who'd helped him secure a just outcome, like Roger and the other trainees who recognized the inequity of the situation, lending their moral support and/or corroborating Ante's account. In the end, Ante felt that this had been a satisfactory resolution and was quickly able to put this negative experience behind him. He felt secure enough to return to complete his training, and still works at LKAB today.

The week's events, however, also vividly highlighted how mine and city space – including rail infrastructure – remain fraught for Sámi people. Reflecting on the instructor's bullying the afternoon it happened, Ante emphasized how this treatment literally made him feel out of place: "Today, I was walking along the lake [Luossajärvi] next to the railroad,

they are emptying it...you know, they made a hole in this mountain, and I felt so Sámi then. What am I doing here, anyway? This is so strange. So surreal. How unexpected." Ante's self-described estrangement as a Sámi person, from the railway and but also the mountain and lake, underscored the conceptual and affective alienation settler colonial space can generate. Like the mining deformations which grow as the ore is extracted, Sámi spaces and senses of belonging are also continually fragmented: settler colonial spatial insist on associating Indigenous people as outside, or disqualified from claiming the right to, urban and industrial space. The instructor's harassment, which had centered on Ante's presence as a Sámi person in a space – on infrastructure – he perceived as *not for Sámi*, upheld settler conceptions of space and society that geographer Jay T. Johnson terms the "imperial binary": spaces categorized as either belonging to colonizers or the colonized (Johnson 2010, 274). Indeed, such a binary, as Henri Lefebvre would argue, intentionally erases the actual interpenetration and superimpositions of space, "giv[ing] rise to an appearance of separation between spaces where in fact what exists is an ambiguous continuity" (Lefebvre 1991, 88-87). This ambiguous continuity is a feature of many settler colonial contexts in the world today and generates conditions under which aspects of settler colonial ideology, such as the notion of Indigenous authenticity (i.e., difference) remains the conditional basis for legitimacy, rights, and recognition (Povinelli 2002; Veracini 2010). Like the mine deformations, which crack buildings and render the surface of the earth unstable, settler colonial space and the inequalities they co-produce in Kiruna continually fragment Sámi social worlds. Alternative forms of co-existence – decolonized social relations – are continually undermined, and the ongoing harm the social production and re-production of extractive settler space causes for Sámi remains diffused, at times invisible, and difficult to apprehend in its totality (Povinelli 2011, 132).

A second way in which Ante was made to feel out of place was in the instructor's equating him with a reindeer. In doing so, he referenced an anti-Sámi discourse particular to Northern Sweden, where dozens of reindeer are killed each year while crossing railroads or roads[52] in

52 Depending on the grazing conditions and the climate – as when overly wet winters lead to freezing and melting that "locks" their food under layers of ice – reindeer will be drawn to roads, where there is less snow, salt, or wander across highways and railroad tracks in the search for better grazing. Between 2011 and 2015, the *čearru* of the Ore Fields experienced the highest number of reindeer killed in traffic accidents in the nation (Sametinget 2018a).

Norrbotten. The *čearru* of the Ore Fields – Kiruna and Gällivare Municipalities – today experience the highest number of reindeer fatalities due to vehicle traffic in Sweden. During the late winter and spring, when the reindeer graze along roads, there are always reindeer who are killed by trucks and cars as they cross highways or stop to lick salt (to de-ice the asphalt), evidenced by their corpses along roads leading to and from the city. Each death is an upsetting event for any reindeer owner, even if is not their animals who have died; pulling over to inspect the earmarks of a deceased reindeer, a herder reads the earmarks to find out who the reindeer belongs to and makes a grim phone call to the owner to report the accident. To reduce these fatalities, the *čearru* work together with LKAB and the Swedish Transport Administration to pause rail traffic during migratory periods so herders can lead the animals over the railroad from their summer to their winter pastures east of the city. Reindeer on the roads or rail – and the delays this may cause – are a source of complaint amongst some residents of the North, who see reindeer as a nuisance, unruly, or "stupid" animals. Reindeer killed by traffic, according to such views, do not die natural or accidental deaths: they either bring it upon themselves by not being "intelligent" enough to avoid roads or are rumored to have been led there by craven Sámi seeking monetary compensation form their deaths[53]. In spaces with settler colonial legacies like Kiruna, Sámi and their reindeer thus continue to be cast as "matter out of place" (Douglas 2003) others whose embodied difference both disturbs and justifies the majority order (Gullestad 2002).

In Kiruna, as elsewhere in the world, the production of urban and industrial space and infrastructure has been a key means through which settler colonial social orders have been materialized (Blomley 2004, Mar and Edmonds 2010, Porter and Yiftachel 2017, Cowen 2020). Urbanization under settler colonialism, premised on the displacement of native people from their lands, is underpinned by transformative spatial imaginaries of cities and infrastructure as by default "not Indigenous". Indeed, settler colonial cities, as urban scholars Libby Porter and Oren Yiftachel (2017, 177) argue, occupy Indigenous land and yet simultaneously "render Indigeneity profoundly out of place". The mine, understood as the reason for the existence of the city, is continually represented, imagined, and

53 Compensation for reindeer killed by vehicles is negotiated between the Swedish Transport Insurance Agency (Trafikförsakringsförening) and The Swedish Sámi National Association (SSR). Owners of Reindeer killed by trains are compensated by the Swedish Transport Administration (Trafikverket) See: Sametinget 2018a.

enacted as a non-Indigenous space. The instructor's racism functioned not only as a form of bullying and discrimination but as a way of marking the space of the mine as space in which Indigeneity is out of place. Indeed, as sociologist Camilla Hawthorne observes, racism is also a *spatial practice* – racism doesn't just unfold in neutral, blank space; it makes and transforms spaces (and people) as well (Hawthorne 2019; see also Pred 2000; Lipits 2011). While early Kiruna was marked by a racialized exclusion of Sámi, Kiruna today can be more accurately described as what anthropologist Donald Moore terms an "entangled landscape" – a space produced through the intersections of multiple spatialities, temporalities and power relations (Moore 2005, 4). Such entangled landscapes, according to Moore: "sugges[t] knots, gnarls, and adhesions rather than smooth surfaces; an inextricable interweave that ensnares; a compromising relationship that challenges while making withdrawal difficult if not impossible. Attempts to pull apart such formations may unwittingly tighten them." This entanglement, as well as the near impossibility of withdrawal, were highly visible in the case of Ante's workplace bullying. As an Indigenous person and reindeer owner with extensive ties to the land on which the mine was built – and whose wages from the mine he could invest in remaining at home, close to family and his animals – he was made to feel out of place and faced discriminatory attitudes in attempting to do so.

Ante's experience of alienation caused by the bullying – magnified as he looked out upon the destroyed lake and mountain – also highlighted how the effects of spatial representations of Indigenous people and land as waste, or "wastelanding" is manifested in extractive settler contexts (Voyles 2015, Gross 2019). As environmental historian Traci Brynne Voyles argues, "'wastelanding" is both a spatial and social signifier, a "discourse-made-material through the degradations of targeted environments and their human and nonhuman denizens" (Voyles 2015, 8-10). Voyles develops the notion of wastelanding in the context of uranium mining on Navajo land in the American Southwest, noting that it takes two primary forms: "the assumption that nonwhite lands are valueless, or valuable only for what can be mined from beneath them, and the subsequent devastation of those very environs by polluting industries" (ibid.). Wastelanding – in many ways the counterpart to the production of untouched and pristine "wilderness" – produces space by rendering it valueless, only to then assign it value later through settler colonialism and extraction. In the American Southwest, the impacts of uranium mining and milling are not only the pollution of the environment and Indigenous

bodies, but the pollution and marginalization of Diné epistemologies of place and place-making (ibid., 154).

Similarly, Ante's experience of racialized bullying rendered him, for a moment, devalued and disposable: just as the land and water was disposable in the name of extracting economically valuable minerals, the land was rendered less valuable as Sámi land, it's social and cultural significance of discounted. In the Canadian Treaty 6 First Nation territory of Northern Alberta, the site of the tar oil sands extraction industry, anthropologist Lena Gross (2019a, 2019b, 2021) observed similar wastelanding processes at work. Gross notes that Indigenous workers linked their experiences of racism, disrespect, workplace accidents, and poor health to working in the industry and to the environmental degradation of their homelands. Being forced to set fire berry picking lands at the behest of their employers, for example, Indigenous oil sands workers were all too aware of the harm these acts caused to their social relations with the land, the Creator, and to future generations (Gross 2019b, 88-89). Others attributed the disrespect they endured as Indigenous workers – in the form of racist comments and disparaging remarks about the land as ugly or boring – from co-workers to the development of chronic illnesses like diabetes, reflecting Cree understandings of health as not limited to the physical body but including social relations with people, animals, land, and cultural identity (Gross 2021, 20).

Indeed, Ante's experience of being made to feel out of place in Kiruna was also far from unique. Workplace bullying based on Sámi heritage was something other people I knew experienced in Kiruna and was not limited to the space of the mine (for example, restaurant work in the city). Being "marked" as Sámi in the city by speaking North Sámi, having a Sámi name, wearing traditional Sámi clothing, or bearing a typical Sámi knife on one's belt (used in herding work) could lead to unprovoked verbal abuse, even towards children. While Sámi cultural symbols and material culture were celebrated in certain contexts[54], many of my Sámi interlocutors also often spoke of the city in ambivalent or negative terms. Working, living, and moving about the lands generations of their families had inhabited and used, as Sámi people they and their animal relations were at times made to feel unwelcome in spaces they saw as a homeland, but that others now also saw as *their* home, one – for better or worse – dependent on extractivism.

54 The door handles of the former and current Kiruna City Hall were designed by the Sámi duodji artist Esias Poggats and made to resemble small shaman's (noaidi) drums.

In the following section, I turn to the stories of other reindeer owners I got to know who, like Ante, also combined waged labor at LKAB with reindeer herding. Their narratives further highlight dilemmas Sámi reindeer owners face in taking industrial work as members of a group particularly affected by the impacts of mining, but also how "double work" (reindeer ownership and wage labor) constitutes "projects and practical intentions" aimed at sustaining Sámi space and places – "where energies derive and whither energies are directed" (Lefebvre 1991, 191).

Brokering Mitigation

Isak, a mine manager at LKAB, recognized the complexities of being a Sámi reindeer owner in mining industry well. A tall, lean man in his forties with closely shorn hair and a wide smile, Isak was also a reindeer owner in one of the local *čearru*. Employed full time in the mining industry, he kept his and his children's animals in the same *siida* where a relative was a *husbonde* and participated in the reindeer work as often as he could. Though he was active within his *čearru* and his family often participated in reindeer work, he was not technically considered a reindeer herder (*renskötare*), as only those whose majority income is from herding are reindeer herders according to Swedish law (SFS 1971:437, §11).

I'd first got to know Isak after I'd wound down my first interview with Margareta one afternoon at the *čearru* summer village in the mountains near the Norwegian border. Isak, who'd been listening to the conversation along with other members of the family, remarked that he found this all very interesting, and, as it happened, he worked at LKAB if I wanted to learn more. We made an appointment to meet a few weeks later at his office in the industrial neighborhood of Kiruna, an area of low buildings housing machine repair workshops, workwear boutiques, subcontractor offices, building and hardware suppliers, and many other businesses servicing Kiruna's industrial sector. Isak worked for a subsidiary of LKAB which focused exclusively on the heavy production side: drilling, tunneling, blasting, concrete manufacturing, rock reinforcement, crushing and unloading, and gravel production. Sitting down in his office, a few personal touches peeked out from behind his large desk – a postcard of reindeer, a photo his family in their *gáktis* – otherwise occupied with binders of paperwork and miniature models of loading trucks and excavators. Isak had begun his career in the mining industry early on. He trained as an

electrician and worked for an industrial equipment manufacturer as a technician, servicing drill rigs underground in LKAB's Kiruna and Malmberget mines. After a couple of years, his employers offered him the chance to take on more responsibilities – to "take the next step" – becoming a work leader, then manager for the company's Kiruna operations, then regional manager for the Ore Fields, and eventually the head of service at the national level. Isak had started his current job as a mine manager at LKAB in 2013, one year after we had met at Margareta's house. At present, his work was focused on overseeing the re-opening of the three open-pit mines in Svappavaara. One of these mines, Gruvberget, had been in operation since 2010, and LKAB planned to reopen two previously closed mines, Mertainen and Leveäniemi, by the end of 2015.

Having gotten to know Isak in exclusively Sámi social or reindeer work contexts, I was curious about how he made the decision to work in the mining industry. Through his mother's family, Isak had grown up as working with the reindeer alongside his relatives. "Of course, I have always been interested in reindeer herding and for a while – I think I was twenty-five years old – I even had two choices. Go and work in the mining industry, or work with reindeer herding," he said. "But I didn't dare go into it because of all the economic aspects. So I had a long discussion with my family. And I didn't dare to take the step." For Isak, as for many reindeer owners, the "next step" of committing to full-time reindeer work was a path already pitted with uncertainty, and with tough economic circumstances. Nevertheless, his passion for reindeer ownership and herding never wavered. When he began working as mechanic and service technician, Isak recalled the intensive pace of "double work", reindeer herding combined with shifts in the mine: "I worked for seven days and then I was off for seven days. And all those seven days I was in the reindeer forest, and then I'd go back to my job". As I reflected on this arrangement – noting I'd heard similar stories from other herders – Isak nodded knowingly. "I think it's quite common for my generation," he said.

From Isak's point of view, one positive aspect of being involved in the mining industry as a local Sámi reindeer owner was the ability to influence and, hopefully mitigate, the negative impacts of LKAB's operations on the reindeer. As someone familiar with both "lives" of reindeer herding and mining, Isak felt that he had much knowledge to offer:

> Of course, you see that they are two different kinds of lives. Different kinds of ways of looking at things. I can take with me what I know from the herding to LKAB, for example. And explain for them how it works

> with the reindeer herding. Of course now when we have stopped...if you look at the Mertainen mine, in Gábna *čearru* area, when they're planning for something, I can tell them [LKAB] that 'You cannot make a wildlife passage for reindeer like that, it's too narrow, you have to widen it. You cannot go to Gábna *čearru*, they will say no instantly.'

Isak saw his work at LKAB as a potential, if informal, avenue for informing non-Sámi about why and how mining operations affect reindeer herding:

> I think it's important to have this kind of dialogue, because people...they don't know...even if you're from Kiruna, you've been raised up in Kiruna, you don't know so much about reindeer herding and how it works, how the reindeer moves and so on. So, you have to get that information to them so that they understand. I think that's one of the reasons why there can be conflicts. Because you don't know how it works and you don't get the right information.

The lack of understanding about how reindeer herding works in practice was a problem that many Sámi reindeer owners I knew pointed to as a major issue – both in consultation with economic actors who wanted to exploit Sámi lands and within Swedish society in general. That *čearru* were even consulted about development on herding lands was a new practice; in Kiruna, a *čearru* board member I spoke with noted that consultation between the Kiruna *čearru* and LKAB only really began after the decision to move the city in 2004. I asked Isak what it was like before the practice of consultation (s*amråd*) between Sámi and development actors became more commonplace (Klocker Larsen and Raitio 2019**)**:

> I think it was not too good, at all. I think if you talk with all Sámi people, they can tell you that LKAB and all the big companies, they never asked anything. They only built. And then you had to accept it, and you had nothing to say about it. But nowadays, now you can early in the process come in and take that dialogue with them [LKAB].

However, whether LKAB or other development actors listened, understood, and considered Sámi knowledge, values, and rights to land as Indigenous people was questionable. Specific duties to consult Sámi are not yet legally required in Sweden, unlike in Norway and Finland (Allard 2018, 33). Furthermore, the corporate *samråd* consultation process, linked to greater EIA (environmental impact assessments) rules in the Environmental Code, is not a mandatory requirement. This process

furthermore treats reindeer herding communities as any other stakeholder, does not involve the state in any way, or stem from responsibilities toward the Sámi as Indigenous people (ibid., 34-25). As a Sámi reindeer owner in the mining industry – and as an employee with some power in the corporate hierarchy – Isak thus saw his presence as an opportunity to educate his colleagues of the implications of mining upon the reindeer. This was an ambiguous role, however, one that required crafting a sense of neutrality, of not favoring one side over the other:

> Everybody at LKAB that works with me, they know that I have reindeer and that I'm with my *čearru.* And so, when it comes to discussing economic aspects, I don't participate. I choose to not be with it, because I think, we call it *jävig* (conflict of interest) ...I have economic interests in it [reindeer herding], and I cannot be part of that discussion. So, it is very important to me to tell them [LKAB] in the early stage that I cannot be a part of that. Of course, I can inform them how I think...well, from my point of view. But I won't be in the negotiations.

Isak pulled out a map depicting the proposed Mertainen complex. "If you look, this is the Mertainen mine, and the road. And when you move with the reindeer it is here, traditionally it is going like this." He pointed to a spot on almost directly in the middle of the mining area:

> But of course, they're going to establish a workshop and so on there. Then they discussed… here you can see the new path, the ecoduct. This is the one our *čearru* has agreed on. In the beginning, we had five different places where it could be situated. And we said, this is the best one of them. So of course, they have much to say about the place to put things, but of course, if we had town choice on this, it wouldn't look like this at all.

"The mine wouldn't be there at all", I said, looking at the complicated puzzle of mine space and the migration path on the map. "No, not at all", Isak agreed. "But they [the *čearru*] know they cannot stop the mine, that's what they told me. So, we had to look at what would be the best for us." Isak's efforts to act as an informal broker of knowledge between the two "interests" on one level, reflected a practical strategy to fill a perceived non-Sámi knowledge gap about herding in and through the workplace. As an informal broker, however, his moral ambiguity was heightened and conspicuous (Lindquist 2015, 873). This he addressed through abstaining from economic decision making for mining operations which could negatively affect reindeer herding. This was a challenging stance to adopt,

however, as this positioned Isak as primarily an economic actor, reflecting state and corporate interpretations of reindeer herding as one industry among other industries, rather than an Indigenous cultural practice and livelihood (Raitio, Allard, and Lawrence 2020). From another perspective, Isak's different approaches could also be seen as a pragmatic: acknowledging the asymmetry in power relations while also signaling a willingness to cooperate and cultivating opportunities to be an advocate for reindeer owners outside of the consultation framework (Kuomu 2020).

Our conversation also highlighted how Isak's efforts to communicate the spatial and cultural complexity of reindeer herding were undermined, or effaced, through abstract representations of space, such as the maps. Abstract space depends on the existence (or appearance) of consensus, as if there were "a tacit agreement, a non-aggression pact, a contract, as it were, of non-violence" (Lefebvre 1991, 57). In the map of the mine complex, Isak had pointed out the five different options the *čearru* had been given for the construction of an "ecoduct", a fifty-meter-wide asphalt bridge, or wildlife passage. Mertainen, a small test drilling pit three kilometers south of Kiruna last used in the 1960s would now be expanded to a fenced off mine complex encompassing ten kilometers, directly in the middle of autumn migration routes and winter pastures two Čohkkiras *čearru* have used for at least five hundred years (Kiruna kommun 2012b, 64). The proposed ecoduct Isak pointed out would cross the E10 highway just south of the planned mine area, and it was hoped the reindeer would adapt to this new path, which would also be covered by dirt, moss, and trees to make it blend into the environment.

What the maps represented, however, was an abstract space, a neutral world in which reindeer herding and mining could co-exist, given the proper bridges, gates, fences, or other technical modifications. Isak and I were both aware of what these maps did not depict: the sound and air pollution from the mine complex and the highway, constantly busy with heavy industrial vehicles and machinery. These conditions would be difficult for both herders and reindeer to adjust to during migrations, it was even possible: reindeer are highly sensitive to noise and other disturbances they might avoid already scarce grazing areas adjacent to the mine, or possibly scatter into other *čearru* territory, making more work for the herders. Similar bridges had already been built in the lands of other *čearru*, both in the Kiruna and Gällivare areas. These ecoducts, such as the one at Boliden's Aitik copper mine in the lands of Gällivare Forest *čearru*, rarely materialized the safe passage promised by the technofix of the ecoduct.

Here, herders noted that the noise and disturbances from the mine complex made communication between herders and reindeer difficult, and therefore migration harder than before (Lawrence and Larsen 2019, 59). The proximity of the ecoducts and increased fencing around the Aitik mine complex also had resulted in reindeer wandering into the mining complex and drowning in tailings ponds or being killed by trucks or other machinery (ibid., 60).

Considering these ever-present industrial threats, I asked Isak what he thought the future of reindeer herding looked like in the Giron-Kiruna area. Isak noted that it wasn't only mining that was the problem, but other kinds of extraction – the timber industry, wind farms – that had been ongoing for many years. Like many local herders I spoke with, he didn't have the most optimistic view of the future for reindeer herding, exacerbated by the accelerating loss of the means of production – land – needed for reindeer herding.

> I've been looking at this for a couple of years now, and I can see reindeer herding isn't growing. Instead, it's going down. It's hard to live on it, to work with the reindeer today as you did in the early days. Today you need snowmobiles, you need two cars, petrol, houses in the winter land and in the summer land, all these costs a lot of money. All the impacts from the forest industry, the mining industry, and other things. If you want to get profit, real profit from the reindeer herding, you have to see the reindeer growing, get more and more so you can sell. So you can get income from the reindeers.
>
> But as I see it now, when you're looking at the autumn, when you're going to get the biggest income from the selling of the reindeers, I don't think most people sell because they have nothing *to* sell. And that's a very bad situation. Instead, they keep the reindeers they have, and they do work alongside reindeer herding. They can work in the mining industry for a couple of weeks and they can work in the village making corrals and repairs and things, and they get their money from that [the wage labor]. A lot of people who herd reindeer have a very difficult time living only on reindeer herding. And if you look back in the eighties, when the reindeer...back in those days, you can see that then people could live only on reindeer herding. But if you look today, some do of course, but not all of them.

Isak foresaw many more in the future dividing their time between wage labor and reindeer herding as he did, what he described as "hobby herding". This expression, which I had heard before, did not have a completely positive connotation (see also Beach 1981, 300). One problem with this

move towards part-time herding, as Isak noted, was that as some reindeer owners began to depend less on the reindeer as a primary source of food or income, this created conflicts within the *čearru* regarding the planning of work, which must be done collectively.

> It is tricky, I know in our *čearru*, some people they want to sell reindeers and gather them in the autumn and get them down near the road [to get them down to the trucks and sell them]. Some other guys, they say 'no no no. We don't need that. We're not going to sell anything. So, it can be some conflicts there, because there are some who want to sell and some who don't. But of course, they have to agree on what to do, because you have to gather all the reindeers and make a decision. Are we going to go down to the roads, or are we not?

Isak's diagnosis of potential futures underscored the dilemmas that herders faced as members of a collective (the *čearru*) with highly individualized possibilities and life circumstances determining the extent of their participation in reindeer herding as an industry rationalized and regulated by the state. Here it is necessary to pause and note that a complete discussion of the complexity, nuances, and dilemmas of rationalization is beyond the scope of this thesis (see Beach 1981 for an in-depth analysis). However, in order to show why herders in Isak's *čearru* faced such dilemmas, it is necessary to understand the constraints within which herders must act.

First, a figure: members in Leaváš *čearru*, for example, can collectively own a maximum of eight thousand reindeer, sometimes referred to as a "carrying capacity" for winter grazing areas. Herd limits, the notion of "rational herd size" and "total reindeer quota" were introduced as part of the Reindeer Herding Act of 1971 (with subsequent amendments in 1992, Proposition 1992/93:32), introducing the so-called "rationalization" era reindeer herding (Beach 1997, 128). Hugh Beach (ibid.) succinctly defines "rational herd size" as:

> …the commonly used term to define for a Sameby [*čearru*,]the greatest number of reindeer (of an age/sex composition to yield the greatest yearly profit) which can be regularly sustained on the seasonal range (usually the winter range) that forms the bottle neck in the Sameby's annual grazing cycle – that is, without endangering regenerative capacity of the pasturage…"Rational herd size" is a term whose origin lies squarely with herding authorities, is grounded in the concepts of the Western market economy, and does not concern itself with satisfaction other than dollars and cents (within sustainable bounds).

The state's purported goal of herd management and rationalization in the 1960s and early 70s was to raise the living standard for herders, as studies in the 1950s of Sámi infant mortality revealed statistics so dire that they lowered the national average (Beach 1997, 125). In response, the government created a program to rationalize the structure and production of reindeer herding– the Reindeer Herding Act of 1971 – simultaneously dissolving the *Lappväsendet* and transferring the administration of reindeer herding to the Department of Agriculture[55] (Beach 1981, 287). Beach notes that beyond the concern with living standards, the justifications for rationalization were vague, linked to goals for the rationalization of agriculture, and business profit was given the greatest priority (ibid.). At this time, the agricultural branch viewed reindeer herding as "inadequate source of livelihood for many herders", citing the low income of herders and the fact that herding had "not been able to make the best of gains from rationalization" in comparison to agriculture (JoU 1971:37, 30, in Beach 1981, 288). Rationalization via limiting herd sizes was introduced as a purported means of raising living standards for herding families, but also a way of "preserving" the Sámi culture. This was to be achieved through the introduction of minimum income limits that herders should meet to reach the state's standard of living calculation and be considered full-time herders. In 1971, this amount was 50,000 SEK per year – with inflation in 2021, approximately 386, 000 SEK (45,000 USD) per year – the estimated gross income from an individual herd of 350 reindeer (Beach 1981, 295). A consequence of this was the creation of a system that favored fewer, larger herders and incentivized forcing out smaller herders to increase the resource/consumer ration for those remaining (ibid.) Beach observed that these not only placed herders and *čearru*, but also Sámi political organizations, in double-binds: in order to prevent even more people from leaving herding, smaller herders had to be protected, but so did the traditional right of herders to grow their herds larger. Rationalization thus created a legal program through which smaller herders could be forced out,

55 Anthropologist Hugh Beach has classified relations between Sámi and the Swedish state according to three chronological phases: the taxation era, the policing era, and the rationalization era (Beach 1981, 277). The rationalization era is the latest of these. Beach further argues that "…if we interpret the term "rationalization" to indicate a program designed to maximize the profitability of resource utilization for the State, then we may claim Swede-Saami relations have been dominated by rationalization ideology since the colonial encounter." (Beach 1981, 277)

and herders were forced to make a difficult and "painful contest between living standards and culture" (Beach 1981, 294).

Hugh Beach further observed that supportive jobs, like part-time work in the mining industry, is one way that herders could afford to keep constant herd sizes and their position within *čearru*, but that required a complex balancing act dependent on the availability of regional employment (ibid). LKAB, the region's largest employer, is a main source of these flexible jobs in Kiruna. This allows smaller reindeer owner like Isak to keep reindeer as many (or as few) reindeer as they wish, though having a larger number of animals would inevitably require more time and work dedicated to herd upkeep incompatible with full-time wage labor. As a self-described "hobby herder" with a limited number of reindeer[56], Isak thus kept his animals to produce household products (meat, skins, antlers) and to maintain the ties to the practice on behalf of himself and his children, as well as to the land, knowledge, and language that constitute the world of Sámi reindeer herding. Participating in reindeer herding, even on a part-time basis as Isak did, was meaningful not only to the individual but the collective. It contributed to the material maintenance and support of domesticated herds, and work and workers needed for tasks within the *čearru* (repairing fences, clearing vegetation from corrals). In practicing herding, even on a limited basis, herders thus contribute to the maintenance of the physical and legal space of the *čearru*, to Sámi people's rights to land, water, hunting, and fishing in country where the recognition of Sámi land rights is otherwise non-existent (Torp 2015, 112).

Double work, double binds

Combing work in the mining industry and reindeer herding also placed reindeer owners in in difficult double binds. During the minerals boom and the construction of the new mine main level, KUJ 1365, opportunities for jobs at the Kiruna mine were plentiful. In 2011 alone, LKAB hired four hundred employees and aimed at recruiting an additional twelve hundred

56 The reader will note that I have not given specific figures regarding the number of reindeer individuals own in this thesis. This is because I never asked anyone how many reindeer they have. This is considered a highly personal question, equivalent to asking someone how much money they have in a personal bank account. However, if a herder is unable to afford to sell any reindeer, harvests only for household use, derives all their income from non-herding sources, or refers to themselves as a "hobby herder", one can be sure the number is quite small.

employees by 2015.[57] One of these workers was Niklas, a man in his mid-forties who I'd met in a reindeer corral held by one of the Čohkkiras *čearru*. I'd complimented him on his safety eyeglasses with plastic guards on all sides, which I thought were very clever to have when working in clouds of dust, dirt and rocks kicked up by the reindeer. Why didn't we all have those, I wondered? Niklas laughed and responded that when he wasn't in the corral or "in the forest" he worked as a caretaker in the LKAB Kiirunavaara mine, where the safety eyeglasses were required as part of the work uniform underground.

We agreed to meet in Kiruna later to talk more about how he combined reindeer herding and mine work on a less busy occasion, when there weren't hundreds of reindeer running around in a tiny corral to keep an eye out for. A few weeks later, we met for lunch at Safari Café in the city center, just before Niklas headed off to work an afternoon shift at the mine. Niklas worked for a subcontractor to LKAB, a job he'd had for about a year and a half. As a caretaker his work included the maintenance of the personnel areas, from janitorial duties in the underground breakrooms to offices. This was the first full-time job he had ever worked in his life, as part-time work was something he'd always aimed for: "I've worked like that all my life because I want to be free. I want to feel free so I can decide what to do every day. When I wake up in the morning, I want to decide, am I going up to the mountains today, or something else?"

As we sat down with our lunch in the busy cafe, I asked Niklas what he thought about the ongoing urban transformation, something I asked almost everyone I met in or around the city. Niklas quickly pointed out that one's view on the matter depended on how one was affected by it. As a reindeer herder and a worker at the mine, he was affected in different ways. "It depends on what side you see it. If you see if from my Sámi side, it's going to be big and bad changes. From my other work [working at the mine], it doesn't matter. But I'm a little bit worried." He noted the relocation of the E-10 highway was a particular concern for his *čearru*, as it was in the middle of a migration path and would require some *siidas* to navigate a new and untried "ecoduct" wildlife bridge over the new highway. I'd heard similar concerns about the ecoduct voiced by other herders, who worried that the ecoduct was much too narrow, in the wrong location and too close to industrial areas, and that the reindeer would get confused by having to walk over something so alien.

57 The additional twelve hundred workers were never hired.

When I asked Niklas if it was possible to reconcile the tensions between these two "sides" of his work, he laughed. "Hah, no not really. You know, I wake up and ask myself, why am I working at the mine? I have big issues about that." He continued:

> But, like a friend of mine [another herder] said – who was talking about this a couple of months ago – he said a thing then that I thought was really good to hear. And I saw it wasn't only me that was thinking this way. Ok, it's not good that this is happening. But why should you have to worry about things that you cannot control? It's like choosing between plague and cholera. He also works at a company [mine subcontractor] during the year, because if he cannot sell enough reindeer to survive, he says it's better to work at the mining company and get that money. And I realized, okay, I feel that way too.

Niklas' assessment of his choices as between "plague and cholera" underscored the tough dilemmas that combining work in the mining industry with reindeer ownership entailed. As a father, Niklas was acutely aware of the pressures of supporting a family in addition to the reindeer, a balance he thought had become more challenging in recent years. To be able to survive, many herders like Niklas had to take additional work, ideally seasonal, with a flexible schedule, or with regular periods of time off they could use to work with herding[58]. During this time "off", reindeer owners worked with their *siidas* to migrate to seasonal pastures, hold round-ups, calf-marking, slaughters, and to drop off supplementary food in the winter forests if reindeer were unable to reach their natural pastures, among many other tasks that needed to be done for their own herding, the *siida*, or the *čearru*. In Kiruna, most jobs of this kind were within the

58 While Niklas' work schedule shifts did not adhere to the mine's twenty-four-hour schedule, this was the case for many, including Ante and Roger. At the time I was in Kiruna, most work along the production chain in the Kiruna mine generally followed the K3 or K5 schedule: K3 consisted of 14 days of morning, afternoon, and night shifts followed by one week off, and K5 consisted of 14 days on, followed by a week off, a week on the night shift, followed by another week off. Each shift was on average 8.4 hours long, including time to change in the work rooms and arrive at their various workplaces spread out in the vast complex. Workers on the K3 and K5 shifts receive between 14 – 28% additional pay for working underground and certain shifts. Shift forms vary depending on the workplace within the company by subcontractor. At major subcontractors, shifts are structured according to negotiated agreements, such as the Mine Subcontractor Agreement and the Machine Operator Agreement. LKAB made changes to the shift structure in 2017, with the average workday increasing by 30 minutes, and unpaid lunches of 36 minutes, for a total of 10.2-hour long shifts.

mining sector, the industry perhaps most responsible for the destruction of land necessary for reindeer and reindeer herding in Kiruna. In this context, Niklas' analogy of choosing between "plauge and cholera" was particularly meaningful as both choices led to death in different ways: participate in an industry which kills the environment necessary for herding and undermines the collective survival (see p. 160-161), or experience a kind of social and cultural death – to cease being a reindeer herder – if one cannot afford to continue herding. This dilemma further reveal ways in which settler colonialism continually exerts pressure upon Indigenous people to leave land, or at least cease to be people with rights to use land. Because settler colonialism's primary aim is the acquisition of Indigenous space in to replace it with settler space, the elimination of Indigenous people who can claim land – reindeer herding being *the* Indigenous claim to land in Sweden – could be one way to achieve this aim (Wolfe 2006, 388, Wildcat 2015).

These predicaments unfolded generationally as well. As a young man, Niklas had grown up working with the reindeer intensively, living up to eight months of the year in the mountains near Norway with his parents. It was not until he was about twenty-three years old that he "moved down" and started spending more time in Kiruna than in the mountains. For his father's generation, the changes had been even greater:

> My father's generation had the biggest change of all. Because they grew up in a tent (*kåta*), no cars, no snowmobiles. Suddenly in the 50s, 60s, the snowmobiles and cars arrived. And electricity arrived. Everything. My father said they moved into their house in 1954 or 1956. They had been in houses of course – gone to school in Jukkasjärvi, lived in houses sometimes. But this was their first house. With electricity and a toilet inside.

As a parent, Niklas was highly aware of the challenges Sámi youth faced in taking work in the mining industry. His views echoed those of several parents, both Sámi and non-Sámi, who often insisted that they did not want their children to work at the mine, which they equated with getting "stuck" in the city and not pursuing higher education. At the same time, depopulation was a frequent concern for many in the community, highlighting a further double bind, one of dependence on the mining industry for jobs that would both keep residents and attract new ones to the region (B. Nilsson 2010; Suopajärvi, et al; 2016, Gross 2019a). "For many young children, for the younger generation, the first work they have after school is work at the mine and they are destroyed forever", Niklas said:

> Yes, the young ones, the ones who start to work at the mine. They are destroyed forever. They cannot take another job because they earn so much money. They don't know how to spend it. For them, when and if the mine is closing, let's say it closes in ten years, a lot of people are going to be in trouble.

Niklas' oldest son, whom I had met at corrals, also worked in the mining industry, and was interested in "starting with the reindeer", as Niklas phrased it (i.e., to grow his herd and invest more money and time in herding). While he was supportive of his son's ambition to do so, Niklas was also very concerned that his children do not get "stuck" in Kiruna, either working with the industry *or* in reindeer herding – which, it was increasingly clear, required waged work as a supplement for many. As many parents in Kiruna wished their children would avoid going directly to work in the mine, Niklas saw the dependence on mine work as particular vexing for young Sámi reindeer owners. "In Kiruna, many of the young people who work with the reindeer could not survive without the mine", Niklas said bluntly, pointing to the unstable boom and bust nature of the mining as a potential risk for young Sámi herders involved in "double work". He described how the expanding destruction of land caused by mining exacerbated this precarity, something that had not been as acute in his own youth:

> If there wasn't a mine here, I think – I must find the words to explain – when the mine is here, we need snowmobiles, motorbikes, quads, cars, everything, and drive long distances, because it is such a big area that has been destroyed by the city, by the mine...so we have long distances to travel.
>
> Before we didn't need to have those things. I remember when I was young and I started in the herding work, I knew the days when I was out in the winter, going around [to check on] the herd, doing that with skis, cross-country skiis. Because it was just a few kilometers away. Very easy, no traffic, no people who were driving snowmobiles for pleasure. We didn't need the snowmobiles, because if you drive a snowmobile it leaves tracks and the reindeer follow the tracks. Reindeer are like people – looking for the easiest way to travel. When you drive with a snowmobile it leaves a hard track, but when you go with skis it doesn't.

Niklas' and Isak's reflections on the dilemmas and double binds facing reindeer herders in the mining industry illustrate the multifaceted impacts of extractivism on the lives of Sámi double-workers. The expansion of

settler space – mine, city, infrastructure – continually forced herders to adapt to blocked off migration routes, destroyed grazing areas, and noise, making the work of herding more difficult and unpredictable. At the same time, new generations of reindeer herders invested local jobs from mine earnings into being able to live locally whilst also growing their herds, but this rendered them precarious in other ways. While a "bust", or decline in mine profits and work[59], would undoubtedly have devastating economic impacts across not only the entire Kiruna community but the whole region, for Sámi double-workers in the mining industry, a reduction in income would mean the loss of the financial resources needed for herding, and in the worst case, an individual's ability to continue working with reindeer. This would lead not only to more people abandoning the practice, but a loss of the continuity of knowledge and skills of reindeer herding, which must be practically developed throughout one's life.

As anthropologist Lena Gross shows in the context of the Northern Alberta tar oil sands, double binds linked to dependence on extractive labor are not the result of individual or group failure. Rather, they are the result of state and policies and practices which render entire regions, like the tar oil sands or the Ore Fields, dependent on the minerals market and wages from extraction, creating double binds in which "no matter how people act, they cannot win" (Gross 2019a, 246; see also Fortun 2001; Cattelino 2010). Gross importantly notes that for Indigenous workers in extractive industries, these double-binds and their resulting inequalities are magnified (ibid). Similarly, for Indigenous workers like Ante, Isak, and Niklas, one form of the double bind presents itself as a choice between "participating in destroying the base of sovereignty, their land, or to give up on the means that enables them to stay in their homeland and lea[d] a relatively good life" (Gross 2019a, 246). For Sámi reindeer owners, the essence of the double-bind thus manifests not only as an economic but a moral and ethical problem – one that is rendered even more painful when non-Indigenous people question Sámi presence as workers in the space of the mine or its infrastructure and their choice to work in the mining industry, claiming these choices as proof herders are "trying to have it both ways" (i.e., to herd and have protected land rights to hunt and fish as well as a salary to live on). This questioning of double-workers' "authenticity" is but a contemporary version of the same ideas that "*lapp ska vara lapp*" sought to enforce – the notion that "real" Sámi only herded reindeer, and that

59 Between 2015 and 2016, when the boom period ended, the LKAB Group eliminated seven hundred jobs from its operations.

combing reindeer herding with other occupations made them less "authentic", "half-nomadic" (Ruong 1937) or assimilated, no longer Sámi. Such views regularly not only ignore Sámi rights to decide their own futures but re-enforce the notion of a conditional notion of Indigeneity and associated rights as decided by the majority (Povinelli 2002, Raibmon 2005).

Recognition and Refusal

As our conversation continued, Niklas increasingly questioned whether double work was sustainable, or even desirable. Suddenly, he said something that surprised me: "If I didn't have the children that I have, I would have sold all my reindeer and moved from here." When I asked why, he said he didn't like living in the area, and that he'd rather be living somewhere with nice weather, like Barcelona. "I have many other friends who don't have children and they are not really working with the reindeers, but they have them. And I ask them, every day, why are you staying here? Sell the reindeers, move to a better place." As we ate in silence for a moment, I realized that I had seen it as self-evident that all people with reindeer *wanted* to be involved with herding. Despite being aware of all the challenges, sacrifices, dangers, and stress the reindeer work required, the economic, moral, and ethical struggles Sámi reindeer owners endured to make it work could be terribly overwhelming for some. Niklas continued:

> The culture doesn't go under if *you* sell your reindeers. It's how you feel, that's the most important thing. I don't need to have a *gákti* (Sámi traditional clothing) on me to show I'm Sámi. I don't need to travel around to all the Sámi parties. I don't need to do it anymore. I know who I am.

Niklas' reflections, personal as they were, revealed the extent to which the state-enforced coupling between Sámi rights to land and reindeer herding placed extreme pressure on herders to maintain herding at all costs. In contrast to the settler imaginary and early 20th century colonial policies which constructed reindeer herding at the "true" Sámi livelihood, for Niklas – and for many others across Sápmi – being Sámi is enacted through a wide range of cultural and spatial practices, only one of which is reindeer herding. In entertaining the idea of selling his reindeer and giving up on herding altogether, however, Niklas a articulated a moral and ethical

thought-experiment: to potentially refuse allowing his identity and ties to the land as a Sámi person to hinge on being a reindeer herder. He was highly aware that potentially doing so would weaken some of his place-based ties to Giron-Kiruna, but they would not erase them completely. At the same time, leaving herding would give him a freedom to choose his place of living, a freedom he currently did not have with his manifold responsibilities towards his animals, fellow herders, family, and community.

Niklas also emphasized that wearing a *gákti* or attending Sámi social events – cultural practices associated with membership in the greater Sámi community – were no longer necessary for him to feel secure in his identity as a Sámi person. Having to navigate his individual and social identity so actively as an Indigenous person in a settler society his whole life, Niklas was clearly tired of doing so. Considering this, I interpreted his ambivalent stance toward herding, Sámi clothing, and social events not as a *rejection* of Sámi traditions or belonging, but as a desire to *refuse* the terms – or "cultural competency" – under which the state, majority society, and perhaps others in the Sámi community recognized him as a Sámi person (Beach 2007). Anthropologist Audra Simpson importantly notes that for Indigenous people, refusal can be one of several political and ethical alternatives to "recognition" in settler contexts (Simpson 2004, 11). Simpson underscores the fact that because state recognition of Indigenous existence is conditional and contingent on Indigenous people adhering to norms established by the dominant society (i.e., practicing "traditional" livelihoods, like reindeer herding), these norms can also work as "cunning" techniques of liberal governance (see also Povinelli 2001). If Indigenous recognition and rights are mediated through the legal, political, and social structures of the settler society, these will always be conditional, and can be withdrawn if the dominant society believes these norms to be broken. The consequences of this, as previously noted, have a deeply spatial and historic component: recall the stripping of the right to herd in *čearru* if a Sámi person took up agriculture, wished to reside in a particular kind of structure, or if animals died due to circumstances beyond the herder's control. Not only would one be prevented from practicing one's cultural heritage, but one's claims to land and home would be threatened, and in the early 20th century, risk forced relocation by the authorities (chapter three, Labba 2020).

After lunch, Niklas offered to give me a ride home before heading to work. As we drove the conversation returned to the reindeer. Could he

imagine a life without them, I asked? Niklas thought for a moment. After a while he said: his ex-wife once had asked him, exasperated, what kind of priority she was in his life. Niklas responded: "Fourth or fifth. She then asked me, 'Is it your children in the first four and then the reindeer?' And I said no, I count my children as one. The reindeer take up the next three. And you come after that." Niklas said that sometime later he went to the mountains with the reindeer "for a few months" and when he got back, she was gone. Reflecting on the conversation after he dropped me off, I was struck by the commitment to reindeer Niklas had just expressed, especially after having also mentioned that he wouldn't mind selling them all and moving to Barcelona. The reindeer were clearly a priority for him, equal to human kin – his kids occupied first place, but the reindeer the next three, and the ex-wife a distant fourth. Reindeer herding, as scholarship on the practice of herding across Sápmi emphasizes, is a complex and ever-changing institution, as constituted by solidarity and cooperation as it is by diverse obligations, labor and property relations, forms of reciprocity, organization, and cultural contexts (Whitaker 1955; Ingold 1980; Beach 1981; Paine 1999; Vladimirova 2006; Kuokkanen 2009). These diverse obligations and relations exist not only between herders in a *čearru* or between *čearru* and the state, but between herders and animals (Anderson 1986; Stammler and Beach 2006; Anderson 2014). Caring for reindeer – making sure they are fed or can find food, and protecting them from predators and disturbances – requires, as experiences of the reindeer owners in this chapter have shown, massive investments of time and energy. Not only must one find the material means to make sure the reindeer are taken care of, but one must also constantly advocate for their needs to mining companies, state authorities, and other land users. Simultaneously, these human and non-human relations produce space(s); as I discuss in the following chapter, reindeer herding is also a social and material world in which the freedom for people and animals to move, interact, and dwell in familiar landscapes together is paramount (Anderson, et al. 2017).

Concluding Remarks

As the stories of the Sámi workers in this chapter have shown, the freedom to articulate relations to the land and to reindeer on their own terms has motivated generations of Sámi reindeer owners to persist despite the

compound challenges presented by settler colonialism, extraction, and limited rights. In this chapter, I have shown how patterns of social and spatial inequality, with roots in the history of settler colonialism, are reproduce in the context of industrial labor and space. Having first attended to the ways in which early Sámi labor on railroad became a means to support herders affected by environmental crisis and colonial policy, I noted how this was an important turning point in the history of the Čohkkiras Sámi community and became a means for herders to re-claim settler space and infrastructure as spaces of home, refusing state efforts of assimilation and removal. Ante, Isak's and Niklas stories, in turn, underscored the ways in which the inequality and marginalization Indigenous people face under settler colonialism is reproduced into the present. In work sites or infrastructure of extraction built on Sámi land, however, Indigenous workers can feel "out of place at home", revealing how settler colonial imaginaries of race, space, and social belonging continually impact individual lives. For Ante, Isak, and Niklas, attempts to morally and ethically navigate these fractured spaces generated by settler colonialism as "double workers" were sometimes, but not always successful. Nevertheless, their strategies and practices – individual, contingent, and context-specific as they were – constitute important contributions to the maintenance of Sámi space in and around Giron-Kiruna. In the following chapter, I extend and expand my investigation to show how infrastructures of herding connect the city to the mountains, and how legacies of settler colonial inequality are not solely limited to the built environment.

Chapter 6: "Not a Wild Land, But a Free Land": Contesting Wilderness in the Mountains

In the chapters so far, I've attended to social and spatial transformations in Giron-Kiruna primarily associated with urbanity and extraction. In the previous chapter, I traced how "double work" – industrial wage labor combined with reindeer ownership – constituted a means for reindeer owners to stay home and continue with herding, but also generated double-binds in the contexts overlapping extractive, settler, and Indigenous spaces. In this chapter, I turn to the spaces where many double-workers' wages are put to use: the mountains and forests outside the city. In the discussion that follows, I consider the relations of reindeer domestication as a strongly resilient type of human-animal relationship, in which the cultivation of "familiarity" between reindeer and people is central to its practice (Anderson, et al. 2017, 399). These relations also produce spaces, or what anthropologists David G. Anderson, Jan Peter Laurens Loovers, and Sara Asu Schroer and Robert P. Wishart (2017) term the infrastructures and architectures of domestication. These infrastructures and architectures of reindeer herding are necessary both for sustaining animal domestication but also for notions of home, belonging, and autonomy amongst reindeer herders in Čohkkiras. The mountains are also sites of conflicts and competing claims between recreationalists, mining companies, and herders. I argue that the mountains reflect what anthropologist Donald Moore terms an "entangled landscape": sites where multiple spatialities, temporalities, and power relations intersect (Moore 2005, 4), and where representations of mountains as recreational "wilderness" space overlap with Sámi views of the mountains as spaces of work, dwelling, culture, and memory.

To the Mountains (*Till fjälls*)

In the mountains near the Norwegian border, Máret and I had finally found time take a walk away from the village and the corrals, where her *čearru* had been busy with calf-marking work for the past week. As no reindeer had been reported in the vicinity of the valley by the lookouts, this Sunday was a good time for catching up with other tasks like reading, sleeping, chopping wood, laundry, baking, and miscellaneous home improvement projects on the small and unique family cabins of the seasonal summer village.

As Máret and I reached a narrow stream coursing down the steep mountain slope, we sat to rest and take in the views over the valley, trying to converse over the surprisingly loud roar of the stream. We'd been talking as we walked about all the changes going on with mining in Kiruna, the move of the city, and the proposed mines in Rahkkurjávri. All this activity had further motivated Máret in her ongoing university studies in biology, with a focus on the mountain environments used by reindeer. "I want, as a biologist, to go these places and not just talk about the value from the reindeer herding perspective, but the value of nature", she said. "And I hope that if I have a good degree in biology, they will take me more seriously." It wasn't that there was a lack of biologists who understood the alpine tundra and taiga habitats[60]; but – in Máret's view – there were few that understood reindeer herding, too:

> I think I can put those two knowledges together. It's hard to describe. It's like if you are only a biologist, and don't know anything about reindeer herding, and the point of a consultation meeting is to protect reindeer herding activity *and* protect the nature, then…if I'm just a biologist, and I don't know anything about reindeer herding, how can I then protect it? A reindeer herder will have to educate me on reindeer herding before I can actually go there and talk about nature *and* the reindeer herding. But now I have both.

As we continued chatting near the stream, Máret's hands scanned the miniaturized plants of the alpine tundra, finding mountain blueberries or other edible plants to snack on along with marshmallow candy cars she had in her rucksack. Looking out over the rugged valley with patches of snow

60 The alpine tundra refers to cold, high altitude mountain environments above a timberline where no trees grow. The taiga, or boreal forest, is one of Earth's largest biomes, between the tundra and temperate biomes. It consists mostly of coniferous forests, and almost two-thirds of Sweden's forests are boreal.

hugging crevasses here and there, she pointed out that snow patches and glaciers were like small oases, providing relief for the reindeer from the summer heat and harmful insects[61] as they wandered around grazing on the same plants we were. Máret said: "You can't say this is the wilderness because it's not. Wilderness for me is like tigers running around and eating stuff. But I haven't seen any tigers around here." We laughed imagining tigers running the seemingly bare slopes. "A lot of people would say that it is", I said. She shook her head. "Yeah, that's what they say on TV...that the wild is a place where humans haven't been living, using the land. But this land has been used by humans for thousands of years. And because of that, it's not a wild land. But it is a free land."

Máret 's reflections that cold summer day, as would our conversations and time spent together in the years that followed, shifted my understanding about the mountains which I'd begun to get to know during my residence in Kiruna. For Máret, the mountain slopes were far from wild; there was a lack of exotic animals (tigers), for one. Wilderness was "exotic", uninhabited by people, a place predators helped themselves to prey uninhibitedly. In contrast, as I'd seen throughout the week, Máret and the herders used the mountains not only with a comfortable familiarity, but also monitored them closely in their work of herding. On a high slope, Máret would lay on the treeless ground on her side, leaning on one elbow while chatting with me, munching on mountain plants, and keeping a watchful eye out for reindeer, all the while looking like the picture of the word "relaxed". As lookouts, Máret and her cousin Elin camped overnight in the open air on the mountain slope without a tent, their herding dogs and a small fire as their main sources of warmth (Fig. 12). If reindeer appeared, they'd spring to action, multitasking as they ran/jumped across massive boulders, communicating with the helicopter or ATV drivers via two–way radios, waving their hiking sticks, and yelling and/or barking like dogs to prevent the reindeer from bolting up the mountain. The land was also clearly useful: snow patches and small glaciers were not just accumulations of ice; they were oases needed by the reindeer to catch a break from biting insects (Fig. 13). The plants of the mountain were a snack. A boulder or shrubbery were hiding places, where one could lay low and let the herd pass over you (run and jump over you) if necessary. On days where there was no round-up and the weather was right, you could also hike up another

61 *Hypoderma tarandi*, or reindeer botfly, is an insect who deposit their larva underneath the skin of reindeer, who then feed on the tissue and damage the hides, meat, and milk of the animal. They can also similarly infect humans.

mountain and use a particular stony outcropping – known as “the Facebook Stone” – to connect to the 3G internet via your mobile phone.

Fig. 12: Reindeer herder working as an evening lookout (*reainnár*) on the mountain slope. The *čearru* summer village lies lower on the valley floor in the background. *Photo: Elisa López.*

Fig. 13. Máret and her dog working as lookouts (*reainnidit*) near an alpine mountain snow patch. Photo*: Elisa López.*

Furthermore, Máret understood these spaces as *free*. Not in the sense that these spaces didn't have value or were unused and unclaimed – as in, "free for the taking" – as the settlers of the past might have perceived them. Rather, for Máret, the mountains reflected a space more akin to the view articulated by 19th century polar biologist, geographer, and political theorist Peter Kropotkin ([1902] 1989): an environment supporting the flexibility, fitness, and evolution of different species through social cooperation. In contrast to Darwinists' interpretation of evolution as a stadial process, characterized by struggle and competition, Kropotkin argued that it was in fact social cooperation – mutual aid – that contributed to the non-linear evolution of both animals and people (ibid.). Kropotkin, in fact, developed the foundations of his theory of mutual aid observing the social behavior of herd animals, including reindeer, in Siberia (ibid. 39, 47, 74), concluding that "the fittest are thus the most sociable animals, and sociability appears as the chief factor of evolution, both directly, by securing the well-being of the species while diminishing the waste of energy, and indirectly, by favouring the growth of intelligence." (ibid.,58). Kroptokin's links between intelligence and cooperation resonated with the human-reindeer

interactions I'd observed that summer in the context of herding, or reindeer domestication. Anthropologists Florian Stammler and Hugh Beach have characterized reindeer domestication as a type of animal learning, a "genetically encoded result of many generations of significant inter-species relations" supported through selective breeding (Stammler and Beach 2006, 10). Indeed, scholars note that reindeer domestication has a particular character in the Eurasian Arctic context: rather than overt relations of domination between humans and animals, the ideal relation between humans and animals are often those in which animal autonomy and self-sufficiency is supported and desired (Ingold 2002; Helander-Renwall 2008; Stépanoff, et al. 2017; Anderson et al. 2017). Stammler and Beach further characterize relations between Indigenous herders and reindeer as a "symbiotic domestication", a "mutual circularity of communication" in which both reindeer and people are drawn to intimate forms of relation (Beach and Stammler 2006, 6). The seasonal cycle of reindeer work, migrations, and other forms of engagement are not merely repetitive actions determined by either humans or reindeer alone, but a "circularity of wills negotiating those of time and space" (ibid., 7). This "circularity of wills" between animals and people also involves a recognition of animal personhood, in which both are recognized as equals in "a reciprocal, symbiotic relationship, not only for their movements in the landscape, but also for their very sustenance and reproduction, their life and death." (ibid., 12).

These spaces within which this mutual freedom, sustenance, and reproduction was co-produced, as Máret noted, were becoming increasingly rare and threatened. These threats took the form of not only new extractive projects, but anthropogenic climate change, two pressing issues currently facing the Artic region (Odell, Bebbington, and Frey 2018; Azadi, et al. 2020). "A mine can never be good for the environment, even if technology has reduced the amount of mercury released into the environment," Máret said. "Because when you open a hole in the ground, you will let loose all the gases and everything that is stored in the ground. These oxidate into the air and accelerate the levels of greenhouses gases". Máret was acutely aware that she needed to show the holistic impacts of mining on the environment, not just the reindeer; indeed, there are no known cases of a mining concession permit ever being denied based on potential impacts on Sámi reindeer herding (Raitio, Allard, and Lawrence 2020, 8). Recognizing that not only impacts on herding but other environmental impacts risked being dismissed, or "not taken seriously",

Máret also knew that she had to articulate their meaning within the epistemology, language, and practitioner status recognized by the dominant society – scientific knowledge (Povinelli 1995; Cruikshank 2007; West 2006a; Kimmerer 2013). In "putting the knowledges together" of Sámi herding and biological science, Máret 's aim was not only to "protect" the mountain and forests from mining companies and other extractive development, but to show how protecting the reindeer's well-being translated into to the well-being of the mountain ecosystem: as 2014 report from the Swedish Environmental Agency (NV-04173-13, 64) noted, "reindeer are the single most important grazing animal in the mountains", whose grazing prevents plant overgrowth that reduces biodiversity (B. Inga 2015, 8). If Máret's attempts to "translate" Sámi herder's knowledge of reindeer in a way that development actors could understand failed, these spaces would become vulnerable to the spatial abstractions which proceed development, of spaces as unused (or underused), isolated, and empty. Indeed, the act of translating Sámi herding knowledge itself – of writing it out, translating languages, and making it compatible with scientific data – risked "distill[ing] out" the social relations and practices that make herding qualitatively meaningful as a way of life (Nadasdy 1999, 9).

Mining, however, was not the only kind of encroachment that Máret and other Čohkkiras reindeer herders were concerned about. A 2014 study of Sámi reindeer herding women's traditional ecological knowledge in Norwegian and Swedish Sápmi (including the Čohkkiras area) revealed that herders rated encroachment (*intrång*), mining, and other development actors resulting in "no land" (*inga marker*) as the greatest threat facing reindeer herding, assigning these 9–10 points on a scale of 1-10 (Inga and Sunna 2014, 27). One of the development threats that reindeer herders I spoke with often mentioned, though not specifically listed in the aforementioned study ("other development actors" [*exploatörer*]), was mountain tourism and recreation. In the following section, I turn to conflicts regarding access to the mountains – spaces also designated as national interests for outdoor recreation – to examine how these articulate a politics of space and spatial inequalities in the mountains of Kiruna Municipality.

"No to ILO 169!"

During fieldwork interviews with residents of Kiruna, an oft-repeated sentiment was that access to "the nature" (*naturen*) for outdoor recreation – hunting, fishing, skiing, hiking – was the single most enjoyable thing about living in the city. The mountain environment was frequently highlighted by politicians as one of the cornerstones of what made Kiruna an "attractive" city, both aesthetically and in terms of attracting potential residents. Indeed, many recent arrivals to the city I spoke with who'd moved there for work indicated their interest in outdoor recreation (hunting, skiing, fishing) had been a motivating factor, and wanted to be closer to outdoor spaces to do so. Along similar lines, LKAB highlighted access to the alpine mountain environment as a benefit of living and working for the company in Kiruna, with recruitment ads featuring LKAB employees skiing, hiking, or camping in the mountains in their free time. Access to mountain areas outside the city was also continually underscored as a quality-of-life issue important to residents in the urban transformation. In the public planning for the New Kiruna resettlement area, municipal planners reassured residents that recreational vehicle storage and easy access to snowmobile, skiing, and walking trails would be included in the new city center, preserving "the interplay between nature and the city" and "living environments in close connection to nature, recreational spaces, and views" (Kiruna kommun 2014, 20, 61).

One rainy afternoon, I sat with Elin in her bedroom as she worked on a Čohkkiras *gákti*. As a sought-after *duodji* seamstress, Elin was often busy with commissions for Sámi traditional clothing, and the men's *gákti* she was making that day featured fine black felt wool, red and yellow trim, and a touch of green on both shoulders and the back. A zig-zag pattern in bold yellow wrapped around the high, stiff collar to keep the neck warm when paired with a scarf and a silver clasp. As Elin swept the felt wool clippings from the hardwood floor, I lay on the wooden day bed perusing the latest *Kiruna Annonsblad*, a weekly newspaper that every household in the municipality received free in their mailboxes. *Kiruna Annosblad* was (and is) an important source of community events, municipal announcements, local business advertisements, and general information, and in September 2014 it was packed with political ads by Kiruna's twelve political parties leading up to the municipal and national elections mid-month. A few pages further in, a large advertisement caught my eye:

"NO TO ILO-CONVENTION 169!
We the associated reject the ratification of this Convention, which incidentally has been signed by only a few of the world's countries.

We believe it should be as it is now, that all land and water which is not private should belong to the Swedish government and, thus ultimately, it is an elected and democratic government that makes decisions after citizen consultation (remisser).

We do not believe that any single ethnicity, Indigenous group, or minority should be accorded either right to ownership or administration over Swedish territory. If it would, it would create major conflict in the Swedish society, which we have fortunately been free of in of this beautiful country!

The associations are committed to ensuring all citizens' rights to use Swedish land and water freely and within existing laws, including the Swedish Right of Public Access, for different outdoor recreation!"

Our motto, FREEDOM with RESPONSIBILITY"

The ad was signed by the Winter City Snowmobile and Leisure Association (VSFF), The Kiruna Hunting and Fishing Conservation Association (KJF), The Kiruna Game Management Circuit, and the Kvenland[62] Association and was overlaid over a drawing of a person driving a snowmobile. I sprang up off the sofa and pointed it out to Elin, who only shrugged her shoulders. "Yeah, well, I don't even bother anymore. I'm so used to it. We're so used to it", she said, returning to her sweeping.

The ad, I would come to learn, was the most recent expression of a conflict dating back to at least the mid-1970s, between snowmobilers and Sámi herders throughout northern Sweden, including Kiruna Municipality. In the 1970s, snowmobiles became increasingly popular and affordable to

62 The Kvenland Association (Kvenlandsforbundet) is a movement founded in 1999 in Kiruna, Tornedalen, and Gällivare. The organization's purpose, as stated on their website, is to protect the interests of the Tornedalen Kven and Lantalaiset people. Since the 90s, the Kvenland movement has increasingly pushed for recognition of the Kven as indigenous peoples to gain the kind of rights to manage hunting and fishing that Sámi reindeer herding collectives do as an indigenous group (urfolk).

consumers. Kiruna is one of the municipalities in Sweden with the highest number of snowmobiles: eleven thousand snowmobiles are registered in the municipality today, nine thousand of which are registered to addresses in the city of Kiruna – more than one per household (Kiruna kommun [2017] 2020). Kiruna Municipality is also home to approximately one hundred and fifty kilometers of snowmobile trails, managed by Kiruna Municipality or the County Administrative Board of Norrbotten.

Three of the four signatories of the ad were associations for active outdoor recreation (*rörliga friluftsliv*), specifically snowmobiling, hunting, and fishing. For many residents of Kiruna, outdoor recreation is a central aspect of the "Kirunabo" ("resident of Kiruna") identity (Granås 2012, 28). In a study of place meanings amongst residents of Kiruna, sociologist Brynhild Granås noted that resident's ideas of the "typical Kirunabo" – one who most embodies the normative way of life and ideals in Kiruna – is first and foremost an outdoor person, associated with snowmobiling, fishing, and hunting (Granås 2012, 128). The mountains north of Kiruna, such as the Torne Lake (Torneträsk[63]) area, are extremely popular sites for recreation year-round but particularly popular in spring, where recreationalists flock to the area over Easter, the spring school break, and weekends. One popular event is the Rautas Premiere, an ice fishing competition held on the Rautas Lake (*Ravttasjávri*), a mountain lake over 500 meters above sea level within Gábna *čearru's* lands. The event – sponsored by LKAB, local businesses, and most of the signatories of the anti-ILO ad – is the highlight of the year for many, and hundreds of Kiruna residents gather to celebrate the first day of the winter fishing season there. On this day, and in the days following, the snowmobile tracks to the lake can slow to a crawl with dense snowmobile traffic, the air thick with petrol fumes and the roar of the engines. Locals passionate about ice fishing look forward to this period and parking their "arks" – small portable ice fishing cabins one can sleep in overnight and fish through a hole in the floor – over their favorite spot on the lake. The Rautas Premier is so valued that Granås highlighted it as one of the "ritual hubs around which everyday life within the town, as well as weekends and vacations outdoors, circle throughout the year" for Kiruna residents. Granås further notes that two interlocutors she interviewed who identified as Sámi distanced themselves from these "typical Kirunabo" activities, emphasizing their reindeer work as the primary reason for being in the mountains (ibid. 29).

63 Torne Lake (in North Sámi: Duortnosjávri) is the sixth largest lake in Sweden, and the largest glacial mountain lake in Scandinavia. It is about 70 kilometers long.

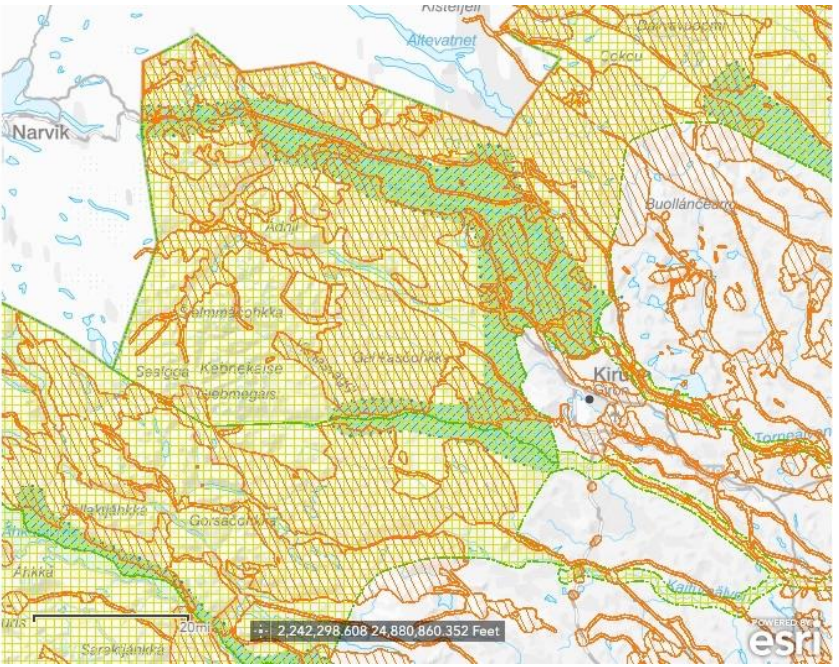

Fig. 14: Map depicting the national interests (*riksintressen*) in the mountains northwest of Kiruna (the grey dot) according to chapters 3 and 4 of the Swedish Environmental Code (*Miljöbalken*). The areas outlined in orange with diagonal lines depict areas of reindeer husbandry as a national interest (Miljöbalken 3:5), the yellow squares outlined with green denote outdoor recreation as a national interest (Miljöbalken 3:5) and areas of high value for tourism and outdoor life shaded and outlined in green, with green diagonal lines (Miljöbalken 4:2). The mountain area directly to the west of Kiruna, Gáhkasčohkka, is a site of year-round grazing for both Leaváš and Gábna *čearru*. *Source: Boverket 2020a.*

For reindeer and reindeer herders, spring in the mountains is also an important period, but in a different way. A large part of the mountain areas to the northwest of Giron-Kiruna are classified as mountain grazing areas (*renbetesfjäll*), or year-round lands (*åretruntmarker*), areas designated as set aside for reindeer husbandry by the state (Fig. 14). During the late winter period between March and April (in North Sámi, *Giđđadálvi*) the reindeer migrate from the eastern winter forest, crossing roads, rail, and city and mine infrastructure to reach their calving grounds in the western mountain areas. Here, they graze before and after giving birth to their young on their spring migration toward their summer pastures, sometime

between April and Maj (*Giđđa*). Herders expressed a need for quiet and minimal disturbances before, during, and after calving in these mountain areas, as reindeer cows and calves tend to scatter easily and avoid good grazing areas if scared by snowmobiles, dogs (pets or dogsledding teams), people moving about the landscape on foot, and tourist cabins/resorts (Vistnes and Nelleman 2001; Inga 2015, 339; Inga 2017). Alternately, a reindeer cow might abandon a newly born calf running away from a disturbance, as reindeer cows with calves are more sensitive to disturbances than adult bulls. (ibid). Reindeer herders I spoke with also expressed concerns over the risk that cows (and calves) may die from stress, or that a cow may spontaneously abort a calf if acutely stressed. The development of oral intestinal lesions caused by stress in reindeer, and the role of these in death, is well documented (Rehbinder 1990; Josefsen, et al. 2007: Tryland 2012). If the winter has been particularly hard for grazing, with fodder trapped under layers of ice or too deep snow for the animals to reach the lichen below, this posed additional risk to weakened animals.

Snowmobiles are not only loud but create tracks in the snow that reindeer will follow, sometimes into dangerous areas (i.e., areas with more vehicle traffic, people's yards). High-profile incidents in recent years, in which outdoor recreationalists have acted irresponsibly and harmed or caused distress to reindeer, or in which reindeer have been intentionally killed, have also been a growing concern for *čearru* (Marakatt and Skoglund 2012). During the calving season, it is thus typical for *čearru* to request a temporary ban from Kiruna Municipality on recreational snowmobiling in the mountains. The bans typically last several weeks, often until the "bare ground period" (*barmarksperioden*), i.e., when the snow melts, so that the reindeer can graze as much as possible until the first snowfall, which can come as early as September. However, bans on snowmobiling during the calving season are extremely unpopular with some recreationalists in Kiruna Municipality, and have even been denied by Kiruna Municipality in recent years (Marakatt and Karlsson 2019; T. Johansson 2020).

Agnes, a former member of the Sámelisttu municipal party, told me that the party was formed in 2006 partially in response to hostile behavior and rhetoric toward the Sámi due to the snowmobile bans. "Everyone was complaining about the Sámi villages wanting to ban snowmobiles," she said:

> There were terrible discussions. So, we said, no, we'll form our own party and take part in the debate. I think the most important thing was

> that when we came, and we responded to the things they said about the reindeer herders and the Sámi community and so on, and we stood up. Then everything stopped. When we answered to all the wrong things they said, it changed the debate. And now everyone knows you can't say whatever.

During our conversation in 2012, she also recalled that concerns around possible Sámi resource co-management were prominent in the community and in municipal debates. "For Sámi to take care of the land, like they have in Laponia [UNESCO World Heritage Site][64]", according to Agnes, was something that "everyone is terrified of". This "fear" of Sámi co-management in Kiruna Muncipality was palatable in the 2014 advertisement, with the author's citing ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries (hereafter, ILO 169), as the major threat to current resource management regime, i.e., in which herding is treated like an industry or national interest among others, and not as an Indigenous livelihood with accordant land use rights (Raitio, Allard, and Lawrence 2020). ILO 169 is the major binding international convention regarding the rights of the world's Indigenous and tribal peoples, articulating their right to their own customs and intuitions, to be protected against discrimination, the right to self-identify, and the right to participation and consultation regarding law, administration, and development (Yupsanis 2010, 437-439). Within the Nordic countries, only Norway and Denmark have ratified the Convention thus far. Article 14 of ILO 169 requires states to recognize the rights of ownership and possession of Indigenous people in their traditionally occupied lands, and this has been obstacle for ratification in Sweden and Finland (Joona 2012, 21). Despite this, the Swedish Supreme Court recently referred to ILO 169 in a landmark legal case brought by Girjas *čearru* against the Swedish state. In

[64] Laponia, established in 1996, is a UNESCO World Heritage Site of approximately 9,400 square kilometers across Arjeplog, Jokkmokk, and Gällivare Municipalities. It encompasses four national parks, two nature reserves, and old growth forest, glacier, and delta land areas. This area is also home to seven *čearru*, whose reindeer herding was highlighted by UNESCO as integral to the area's status as a World Heritage site. In 2011, after ten years of debate over co-management with state and municipal authorities over the site, representatives of the local *čearru* succeeded in gaining a majority role in the management of Laponia, the first time Sámi have officially co-managed their traditional lands in Sweden (Green 2009). However, the road to achieving this was marked by polarized conflicts between *čearru*, municipal government, and other local interests on similar subjects, such as the ratification of ILO 169, small game hunting, and tourism (Green 2009, see also Grey and Kuokkanen 2020).

2009, Girjas *čearru* field a lawsuit against the Swedish state in Gällivare District Court, claiming the *čearru* had the right to co-manage hunting and fishing in the *čearru* year-round lands. In lower court proceedings, the state counter-argued it had no international obligations to recognize the rights of the Sámi as an Indigenous people of the world (Mörkenstam 2019), but in January 2020, the Supreme Court ruled in Girjas' favor, confirming their right to manage, and issue permits for, small game hunting and fishing within *čearru* territory. In its ruling, the Supreme Court referred to ILO 169 as a "general principle of international law", finding "the principle must be applied in resolving disputes related to 'land rights affecting the Sámi', which means 'that a Sámi custom which has been established must be taken into account' (paragraph 130)" (Ravna 2020, 20).

Positing ILO 169 a threat not to specific (and highly regulated) recreational practices like snowmobiling, hunting, and fishing but to Swedish Right of Public Access, *Allemansrätt* (in English, "everyone's right"), or the "freedom to roam", the ad's rhetoric revealed notable links between the production of recreational space and the production of settler colonial space. *Allemansrätt* is the sole exception to property rights in the Swedish constitution, and permits individuals to hike, bike, ski, camp, swim, and boat on private lands and waters (Naturvårdsverket 2021). *Allemansrätt* is often described as a "uniquely Swedish institution", reflective of egalitarian values, and high values associated with nature. However, in positing ILO 169 as a threat to *Allemansrätt* and representing spaces in Kiruna Municipality as predominately "Swedish land and water", and that no "single ethnicity, Indigenous group, or minority should be accorded either right to ownership or administration over Swedish territory" the ad's creators also articulated a thoroughly settler colonial view of space, centering the claims, representations, and practices of the majority as the most legitimate. In this framing, Indigenous rights (ILO 169) are represented as illegitimate, the hesitancy of some states to rarify ILO 169 as proof of this illegitimacy. The ad also attempted to deny, or obscure, the reality of overlapping meanings of space in Kiruna. As the public debates over snowmobile bans show – and in which several of the recreational associations who created the ad have been directly involved – it is precisely this socio-spatial overlapping which is a core part of the conflict.

Making Nature and Nation

As spatial practices and representations, recreational activities and *Allemansrätt* also produce space. Snowmobiling, hunting, and fishing popular activities among not only "typical Kirunabo" but with tourists who visit the city and municipality from around the world. Non-urban spaces in Kiruna Municipality are often described as a wilderness (*vildmark*) in tourism advertising, and as "Europe's last wilderness" in international media coverage happenings in the city or municipality. Since the 19th century, wilderness has been a key concept not only in tourism, but conservation movements throughout the Western world, including Sweden (West, Igoe, and Brockington 2006). As ethnologists Jonas Frykman and Orvar Löfgren note in the Swedish context, 19th and early 20th century romantic notions of untouched nature and wilderness – interpreted as reflections of the emerging Swedish national character – arose as counterbalances to extractivist and rational views of nature which existed during the same period. The appreciation of "nature" increasingly became a value within bourgeoise middle class life, as well as a potent, patriotic symbol of "Swedishness and national fellowship above class boundaries" (Frykman and Löfgren 1987, 58). In turn, new "wild" landscapes of recreation – and consumption – were created as spatial counterparts to the industrial mode of living (ibid., 52, 58)

Tourism and recreation became key spatial practices through which this ideological, national space was accessed and embodied. Geographer and historian Klas Sandell traces the rhetoric of "Swedish nature" and the national and international image of Swedes as a "nature-loving" people to the 1930s, the period when Swedish outdoor recreational life (*friluftsliv*) and nature tourism was first established in the country. Sandell sees cultural practices and ideas of nature tourism as extensions of the modern Swedish nation-making project. Themes of nationalism and national identity were prominently articulated by key founding figures in organizations like the Swedish Tourism Association (STF), as well as by conservationists who advocated for the establishment of Sweden's first national parks (Sandell 1998, Sandell and Sörlin 2000, Sörlin and Nordlund 2003, Niemi 2018). Beginning in the 1930s, the People's Home welfare state ideology of the Social Democrats (*folkhemmet*) increasingly made use of these 19th century ideals of health, beauty, the body, domestic space, and nature as potent political symbols (Mattsson and Wallenstein 2010). Rapid industrialization and urbanization, as well as shifts in standards of living and labor relations saw leisure time for the working class increase during in the early 20th

century. Social policies which facilitated citizen's access to new spaces – recreational spaces – were expanded during this time, such as the establishment of the Compulsory Holidays Act of 1938 (today, the Vacation Law [*semesterlagen*]) guaranteeing twelve days' annual vacation for every full-time worker in Sweden. Anthropologist Gudrun Dahl (1998) further argues that since post-war period, "Swedish nature" and "nature loving" have also functioned as subdued expression of nationalism. Dahl cites the example of *Allemansrätten* as a potent cultural symbol that "stands for a cluster of images that tie together Swedishness, childhood, freedom and the particular Swedish landscape" (ibid., 282). Equally importantly, Dahl argues, *Allemansrätten* articulates a notion of conditional freedom and Swedish ideals of interpersonal behavior, such as consideration towards animals, the environment, and other recreationalists enacted through practices such as removing trash and extinguishing campfires.

Historian Niels Nielsen argues that sport and outdoor recreation is another important way in which "Swedishness" as a national identity is articulated and embodied (Nielsen 1997, 75). Nielsen highlights the example of skiing[65] as a sport with a prominent role in producing the image of the modern Swedish nation, allowing a 20th century Swedish nationalism to be expressed in settings ranging from popular children's books to national sporting events. One notable example is the Vasaloppet cross-country ski race founded in 1922 – and held every year since – to commemorate the mythic founding of the modern Swedish nation by King Gustav Vasa, who was said to have evaded Danish pursuers on skis. The ninety-kilometer race takes place in Dalarna, an "iconic" region considered since the 19th century as the most quintessentially "Swedish", and a place (and local people) associated with an idealized historical past in the contemporary Swedish national imagination (Johansson 2008). The region's perceived "Swedish" authenticity also made it a popular destination for wealthy residents from Stockholm and other large cities to visit as tourists, to "enjoy the fresh air, the spectacular landscapes, and the 'authentic' life of peasants, as well as the Sámi people in the northwest part of the country." (Mörner 2010, 157). The growing popularity of outdoor sports like cross-country skiing, promoted by the National Institute of Public Health founded in 1938 – the same year as the Compulsory Holidays Act and decade where *allemansrätt* first appeared as a concept – further

65 A recent chapter by Sámi scholar Maj-Britt Öhman further notes the erasure of Sámi contributions to the development of skiing technology within Swedish archeology, museology, and events like the Vasaloppet ski race (Öhman 2020).

centered the body as means for embodying Swedish national belonging, and for sport as a means for Swedes to head outdoors and "incarnat[e] modernity" (Nielsen 1995,70).

For many Swedes, *Allemansrätten* is further legitimated by its' popular status as an "ancient" or "customary" law (*urminnes hävd*). Indeed, a popular assumption about *Allemansrätten* is that it is based on a long-established historical tradition, in which natural resources were a resource common that all "Swedish" people could partake in. However, as economic historian Matti La Mela (2014) examines in relation to berry picking – one of the activities protected under *Allemansrätten* today – this claim of ancient custom is historically dubious. La Mela shows that berry picking, especially on private property, historically fell into an ambiguous legal category, and was the source of political conflict. In the late 19th century, there were active debates about whether to criminalize berry picking on private land during negotiations on legal reforms within Finland, then part of the Swedish kingdom (La Mela 2014, 78). Landowners opposed the harvesting of berries and other materials (mushrooms, moss, kindling) on private land, and some even offered rewards for anyone who reported "illegal" berry picking to them so they could initiate persecution (ibid.). La Mela therefore argues against using *Allemansrätten* as a historical concept, as it simplifies complex and contested practices (in this case, berry picking) and the rural social dynamics in which people used the environment prior to the 19th century. Rather, La Mela concludes, paying attention to such discontinuities would help us better "evaluate and appreciate the making of this fundamentally twentieth-century institution." (La Mela 2014, 285) However, the notion of *Allemansrätten* as based on ancient custom today remains strong, as Dahl found amongst her fellow Swedes: "When I have tried to question the latter with my friends, I have met very hostile reactions – to do so is more or less heresy." (ibid.,294) This is not to say that *Allemansrätten* has not been debated in Sweden; Dahl notes several examples of conflicts during the 1990s around increased tourism (specifically international tourism), and complaints about tourism operators perceived as "taking advantage" of *Allemansrätten* for profit, as it is a right accorded to individuals, not businesses. In recent years, debates over foreign laborers brought into harvest berries and the ways new (immigrant) Swedes use and behave "in the nature" have also highlighted tacit social norms behind "Swedish" cultural values associated with nature, and how (and by whom) these should be observed (La Mela 2014, Sténs and Sandström 2013).

The social production of spaces for recreation and leisure also reflects spatial inequalities. Henri Lefebvre observed that the very distinction between spaces of work and leisure ("non-work") plays a role in the social division of labor under "neocapitalism", what geographer Neil Brenner terms "high Fordism" or industrial ideology (Lefebvre 1991, 58-59, Brenner 2000, 369). Lefebvre cites the production of the Mediterranean region as a leisure space for industrial Europe as a primary example of how representations of space facilitate the manipulation of representational spaces ("space lived through its associations and symbols…the spaces of 'inhabitants' and 'users'") in order to produce spaces of "non work" (ibid. 39, 59). Lefebvre argues that leisure spaces are produced as distinct, while remaining integral to the reproduction of neocapitalist relations and consumption, by juxtaposing "productive" versus "wasteful" spaces (ibid.,59):

> If, by abandoning all our critical faculties, we were to accept this 'distinctiveness' at face value, we would get a mental picture of a space given over completely to unproductive expense, to a vast wastefulness, to an intense and gigantic potlatch of surplus objects, symbols and energies, with the accent on sports, love and reinvigoration rather than on rest and relaxation.

Recalling LKAB's advertisements to job seekers, in which outdoor recreation during leisure time is presented as a benefit of working for the company, Lefebvre's insight reveals continuities between the historical production of the environment around Kiruna as a "wasteland", unproductive, and "wild", and the (re)production of these as leisure spaces for industrial workers. In other words, capitalist social and spatial orders have actively produced the alpine forest and mountain environment of Kiruna as a "wilderness" to be consumed (Smith 1989, 80-81, West, Igoe, and Brockington 2006). In doing so, these representations re-produce settler colonial space, as the mountains and forests are primarily valuable as sites of leisure, or recreation linked to national ideals (Jacoby 2014; Boggs 2017; Walter 2020), marginalizing their significance as Sámi spaces.

In the following section, I contrast this view to the ways Sámi people articulated the mountains as spaces of home, work and, belonging. As I will show, reindeer herding does not obey the neat capitalist division between work and leisure. While larger scale meat production is undoubtedly important for herders who make a living from working with

the reindeer full-time, this is not the only reason for doing so – connecting within spaces of home, multispecies sociality, spiritual landscapes, and sites of memory on the land are equally important.

Min biras (Our environment): Spaces of Reindeer Herding, Being, and Dwelling

In the spring of 2012, a group of women and young people from Leaváš and Girjas *čearru* gathered at the local adult education center in downtown Kiruna to create paintings for an exhibition called "Painting for the Fish and the Mountains" (*Färg för fisken och fjällen*). The aim of the project was to visually represent places in Leaváš' and Girjas' homelands proposed as sites for new mines, to be publicly exhibited in the city and later in the summer at the Kiruna Festival. As they worked, the artists gathered consulted a map of the mountains laid out on a table in the center of the room, checking with each other about the names of places they knew in North Sámi. Together, they identified the places under threat by the proposed mines and wrote them on a flipchart. Each artist selected a place name from the flipchart and set to work painting on wooden panels of equal sizes. Incorporating bright swirls of color and text, the panels began to take form (Fig. 15). Some artists included Sámi pictographic symbols, such as the sun (*beaivi*), reindeer hoof prints, and the hand and footprints of the artists themselves alongside the place names: Meahcci Rahkkurjávri (Rakkuri Lake Forest), Ráhkhurgielas (Rakkuri Ridge/Pine Heath), Gironnjaskka (Ptarmigan Watershed), and Ruovdenjunnji (Iron Nose[66]). In some of the paintings, I also recognized village names where the painters lived, at times alongside their reindeer, as some homes had small corrals next to family homes where reindeer in need of extra care could stay. When the works were finished and exhibited together, the effect was quite powerful: colors, shapes, symbols, and place names representing diverse spaces – some quite a distance apart – which would all be affected by mining.

66 "Nose" here refers to the structure of the mountain.

Fig. 15: The artists at work, Kiruna 2012. *Photo: Elisa López.*

For the artists, the place names they pained denoted not only a location or description of geography: they were reflections of *biras*, the North Sámi term for "environment" or "surroundings". These names also described specific *meahcci (pl. meahcit)*, places in the landscape constituted by different activities and temporalities, often translated by the people I knew and others across Sápmi as "forest" (Mazzulo and Ingold 2008, Joks, Østmo, and Law 2020). *Meahcci* articulates a notion of "home" as open-ended and unbounded, defined by activities and movement. Within this

concept, diverse spaces are also linked, with *meahcci* reflecting a kind of network space, a "texture interwoven from the paths along which people carry on their activities." (Mazzulo and Ingold 2008, 31) In contrast to philosopher Martin Heidegger's (1971) notion of *raum*, or the "clearing" as the pre-eminent space of being and dwelling, anthropologists Nuccio Mazzulo and Tim Ingold argue that the clearing presupposes a physical and conceptual space which does not fully align with the Sámi herding world. While forest clearings may be ideal dwelling spaces for settlers engaged with forestry and farming, Mazzulo and Ingold observe that Sámi herding life is "lived not *in* place, but *along* paths," and that Sámi dwellings are thus the sum of the trails that people follow in their everyday activities, including reindeer herding. The forest, *meahcci*, exemplifies "the sum of these trails, interwoven with the trails of its other inhabitants, humans and non-human. Home and forest are one." (ibid., 32)

The *meahcci* I got to know most was the "reindeer forest", a term herders used to denote the space and tasks of herding. These activities, while often physically demanding and undertaken in difficult weather conditions, nevertheless elude clear divisions between "work" and "leisure". As one young reindeer owner put it:

> When I go on vacation, I help out in the reindeer forest and that's an even more physically challenging work than this sitting here [his office in Kiruna where we were conducting the interview]. Here I'm sitting on my ass from 08:00 to 16:30 every day. But in the forest, you get up early as hell, and you work 'till late as hell. I get my meat – I get to slaughter a reindeer once in a while but other than that I don't get paid. But that's what keeps me floating.

One of the first things that struck me about reindeer herders' uses of the term "forest" was its application as a term regardless of whether there were actually trees in the place where the planned activity was to occur or not. One task Máret was delegated during the summer work with her *čearru*, for example, was as a lookout. This involved sleeping out in the open air of the slope of the mountain overnight to watch for reindeer heading down the valley and in the direction of the waiting corrals. Though there were no trees at this latitude, Máret referred to this destination as "the forest". The "reindeer forest" could also be used to describe spaces where no animals were present at all, such as the maintenance of herding infrastructure and architecture (corrals, fences, seasonal cabins) or knocking down tree lichen (*lahppu*) as supplementary winter fodder. *Meahcit* could also include forests for fishing (arctic char, trout, perch), picking berries (cloudberries,

lingonberries, blue berries), or harvesting useful plants – grasses used to keep shoes dry and insulated, firewood, special birch wood for handicrafts. Thus, *meahcit* do not necessarily denote fixed spaces, but a constellation of sites and activities that determine what kind of "forest" one should seek out. In this sense, *meahcit* are emblematic of what anthropologist Tim Ingold calls taskscapes, place-based ensembles of activities and movement which come into existence through people's active engagement (Ingold 1993, 161). Joks, Østmo, and Law (2020, 308) summarize the conceptual unit of *meahcit* as "place-time-tasks", different combinations of actions, encounters, and located potential resources. A defining quality of both Ingold's taskscape and *meahcit* is the fact that such spaces are never finished; rather, *meahcit* and taskscapes are in a constant state of production, of unfolding (Ingold 1993, 162: Joks, Østmo, and Law 2020, 308). Most importantly, *meahcit* are not static but dynamically generated through the ongoing encounters between humans, animals, natural phenomena, and spiritual phenomena – *meahcit* are both verbs and nouns (Joks, Østmo, and Law 2020).

Corrals are emblematic of such taskscapes, temporally bound, highly active spaces of work and sociality. Along with the mountains, forests, herders' cabins and summer villages, they also constitute what anthropologists David G. Anderson, Jan Peter Laurens Loovers, and Sara Asu Schroer and Robert P. Wishart (2017) term the infrastructures and architectures of domestication: spaces in which human and animals encounter each other. In these authors' usage, "infrastructures" and "architectures" do not simply denote material structures designed by humans alone, but rather spaces generated by people and animals together through their encounters and relations (ibid, 399). This nexus of relations the authors further re-connect with the notion of *domus* – the Latin root of the word "domestication" – a space of "humans and animals living together, and the infrastructures which animate their places of co-residence" (ibid., 412).

Taking the corral as one such architecture of domestication, a visit to a round-up reveals the diversity of activities and socialities that such a space offers. In corrals, there are a myriad of opportunities to speak North Sámi, reconnect with family, friends, and animals, share stories, revisit community and kin histories, refine skills, organize and problem solve with others, and produce food and other byproducts. Important animals include not only reindeer but reindeer herding dogs, a companion species crucial to reindeer herding work (M. Anderson 1986,1988; Haraway 2003), who

as active participants in the space of the corral also can be considered "landscape architects" (D. Anderson, et al. 2017, 401). Indeed, beyond the emphasis on the production of meat at certain parts of the year (such as the autumn slaughter), meat production was only one of the many reasons to interact with reindeer. As the young herder and herders in the previous chapter noted, there were other reasons to go to the reindeer forest. Some of these reasons involved tending to the development of reindeer, such as picking up exhausted or sick reindeer (both adults and calves) in the winter forest to bring back home for round-the-clock care work in small corrals next to the family home, often done by women (Inga and Sunna 2014, 25). These practices constitute both a material and affective labor, whose practice contributes to the constitution of herders as much as the constitution of reindeer, or what anthropologist Radhika Govindrajan terms animal intimacies (Govindrajan 2018). Govindrajan, drawing on the work of Donna Haraway and writing in the context of India's central Himalayas, shows how both people and animals are composed relationally, and that this relatedness "always already exceeds the human" in the everyday life is of communities where animals live closely alongside people (Govindrajan 2018, 6). Like the home pens of the Indian Himalayas, architectures of domestication (Anderson et al. 2017) such as reindeer home corrals, fences, and feeding troughs are all a part to the Sámi herding taskscape and domus, spaces where multispecies partners communicate, work, and dwell together.

The ubiquitous presence of reindeer in the lives of herders also reflected a more complex social relationship between people and reindeer, both conceived as having personhood. Arriving to a corral, for example, Máret and her family would immediately look for "familiar faces", reindeer belonging to individual family members whom they often knew by their coloring or body shape alone, confirmed with a glance at the marks cut into the animal's ears. A photo of a beloved or particularly beautiful calf might adorn the background screen of herder's mobile phone, or to a friend along with a birthday greeting text message. Reindeer with particularly "cheeky" personalities, distinct physical features, or unique ways of moving and behaving also received names and were often the subject of conversation. One particularly memorable reindeer was Zlatan, a reindeer Margareta had named as a calf in honor of the Swedish footballer Zlatan Ibrahimović. Margareta admired the footballer for his "take no shit" attitude and had read his autobiography several times, and the name seemed a natural fit for this reindeer whom everyone agreed did things differently than others.

Notable updates about Zlatan and his quirky behavior were frequently posted on the digital social media platform Instagram by family members, including his comings and goings from the family yard and home corral, sightings of him out in the forest or mountains by other herders, his tame behavior around people (he'd come when called by name and eat out of Margareta's granddaughter's hand), or his growing crown of antlers as he aged. For years, phone calls or meet ups in Stockholm with members of Margareta's family included updates on how he was doing, as one might about a relative.

When Zlatan died – he was found having starved to death in the winter of 2019 – the sad news added a personal dimension to the annual struggle of reindeer to find sufficient food in ever-shrinking grazing areas. It was no longer anonymous animals dying out there, but an animal person whose personality brightened the herders' every day and was a part of their social world. Zlatan and other reindeer with names (Bilbo, Star) exemplify animal actors whose place in the herding world exceeds their position as mere livestock; they are "reindeer-as-persons," non-human partners in a reciprocal relationship with people (Todd 2014, 218, see also Helander-Renvall 2009). In the Sámi herding world, people and reindeer thus constitute a human-animal social community, from whom the mountains and forests are key spaces of co-existence and mutual independence, the herding *meahcit* (Anderson 2014)**.** This is one way in which home is articulated in reindeer herding areas of Sápmi: constituted not only by physical architectures but also embodied practices, producing a "web of trails that converge upon the dwelling…home and forest are one" (Mazzulo and Ingold 2008, 31– 32; see also Anderson, et al. 2013).

Naming, Claiming, Remembering

In naming and representing *meahcit* in the paintings, the herder-artists were also making claims to the land. Indeed, naming is one way in which kin relations, histories, and claims of belonging are spatialized in Sápmi and in many other Indigenous cultures of the world (Basso 1996; Cruikshank 2007; Sköld 2015; Murphyao and Black 2015). Local Sámi historian and Elder Anna Dynesius, Margareta's sister, underscored the claims to space that names and activities denoted (in Gillberg and Ljung 1983,6):

> We Sámi have been here for a long time, but we have no written documents that we can show. But we have all the documents that have

> been left out here in the fields, such as huts, reindeer pastures, sacrificial places, and the migration route, yes, the whole community

Though Sámi retain the usufruct right to land according to the principle of "right of immemorial use" (*urminnes hävd*; notably, same as attributed to *Allemansrätten*) in Sweden, the burden of proof remains on the Sámi to show evidence of continuous use. In Norway, by contrast, the burden of proof is on the state or property owners to show the Sámi have *not* used a site within areas defined as reindeer herding areas (Allard 2011, 171-172; see also Sasvari and Beach 2011; Anaya 2011; Carstens 2016; Allard and Brännström 2021). Sámi spatial values, relations, and temporalities, however, are not always visible – do not leave obvious physical traces – and thus are frequently misrecognized by non-Indigenous people (Kuoljok 2019). As anthropologists Nancy Munn and Elizabeth Povinelli have observed in the context of Australia, Aboriginal labor and land relations, such as hunting and gathering in sites spread over large areas, are similarly misrecognized by non-Aboriginal people, and this has implications for the legal recognition of native land title (Munn 1996; Povinelli 1993).

One community research project, spearheaded by Margareta Stenberg and Anna Dynesius (2004), sought to counter this erasure of Sámi space through the collection and transcribing Sámi oral narratives and place names in the Rensjön area. These *muitalus* (pl. *muitalusat*) – sometimes translated into Swedish or English as "story", or "narrative" – is a Sámi oral tradition that draws its etymology from the word *muitit*, memory, or remembering (Cocq 2008). *Muitalusat* center the subjective experiences of the storyteller within a greater collective memory and experience, which is continually being added to as a living repository of knowledge by subsequent generations. Contemporary works by Sámi scholars on community experiences of colonialism, such as the nomadic schools and forced relocation of herding families make powerful use of this tradition, centering *muitalus* as told by Elders or their descendants as primary sources (Huuva and Blind 2016; Labba 2020). Many of the *muitalusat* Stenberg and Dynesius collected were dense with place names and definitions of specific *meahcit*, many of which describe exactly how specific sites were produced by humans and non-humans. The non-human actors include animals but also a range of invisible or supernatural beings who move about the landscape, becoming only visible through their movements, physical marks on the land, and sometimes their interactions with people (Svonni 2006). These beings include everything from God (*Ipmil*) to mythical giants (*stállu*), to large "ghost herds" of white reindeer belonging

to dangerous spirits. Encounters with such beings are not only possible but mutable; for example, a savvy and lucky herder encountering a ghost herd can turn the encounter in their favor through the act of throwing a knife over the herd to dispel the magic, transforming the ghost reindeer in real animals that then become property of the herder (see also Oskal 2000; Brandišauskas 2016). Features in the landscape are physically shaped by animals, people, and divine beings, as seen in story "God becomes frightened" (*Ipmil ballái*) (Dynesius and Stenberg 2004, 12):

> God continued his journey eastward past Abisko and Báddosdievva sacrificial place, and up across Nissonvággi. He followed the reindeer tracks until Bajip Uhritjuovva, where he paused to rest. A *siida* was moving towards Vuoževággi, with the dogs barking and the people yelling. God became frightened and fled eastward behind the slopes of Viddjáloapmi, until he came to rest at Vuolip Uhritjuovva sacrificial place. God's path is still visible along the slopes of Viddjáloapmi.

Here, an encounter between humans and God resulted in a feature of the landscape that visibly links different sites of importance. In this *muitalus*, however, God is – like a reindeer – easily frightened, seemingly just one of several beings (human, non-human, more than human) in the mountains. Another *muitalus*, "God's Path" (*Muitalus Ipmila bálga birra*), highlights the agency of both spiritual beings (*Ipmil*) and the environment. An avalanche is credited with "tak[ing] and mov[ing]" a sacrificial place from one area to another (ibid., 10):

> God followed the old migration path from Ofoten, over Raddejávri to Vassevággi, Boasseoaivi and Bessešloapmi. It was said that there was a sacrificial place at Bassešloapmi that an avalanche had taken and moved to Bassenjira. God wandered on to the west side of Vuoiddasbákti and when he arrived to Vuoiddasčáhca he fell on his knees, took his cap in his hand, and bowed towards Vasseoaivi. He continued to the west side of western Gorsavággejávri and Bogičorru. The path over Bogičorru is so narrow that the reindeer must walk one in front of the other to get through. He came to Abisko Ábeskovuopmi and followed Njullaluohka down, past Riddunjira sacrifical place and past Ábeskoeatnu at Beavrekgorži. Here have wild reindeer in the past jumped over Ábeskoeatnu, and God did likewise and continued eastward...God arrived at Njáhkačavil and Bajit (Upper) Njáhkajávri where ancient Sámi had trapped wild reindeer. The method was to sneak upon the reindeer when they were crowded as they walked (or "sneaked") through, and they even made use of trapping pits for hunting. Nearby lies the Báddosdievva sacrificial place.

In both tales, place names are listed in sequence along an actual migration path, functioning simultaneously as an oral map, historical document, and instruction manual. These names function, as Tim Ingold and Nuccio Mazzulo observed in Finnish Sápmi, both describe a journey and link together the paths of humans "…[render] an account of the journey, and at the same time [binding]…the paths of humans and animals and the activities that take place along them" (Mazzulo and Ingold 2008, 28). In addition to the practical function of recalling landmarks or features in the landscape to find one's way to and from home when on a journey, these spaces and their names make concrete the relations and interactions between humans, non-humans, and spiritual beings (Watts 2013).

Sámi spaces are not limited to those of cosmological importance or belonging to a mythical past, but also landscapes of memory. One such site is the small island of Jámegašsuolu, also known as the "island of the dead", located on Rávttasjávri (Rautas Lake), the mountain lake popular with snowmobilers mentioned earlier in this chapter. A large Sámi village called Rávvtasluspi had once existed near this island, where herders from Gábna *čearru* lived seasonally and others lived permanently, fishing, hunting, and raising cattle. Over time, people moved away from area, with only a few seasonal fishing cottages and a graveyard on Jámegašsuolu marked by wooden crosses remaining. Until the 1930s, Jámegašsuolu had been used as an occasional burial place, one of several sites where temporary "summer graves" were built until the dead could be transported by sled to Čohkkiras for burial in winter. However, some graves remained there permanently, and it is believed that the site had also previously been used as a pemanent graveyard (Dynesisus and Stenberg 2004, 34). Dynesius and Stenberg's book documents a *muitalus* from 1957 in which a woman and her sister from Gábna skied to Jámegašsuolu on a winter's day, and on the way were overcome by "a great sorrow". Upon arriving to Jámegašsuolu, they found recreational fishermen from Kiruna camping near the island had disturbed the graves, moving stones from the burial cairns to use for their camp and uprooting the wooden crosses, casting them aside: "these wooden crosses, which had managed to stand against many hard storms, now lay on an unprotected snowdrift, which the first storm would cover and bury in its arms." (Dynesius and Stenberg 2004, 42). The *muitalus* was accompanied by a poignant pen and ink sketch by one of the women of the island, depicting the crosses on their side and the fishermen's tent on the ice nearby. By the 1980s, these crosses had disappeared, with only the stones remaining.

Jámegašsuolu is a site that non-Indigenous people have long been familiar with as a place of burial. Picture postcards for tourists featuring of this "island of the dead" were produced for sale in the early 20th century, and the site was photographed by celebrated Kiruna photographer Borg Mesch, as well as depicted in the book *Lappland: Det stora svenska framtidslandet* (*Lappland: The Great Swedish Land of the Future*, 1906) in a painting titled "Den dödas ö" ("The Island of the Dead", 1905) by the artist Karl Tirén. The river island, it's stones and wooden crosses – framed by mountains – at the center of both the painting and photographs, seem to emphasize a vast emptiness, the crosses the only man-made traces of an absent people. And yet, at the time of Tirén's painting and Mesch's photgraphs, Jámegašsuolu was still actively being used as a burial ground. These non-Indigenous representations of Jámegašsuolu, as anthropologist Mary Louise Pratt observed in the context of colonial travel writing in Africa, emphasizes the landscape while also "separating people from place" (Pratt 1985, 124). The sweeping, panoramic views – characteristic of European colonial aesthetics – center a disembodied imperial gaze, Pratt argues, which "commands" what ever it lands upon: "the mountains 'show themselves' or 'present themselves'; the country 'opens up' before the European newcomer" (ibid.). In such representations, landscapes are visually emptied and rendered available for colonial consumption, part of the transformation from taskscape to leisurescape (Tilley and Cameron-Daun 2017; see also Descola 2005, Angus 2018). Indigenous dwelling and dwellers are rendered silent, mute, elsewhere; whatever claims they once had to these spaces no longer evident. Elin had also expressed frustration at the fact that recreationalists treated Jámegašsuolu as a "playground", rather than as a sacred resting place and memory site meaningful to the people of Gábna. The snowmobilers, in Elin's view, either failed to recognize the site as burial place or saw it as belonging to a closed past, and thus no longer meaningful; as the woman who recounted the *muitalus* in 1957 put it, the fishermen "had no idea that this land has since long, long ago belonged to completely different people, and that the descendants of this people still value their ancestor's way of life." (Dynesius and Stenberg 2004, 43) For Elin, Margareta, and the others related to the Gábna community, Jámegašsuolu remains an active memorial site, imbued with significant meaning and community history. While no monument marks the site, the memory of those buried there and the community that existed there before are frequently commemorated through visits to the place. These visits provide opportunities not only for the retelling of stories about

kin, ancestors, community history, and storytelling focused on Sámi traditional knowledge around life and death (Kroik, et al. 2020), but also for the (re)production of Jámegašsuolu and surrounding areas itself as Sámi places of home, composed of individual and collective memories, journeys, and encounters. Places and traces of the land are meticulously documented, not only in works like *Muittut Ja Muitalusat* but through place names which indicate holy sites, previous owners or inhabitants, supernatural incidents, and notable events.

Conflicts with snowmobilers over access to the mountains for recreation, as noted earlier in the chapter, might also be considered in relation to sites like Jámegašsuolu, which exemplify aspects of what anthropologist Katharina Schramm (2011, 6) terms a "memorial landscape." As Schramm notes, places and landscapes are not just "memory containers, but rather profoundly shape, and are also shaped by, the ways in which violence is experienced and performed as well as remembered." (ibid.) Recalling Patrick Wolfe's (2006) and Matthew Wildcat's (2015) arguments that Indigenous displacement can take many forms in settler colonial contexts, this awareness raises important questions about the ethics of tourism in areas where Sámi have few avenues to articulate their own visions of, or participate, in land management. While to my knowledge there have been no proposals to close off the site to recreationalists, practically speaking the Sámi have little legal ground to do so, as the site is not explicitly linked to herding. Furthermore, as Jámegašsuolu remains accessible through *Allemansrätt* – as an environment that should be accessible to all – the sacredness of this space (and others like it) is continually threatened. Nevertheless, community members continually tend to the site through practices of visiting and remembering, sustaining Jámegašsuolu as an active space of community and history.

Concluding Remarks

Conflicts over who gets to use the mountains in Kiruna, as I have argued in this chapter, reflect diverse of views of nature, work, and leisure, enacted in space. This dense overlapping raises complex questions and contestations, and I have only touched on a few briefly here. For recreationalists, mountains are spaces of "wilderness" valued for their use in tourism and leisure. This view of nature is largely characterized by firm

distinctions between spaces of recreation and work, or work and leisure. As I have shown, the rise of tourism and recreational practices in Sweden was closely linked to development of the modern nation and new industrial social relations, which in turn generated new views of nature, the body, and national belonging. Sámi reindeer herders also value these same mountain areas, but perceive them as multiple, interlinked spaces of work, home, and cultural memory. This is evident in spatial concepts like *meahcci*, place names, herding practices, and documentation of cultural landscapes through oral traditions. The overlapping nature of these diverse spaces is thus highlighted as a defining characteristic of space in Kiruna Municipality. In the following chapter, I return to the urban space of Kiruna, to examine how mining deformations also shed new light on the nature of overlapping spaces in the city, experiences of mining, and the production of new visions for the future in the context of community resettlement.

Chapter 7: Deformations in the Landscape: Managing Uncertainty and Imagining Sustainable Futures in New Kiruna

In the previous chapter, I examined how forests and mountains of Giron-Kiruna are contested spaces, key for identity production, work, and leisure for local people. In this final chapter, I return my focus to Kiruna's urban transformation, the ongoing resettlement of six thousand residents due to mining deformations that will continue until 2033. The first part of the chapter describes the mining deformations damaging the city, and how increased sensations of mining activity in domestic and bodily space exacerbated resident mistrust of company knowledge regarding the mining deformations, expressed in residents' attitudes of uncertainty, suspicion, and ambivalence. In the second section I examine how municipal planners and architectural consultants sought to address uncertainty and the negative impacts of resettlement through the planning and design of the New Kiruna resettlement area. Here, I analyze how notions of sustainability which emerged in the planning process for New Kiruna reflected municipal ambitions to convey stability, confidence, and a positive side to resettlement. These visions articulated a desired future which would help residents of Kiruna look towards a sustainable future, and away from the dilemmas of extractivism that the deformations symbolized and inscribed in physical space. Finally, I show how delays in deciding the location of the new train station, a key infrastructure for New Kiruna, revealed tensions between municipal and corporate stakeholders with incompatible mandates, as well as existing relations of inequality that have long characterized city politics and planning in Kiruna.

"The City is Cracking"

On March 16, 2004, LKAB sent a letter to the Kiruna Municipal Council, whose city hall offices sat directly across the road from the company's headquarters (LKAB 2012b). The letter, only five sentences long, read:

Re: Kiirunavaara Mine expansion into the detailed development plan area

> LKAB hereby requests that municipal board implement the necessary review of the city master plan in light of the expansion of the Kiruna mine towards the planned areas, so that this development can be implemented.
>
> Information about the expansion of the Kiruna mine has occurred on several occasions, including with your City Master Plan group on November 11th, 2003, and two informational meetings with attendees from your Planning department on December 12th, 2003, and February 2d, 2004[1].
>
> The attached resources for urban planning showing the forecasted influence from the future mining of the Kiirunavaara ore body 0, 20, and 30 years into the future. Please see Appendix 1.
>
> Best regards,
> LKAB

With this short letter, a new era of change was officially introduced to the lives of residents in and around the city of Kiruna. Since the 1960s, underground mining of the Kirunaavaara ore body – eighty meters wide, at least two kilometers deep, and slanting at a sixty-degree angle towards the city – has slowly caused the earth's surface to to sink, crack, and collapse (Fig. 16). This downward movement of the ground surface, caused by gravity and a removal of ore, coal, and other rock strata between the ground surface and the mine floor has resulted in mine subsidence (Speck and Bruhn 1995, Stöckel et al. 2012). This mine subsidence is not only growing due to ongoing mining on main level KUJ 1365, but is also irreversible, and will continue long after mining ceases and the deposit is abandoned.

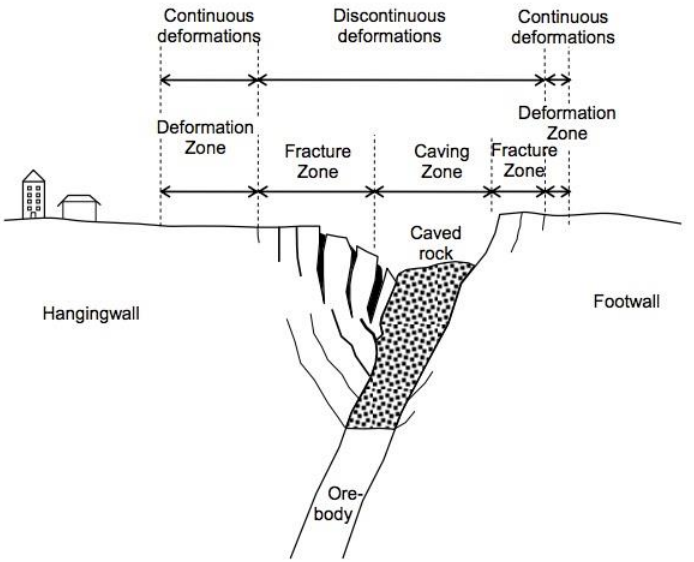

Fig. 16: How mining deformations occur in Kiruna. The most left arrow indicates the movement of the deformations towards the city, leaving behind a growing fracture zone that will be sealed off as it expands, and converted to Mine City Park, the buffer zone between the mine and inhabited areas. Closest to the mine is the landslide zone, which will also grow over time. (Stöckel, et al. 2012, 3)

Kiruna's entire city center, including most public administration facilities, schools, hospitals, and public spaces, are already in the process of being demolished. Three thousand homes are affected, one thousand workplaces, and thirty-three percent of central Kiruna's residents – approximately six thousand people – are being involuntarily displaced and resettled (Nordmark 2021). This ongoing, population resettlement megaproject is known as the urban transformation (*stadsomvandling*) or social transformation (*samhällsomvandling*) of Kiruna and is expected to continue for at least the next several decades.

Initial knowledge about this problem trickled out slowly, at first over a period of several months. In September 2003, LKAB announced that test drilling had revealed new ore deposits under Luossajärvi Lake. The exploitation of these new deposits would require the relocation of the railway – whose tracks were adjacent to the lake – but little more was known until February 26th, 2004, when LKAB announced that the exploitation of the new deposits would likely require central parts of the

city to be demolished and relocated. Two weeks later, LKAB formally requested that the municipal master plan be amended, and with this letter, made clear that residents would have to move for mining to continue in Kiruna.

After requesting and receiving my own copy LKAB's letter from Kiruna Municipality, I wondered about how long the problem had been known, as the letter noted "several occasions" during which the information had been shared. I reached out to a planner who had been working there at the time and asked if she recalled this information being conveyed during the meetings mentioned in letter, or if there was any record of these early meetings. The planner kindly agreed to investigate, and a few days later she reported back to say that she had been unable to find any records from these meetings. Reflecting on why this might be so, she said: "It was probably a meeting of the group called Municipality-LKAB. These were pure general information meetings. I was involved, and it was [a representative of LKAB] who requested an extra item on the agenda during one meeting. He then announced, "the town is cracking." The 2004 letter, according to the planner, was LKAB's first effort at "dealing with the matter", after the company was informed it had to formally request to modify the city master plan (*översiktsplan*) so that it could legally continue mining[67].

Sudden announcement of large-scale changes would become characteristic of the "urban" or "societal transformation" of Kiruna. The 2004 letter's confirmation that the city center would have to be demolished, and that residents would have to move after all, in many ways characterized this new social and political uncertainty. This uncertainty about what was happening and when it would happen, exacerbated by sudden company announcements about deformation growth or sudden changes to everyday spaces (as I discuss in the following two sections), also cast doubt on LKAB's knowledge about what was happening, and on a deeper level, whether nature had every fully been under human control. For a long time, iron mining in Kiruna had been a "matter of fact" (Latour 2004b, 22-23), a clearly defined and knowable practice, supported by scientific knowledge and technology. Mining was understood as minimally risky and manageable in regard to humans, with the consequences of its production generally limited to non-human entities like land, air, water, and animals. In the post-2004 world, however, the extraction of iron in Kiirunavvara

[67]Explain Mining Law re: mining in inhabited areas

shifted from being a "matter of fact" to a "matter of concern", something unpredictable, no longer defined by clear, safe boundaries between itself and its environment (ibid., 24). Mining and people were now understood to be entangled in new and more dangerous ways than previously known. What these new entanglements portended, and the uncertainty they generated, were challenging to apprehend as a researcher when I arrived in 2012. They were even more so for residents of Kiruna, who had been living with the positives and negatives of mining their whole lives. How people made sense of these shifting social and spatial relations to mining I now turn to in the following section.

The View from the Edge

> We are going to move.
> Not because we want to.
> We have to.
>
> Otherwise, we risk dying. Falling down in a pit. Devoured by a hole, as big as a crater, dark as sin. Right down to hell. Pappa has called the mine hell for as long as I can remember. Hell is that which pays for our new Audi. And the trip to Turkey. Pappa has dark rings under his eyes, year-round. Only when we travel to Turkey do they fade away."
>
> –*Tio över ett*, by Ann-Helén Laestadius[68], 2016

Tio över ett is the story of Maja, a teenager living in the Company Neighborhood (Bolagsområdet) of Kiruna. Maja's family will be amongst the first to be resettled into new housing built for mining-displaced residents a few kilometers away in another part of the city. In addition to dreading being separated from her best friend and neighbor, Maja is afraid of the ground collapsing and tries to read everything she can about the urban transformation, an obsession her loved ones find unhealthy, and her panic attacks escalate to the point her parents seek psychiatric help for her. Her fears and mistrust of the company are perceived by those around her as irrational, and at times offensive and hypocritical as her father, like many

68 Ann-Helén Laestadius is a Sámi-Torendalian author and native of Bolagsområdet neighborhood in Kiruna. In 2016, *Tio över ett* won Sweden's top literary prize, The August Prize (Augustpriset), for Best Children's and Youth Literature. The title of the book refers to the time of the early morning where blasting is conducted in the LKAB Kiruna mine.

parents in the community, also works in the mine. “LK” (pronounced *el-koh*), as residents often refer to the company, makes it possible for Maja’s family to own a luxury car and take rejuvenating family trips to sunnier places abroad, and company sponsorship allows the youth hockey club to purchase equipment and to travel to away games. Indeed, for the fictional Maja – and for many real Kiruna residents – to be openly critical of the urban transformation and resettlement would be to criticize the source of livelihood from which a large portion of residents draw their income.

As depicted in *Tio över ett*, residents’ views of the urban transformation in real life were by no means uniform. Roger, who was in his mid-twenties and worked full-time at LKAB, for example, saw resettlement as an opportunity. He wasn’t sure why others “complained” about the move so much, though acknowledged some local politicians “didn’t seem happy with the job”, i.e., the planning for urban transformation. Overall, however, he felt that residents should be glad for the chance to have a new city space. “When do you get an opportunity to start over and build the town like you wanted it?” When I asked Roger if he felt many residents felt as positively as he did about the urban transformation, he admitted the lack of building was becoming an issue for some: “Just one building, and it would show that we are getting somewhere. Because now people are just thinking: ‘are we getting something new? or are we just going to drop down [into the ground]?” He indicated there was skepticism amongst some of his co-workers at LKAB about whether the company was accurately reporting the extent of the deformations. When I asked him to elaborate, he noted that there was a mismatch between what people saw as lines on the deformation prognoses maps (Fig. 17) and what they felt themselves as they went about their daily lives:

> The projections for the deformations, these lines which say where they will be this year, and that year...a lot of people, especially at work, say they don’t trust them as much. This is because a couple of years ago, there was a road that you had to take to get to work to get to LKAB, from the city hall it was a straight line. Then they said, ‘we have to make a new road’, and they started to make a new road, that goes in a curve. And they started to work on that. And then one day, it was really stressful to finish the road, and they were building and building and building, and when it was done, they closed the old road just like that, and then it was gone. The whole area. It seems like they hadn’t calculated correctly or something.

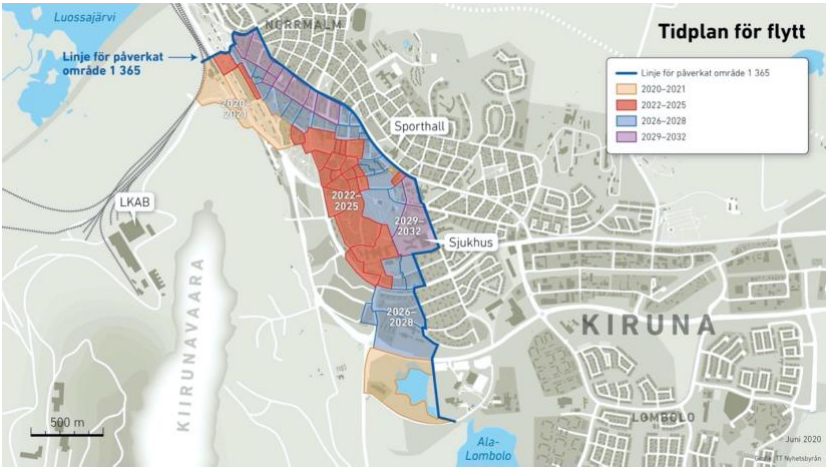

Fig. 17: Latest map (2020) of the deformation prognoses, and timelines for evacuation of neighborhoods in Kiruna's city center. The grey neighborhoods surrounded by colored zones closest to the mine have already been evacuated. The year 2032/2033 is the year mine level KUJ 1365 will be exhausted. *Source: LKAB.*

For Roger and his colleagues, the severe and sudden infrastructural damage didn't seem to match the deformation forecasts or other publicly available information. This information, for most residents, was found in the LKAB newsletters distributed to all homes in the Ore Fields, intended to keep residents updated about the urban transformation process (LKAB 2012c). For Roger and his colleagues at LKAB, however, the sudden rush to finish and close the road seemed to indicate that the company didn't fully have control over the situation. "Many people thought: if they calculated that wrong, what's to say they won't do it next time?" he said.

Some changes had been more gradual but had nevertheless had a disruptive effect. Roger recalled that his mother, who used to work at LKAB as a cleaner, would often take an off-road shortcut to the mining complex, walking or riding her bike through an area with plants and small trees. One day, the area was fenced off without notice – the deformations had gotten too severe in the area – and she had to start taking a longer way around, adding time to her work commute. Something similar had also happened to Roger when he'd just started working at the mine. When he began at LKAB, it had been possible for him to walk or take his bicycle to work. However, as the deformations grew, he could no longer take his old

route, requiring more time for him to get to the company changing rooms before his shift.

The sensations of mining were also becoming more noticeable, a new kind of evidence that led Roger to question LKAB's forecasts. Roger had previously lived in an apartment in Kiruna's city center. His family had owned this apartment for some years, and his parents and other family members used it when attending school or working in town. He recalled an incident from three years prior (around 2009) where his father visited for an overnight stay. Both noticed that the apartment shook a bit more from the nightly blasting in the mine than it used to, leading his father to say, "I was wondering if I was going to wake up in a hole or something!" During the time Roger lived in that apartment, the seismic activity from the underground blasting in the mine conducted between 1:10 and 1:30 every morning became so intense that he started waking up every night. This was something he hadn't noticed before; the vibrations had suddenly gotten worse. The blasting was also felt differently in different places in the city too, he pointed out. Though the flat I'd lived in with my roommates Ante and Hannele wasn't as close to the mine – about one and half kilometers away – on quiet nights one could still faintly feel/hear the blasting. In other places in town, Roger said, "you could see the pictures on the walls swinging." Though I rarely spent the night anywhere other than my own residence, other people I'd visit who lived close to the mine would point out the growing cracks in the walls of their apartments or workplaces, the gradual warping of a doorframe that prevented its closing; in 2009, mining deformations were moving toward inhabited areas at rate of seven centimeters per day (Kiruna kommun 2009, 12). Roger indicated that the uncertainty he felt in the deformation prognoses were exacerbated by these increasing vibrations. "We are not afraid", he said," but do they [LKAB] really know?"

Roger's experiences of increased vibrations from the mine and the time when he first noticed them – around 2009 – roughly correlate with the period when the Kiirunavaara mine came to be considered "seismically active" for the first time in its history. This increased geophysical activity consisted of earthquakes, sometimes resulting in underground rock falls, and first became first noticeable in late 2007. Prior to this, the mine had no history of such events, but it is believed that mining at greater depths has caused the mine to become seismically active (Dahnér, et al. 2012; Nordström, et al. 2020). Despite his positive view of the urban transformation, Roger's experiences of these vibrations, along with the

sudden closure of the road and other paths – sudden spatial changes – exacerbated feelings of uncertainty shared not only by him but others around him. The increased vibrations had led Roger and his co-workers, for example, to question whether the company was had control of the situation, or "if they really knew" what was happening to the ground.

When considering seismic activity as a form of industrial pollution – as in hydraulic natural gas fracking – such sensory experiences of industrial activity are often the first signs and sources of concern for people on the ground (Willow and Wylie 2014, 226). In combination with other forms of mine pollution, these functioned as ever-present reminders of the hazards of mining. Eating lunch one day at Ante's new apartment in 2014, he suddenly put down his fork and walked over to the windowsill. Running his fingers on the inside edge, the tips became coated in a fine layer of black dust. "Have you seen this shit? Fucking dust!" he exclaimed. This wasn't ordinary house dust: it was black dust from the mine, which had somehow gotten inside though it was winter, and the windows hadn't been opened for months. He grabbed a paper towel and ran it along the windowsill again, sweeping up even more of the black dust. He reflected on the unexpected appearance of the dust as he cleaned: "Remember when we lived in Lombolo? How the windows on one side of the house were always black, and not the other?" I didn't remember, but I did remember that the snow drifts quickly turned black in town, and that on windy days big clouds of the dust swirled around and stung your eyes. I'd never seen it inside a house before, however. It wasn't just Ante's imagination; the dust really was worse in this part of town. An environmental health study and survey conducted by Norbotten County study showed that over sixty percent of residents in Kiruna considered the dust a serious disturbance, with forty-five percent of residents in Ante's neighborhood of the opinion that the dust, seismic vibrations from the mine, and noise from heavy equipment negatively affected their health (Engström, et al. 2016 8, 15).

In her ethnography of an Ontario First Nation community reserve in Canada's "Chemical Valley", anthropologist Deborah Davis Jackson traces how the unpleasant odour and air pollution from a petrochemical plant which permeated the community kept residents constantly aware of pollutants in the environment and the potential risks they entailed (Jackson 2011). Jackson's concept of *dysplacement*, "the uncanny feeling of being at the same time firmly emplaced and eerily displaced", shows how perceiving industrial activity through the senses contributes to feelings of alienation from one's own body, making residents feel out of place (ibid.,

615). Roger is awakened in the middle night, disturbed physically at time when one is at one's most vulnerable; Ante's meal is interrupted by noticing iron ore dust inside his home, and he is compelled to remove it before he can resume. In both cases, the potential dangers of mining have announced themselves unexpectedly in intimate spaces, far beyond the security gates of the mine complex. This not only evidences risky and unpredictable entanglements between people, the earth, and extraction (Latour 2004b), but uncertainty about LKAB's knowledge and control over the effects of mining they claimed.

Mattias, a middle-aged tour guide at a local museum, expressed similar views as Roger, agreeing that most people accepted having to move but that there was mistrust about the process, and that community discussions had been "active and aggressive" at times. Mattias had just concluded a presentation on the relocation ("A City on the Move") offered by the local historical association. I was the only person who had signed up for the guided tour that day, but Mattias was kind enough to show me around anyway. Clicking through PowerPoint slides of deformation maps, photos of historic homes, homes, and satellite GPS measuring plinths (which monitored earth movements from space via satellites[69]), Mattias also saw positive and negatives to the urban transformation. The process would create more jobs, and new, modern housing would be built for residents. However, because the company-produced deformation maps were not made regularly available to the public – rather updated yearly or every few years – a Mattias pointed out that residents had to trust and wait for LKAB to say, "it's gone over the limit". Nearly in passing, he suggested that he didn't really believe the public deformation maps were accurate. When I asked him to elaborate, he said a relative working at company had shown him "other maps" that indicated the deformations were moving much faster and affecting much larger areas than the company was letting on. He further hypothesized that the lack of information might be related to company concern with profits rather than long-term solutions for residents. "Saving LKAB money is not important," he said with emphasis. "We have to live *now* in the best society we can plan. I fear that when they make temporary solutions, they will become permanent because it's the cheapest thing to do". Like Roger, Mattias also apparently distrusted the publicly

[69] The maximum allowed limit of ground deformations in Kiruna have been set by a special ruling in the Swedish Environmental Court (Miljödomstolen) and stipulates a ground movement limit of 0.3% horizontally (10 centimeters) and 0.2% vertically (15 centimeters).

available information about the deformations. His suspicions that this information was inaccurate further led him to turn to non-public information sources he trusted, on which he could make better informed decisions about the future. Mattias further interpreted the lack of clear information as possibly linked to corporate priorities of profit over people and expressed concern that these priorities may result in low-quality and temporary solutions offered to residents forced to move.

The perceived lack of trustworthy information also made some in the community like 21-year-old Hannele – whose father also worked at the mine – feel as if one could make little difference. Had there been sufficient opportunities for people her age to get involved in the urban transformation process, I asked? Shrugging her shoulders, Hannele said, "it feels like you heard so much about everything, so you just don't really care anymore. Cause you don't know if they will change their minds or what. You don't take things that seriously." Hannele attributed the difficulty in finding clear information, or frequent changes to information, as a reason about why she didn't "care" about what was happening:

> It makes me have the attitude of 'whatever, they can do whatever they wanna do'. But if I could get information, I guess I would read more and be more interested. But now it just seems they are just changing their minds and changing everything the whole time…it's too much time to nothing. If you try to read everything and know everything, they will change their mind anyway.

Hannele was of the generation of young people who grew up hearing about the urban transformation – she was ten years old in 2004 – but had seen little actual building. In conversations with Hannele and her friends between 2012 and 2014, whom I first met in their final year of high school, it was clear some young residents saw resettlement as something so uncertain it might not even happen, while others, like Hannele, expressed a lack of interest in the process. Some of Hannele's friends also mentioned conspiracy theories about the urban transformation, including beliefs that the company didn't intend to pay for a resettlement area and was instead taking "a wait and see approach" to the situation. While Mattias worried that whatever the company re-built might be poor-quality, some young residents didn't believe a resettlement area would be built at all. Hannele also pointed out that uncertainty about whether she would recognize future Kiruna as familiar was a source of concern.

> If I move and live somewhere else and study and things for like ten years… People usually come back to where they grow up, but I'm not sure that people will come back when it's not the same. Cos it's not the same street, it's not the same houses. You've destroyed memories and places you used to go. And if you're not interested in nature, and like skiing and those activities, maybe there's nothing to come back to. I don't know why people would come back if it's not to walk on the same streets and live in the same houses. So, I think if the town is completely different, they can move to a completely different town. They can move to Luleå instead, cos it's also not familiar.

Hannele's ambivalence toward the city move, as the conversation revealed, was not just based in disinterest but linked to concerns about her future relationship to Kiruna. Without a familiar urban space to re-connect with, Hannele worried her connection to her hometown would become fragile, and perhaps permanently severed, should she move away to pursue work or study. While migration to southern cities was common amongst Kiruna residents – as was the fact that some returned, and some didn't – for Hannele the urban transformation portended a further unknown about the future to consider. Indeed, at the time of our conversation, Hannele was still deciding whether she would stay in town and get a job at LKAB or apply to universities in southern Sweden and move away.

As these resident reflections indicate, uncertainty around the urban transformation was exacerbated not only by a lack of clear (or rapidly changing) information from LKAB, but also changes to their everyday spatial practices, trajectories, embodied experiences, and plans. For Roger, the increased seismic vibrations and sudden road closures had led him to question whether LKAB "really knew" what was going on, while for Mattias, access to information about the deformations through a family member, rather than the publicly available and infrequently updated deformation forecasts (Fig. 17) had also led him to question if residents had the full picture. For Ante, moving to a different part of town required him to adjust to increased pollution, and for Hannele, to re-think her emotional relationship to Kiruna as a place.

These resident views echo observations by anthropologists Mary Douglas and Aaron Wildavsky (1983, 43) that concerns around industrial risks "cluster thickest where cherished values conflict" and are the products of "ongoing political debate about the ideal society" (ibid., 36). The gap between everyday experiences of industrial activity and experts' views of what is considered serious or risky, however, can also create mistrust between laypeople and experts (Jackson 2011, Button 2010). While earth

deformations could be measured with satellites with precision and clearly acknowledge as risky, changes to residents' relationships to Kiruna or growing discomfort caused by mine activity were less easy to quantify. For some, the lack of certainty had led to conspiracy theories, while for others, indifference, disinterest, and emotional distancing.

These diverse reactions to mine activity and to the city move were also reflective of people's relationships to Kiruna as place. In her own study of Kiruna resident's views of the urban transformation, sociologist Brynhild Granås (2012) argues that ambivalence can reflect a pragmatic strategy for residents to manage their relationships to the city. To openly question the need to move, or the legitimacy of LKAB's demands, Granås argues – as in the case of the fictional Maja – may be understood as "irresponsible" and disruptive to the social order. Strategies to manage emotional, or "affective needs", according to Granås, can include displaying aloofness, or focusing on the nostalgic history of the ideal city (ibid., 134-135). In doing so, residents needs are met in ways that "enac[t] responsibility toward a place that "may be 'in their hearts' but still 'out of their hands'" (Granås 2012, 136-7). In the context of urban transformation, excess emotions are themselves risky, potentially destabilizing to the social order, especially when the problem (large-scale mining) is perceived as being "out of the hands" of residents (Granås 2012, 136-7). Indeed, for some residents like Vilma, Frederika, and Helge (chapter four) part of their emotional relationships to Kiruna were managed through nostalgic representations of the city's idealized past: Kiruna's lasting value was not just in its built environment, but as a society which valued not only work but culture, leisure, education thanks to Hjalmar Lundbohm (see also Granås 2012, 133-134). For others, like Roger, Ante, and Hannele, emotions related to the urban transformation were managed and expressed more ambiguously, though not completely free of uncertainty or anxiety about the future.

These transformations to resident's spatial relationships also reveal that the impacts of mining-based displacement can precede physical displacement, or what anthropologist Hedda Haugen Askland (2018, 234) terms "being displaced in place". In waiting to move or for decisions to be made, residents are caught between two choices – leave or stay – and in staying, must accept losing control over their own futures and living in a place that is not the place they grew up or chose to live in. Askland also highlights the importance of emotions in extractive contexts (see also Askland 2021; Sörlin 2021; Sejersen 2021; Thisted, Sejersen, and Lien

2021), observing that affective and temporal impacts of extraction are significant in extractive resource communities, re-make people's relationship to space and time significantly. Mining, Askland argues, extracts not only minerals, but emotions, expressed in people's narratives about their relationships to place and visions of the past and future (Askland 2021, 2-3). While the emotions that Kiruna residents expressed in the context of urban transformation appeared at times ambiguous– references to a nostalgic past, uncertainty about mine pollution, or skepticism toward company information – they evidence how mining generates affect, arising from a "*state-of-inbetweenness*" from "the capacities to act and be acted upon" (Gregg and Seigworth 2010, 1). This in-between-ness, as I discuss in the following section, would become an urgent priority for municipal leaders to address in the planning for New Kiruna, the first municipal resettlement area for displaced residents.

Fig. 18: The demolition of Mine Bridge (Gruvbron). This bridge connected LKAB's mine complex and the city for many years. Both the bridge and the E-10 Highway underneath were irreversibly damaged by the deformations**.** Part of the deformation zone is also visible between the bridge and the building. September 2014*. Photo: Elisa López*.

Imagining a Sustainable Kiruna

Exemplifying the sudden shifts in information characteristic of the urban transformation, in August 2012 LKAB announced that the ground deformations caused by mine level KUJ 1365 were more acute than previously known. This meant that the time frame for evacuating the most densely inhabited areas of central Kiruna had shortened from over twenty years to between five and seven (LKAB 2012c). According to the new prognoses, it would be necessary to evacuate all inhabited structures in the city center by 2023, with some areas already affected within five years. The surprise announcement came as a shock for many, and highlighted company problems with informing the public in a timely manner. Indeed, mayor Kristina Zakrisson was not informed of the new prognoses ahead of LKAB's public press announcement: "This latest news that there are areas that should be emptied within five years is completely new to me", said Mayor Zakrisson following the announcement to Swedish Radio (Östlund 2012). Besides strengthening some residents' lack of trust in company information, the announcement revealed new forms of social, political, and spatial instability linked to mining. The need to resettle residents – which some thought would never happen – was now actually happening, and the danger that deformations represented closer than before.

The planning for a new city center for Kiruna would mark an important turning point in how future space and time was imagined in the city. One month after the surprise announcement, Kiruna Municipality, in collaboration with the Swedish Association of Architects[70], announced an international architectural competition for the master plan for the New Kiruna resettlement area. New Kiruna would be built three kilometers to the east of the present city center – a site not without risk of future resettlement – but would allow all parts of the existing Kiruna to remain connected to the new. From fifty submissions, ten architectural teams were chosen as finalists and invited to submit design proposals for Phase 1 of New Kiruna, the new city center, by December 2012. The municipal architectural competition brief, *A New City Centre for Kiruna 2012-07* (Kiruna kommun 2012a), underscored the need for "a vision for a Kiruna of tomorrow," centered on the three concepts of "sustainability, attractiveness, and identity." (ibid.) New Kiruna's production would be a

70 Kiruna's Municipal council formally resolved in favor of an architectural competition on 19th September 2011. They were assisted by the Swedish Association of Architects in this preliminary work and the organization and adjudication of the competition itself.

means for existing Kiruna to become an "attractive" place for new businesses, attract new residents, and keep current residents, as well as ensure remain "attractive" during the liquidation (*avveckling*) of buildings, environments, and infrastructure (Kiruna Kommum 2012, 14). New Kiruna and the urban transformation process would help articulate new aims for the city, specifically sustainability (*hållbarhet*). Successful competition entries should include sustainability in all aspects, from vision, strategy, and structure, to design (ibid, 9):

> –show a vision for the Kiruna of tomorrow. The watchwords of that vision must be sustainability, attractiveness, and identity. The vision must affirm growth and new, robust patterns of living.
>
> –describe a **strategy** and a basic sustainable **structure** for accomplishing the urban transformation eastwards in a dynamic, quality-creating process, in which the new and the pre-existing will form a holistic entity and will function throughout the transformation process.
>
> –suggest ways of **shaping** a sustainable, distinctive, and pleasant city centre in the east, within a holistic structure encompassing the entire city. [original emphasis]

As this excerpt from the brief shows, terms like attractiveness and sustainability were used to express both spatial qualities and social aims, in a manner cultural geographer Moa Tunström observed is typical within Swedish urban planning discourse (Tunström 2007). This discourse, according Tunström often leans on the double meaning of words like "vital" and "attractive". Added as descriptors of urban space ("an attractive city"), these terms work to suggest images, symbols, and meanings – physical, social, and economic – that are considered achievable through urban planning actions (ibid., 685). Similarly, in the architectural brief, sustainability as a quality and function of the built environment appears synonymous with literally "sustaining" the city itself, through a new urban structure that could not only underpin future economic development but give form to the entire urban transformation process (Kiruna kommun 2012a, 11).

In a twist on the typical aims of modernist master planning, which anthropologist James Holston (2020) defines as "attempts to overcome the contingency of experience by…fixing the present as a totally conceived plan based on an imagined future," the brief also asked for a plan allowing for things *not* to be fixed, that could be adjusted according to shifting policy

decisions, economic issues, and other unknowns. The ability to adapt to uncertain conditions, then, was to be a part of a winning design, and sustainability, or a "sustainable city", would not emerge immediately but rather be the end goal of a longer process (Kiruna kommun 2012a, 46). This new, improved, sustainable city would be also be positive outcome of involuntary resettlement. Though mining is an inherently unsustainable mode of production – minerals are non-renewable – a sustainable city was something residents could look forward to as an end goal. The first phase of New Kiruna, for example, would focus on the creation of an "attractive" city center, while the second phase involve the old center and new center co-existing. In the third phase, the old city center would be phased out, and the "sustainable city accomplished" (ibid.). Thus, while the brief did refer to other qualities typically associated with urban sustainability within planning – energy efficiency, reduced car use, pedestrian and bicycle friendly streets, and green spaces – other goals for New Kiruna articulated in the brief were the developing the local economy, preventing outflow migration of residents, and attracting new ones (Kiruna kommun 2012a, 29):

> Kiruna's survival as a city stands or falls in the long term by the creation of appropriate conditions for good development, a diversified economy, and a place where people want to come and live and, because they like it here, want to stay. New industries and educational opportunities need to be attracted here, to spearhead development.

The competition brief 's emphasis on urban ecological sustainability as means to accomplish these greater ambitions also reflected neoliberal ideas of sustainable development in Sweden. Sweden was a nation to quickly implement the global Agenda 21 program (from 2015, Agenda 2030), adopted at the United Nations Conference on Development and Environment in Rio de Janeiro in 1992 (Eckerberg and Forsberg 1998; Keskitalo and Liljenfeldt 2012). In Agenda 21, however, a neoliberal idea of sustainability and sustainable development is articulated. That is, the notion that governments should support private economic development as means to achieve sustainability or allow the market to resolve ecological and social concerns (Isenhour, McDonogh, and Checker 2014; see also Escobar 1995; Harvey 2005). Agenda 21 also placed emphasis on local authorities to materialize sustainable development programs and goals, reflecting neoliberal ideology and statecraft in which responsibility is shifted from federal governments to local government in a top-down

manner (Isenhour, McDonogh, and Checker 2014, 7; Mack 2019, 9). However, defining sustainability operationally is a notorious challenge, and often results in definitions which are context-specific, reflect specific policy concerns, politics, and values (Keskitalo and Liljenfeldt 2012, 17). In the following section, I examine how architectural consultants competing to win the commission to design New Kiruna interpreted Kiruna's sustainability in their design work, and how these ideas interfaced with Kiruna Municipality's ambitions for sustainability in the context of resettlement.

The Stockholm Office

In a seaside conference room in the Södermalm island-district of Stockholm, a group of architects and planners from the firm White Architects gathered with notebooks, pens, and coffee ready to begin the day's work. The topic of the meeting that morning was the competition proposal for the New Kiruna city center, which was due in less than two months' time. Though the competition brief only asked for a design plan until 2033, the team had begun to think of a longer scale for developing the city beyond this time frame, an additional sixty-seven years. The challenge of uncertain temporal horizons for the resettlement provoked a both a problem-solving attitude and creative possibilities for the group. "Maybe we can see it in a hundred-year perspective, rather than up until 2033," senior architect Martin offered. Another planner, Alice, agreed. "It's about diversifying the identity of the main city – Mine City – and to try to think about the recovery of the landscape and the situation that is negative", she said "So that they can also become healed, so that the landscape can become something nice in the very long future as well." The discussion turned to a post-mining perspective, and what could happen to Kiruna after the ore ran out, or the mine shut down. "What is Kiruna in the future? What happens when the iron runs out there, so you don't feel like you are digging your own grave, so to speak?" Martin asked those gathered around the table.

Taking a longer-term perspective than required by the competition brief, White's one-hundred-year vision took the timescales estimated for the first phase of the relocation – associated with the exhaustion of KUJ 1365 in 2032/33 – and instead linked them to a temporal frame that not explicitly linked to extraction (D'Angelo and Pijpers 2018, 215). Indeed, whether it

would be possible to deep-mine ore beyond 2032 was unknown, a fact often emphasized by both LKAB and municipal representatives. While residents were accustomed to living with extractive time, being presented with chunks of five, ten-, or thirty-years to imagine the future – linked either to the urban transformation, boom and bust cycles, or, more recently, estimates about when the ore body would run out (Fredriksson et al. 2019). This temporal experience particular to mining anthropologist Hedda Haugen Askland (2018) terms "broken time": a temporal system that follows the logic of extraction and capital, planning, and governance, rather than the local society's (ibid., 233). Indeed, concerns about broken time were reflected in the competition brief, which identified the urban transformation's orderly progression of time and space as a central challenge, and New Kiruna's development as a key step in supporting resident's sense of security, enthusiasm, and optimism for the future (Kiruna kommun 2012a, 7):

> The biggest challenge at this stage of the urban transformation process is that of creating clear strategies and principles for the advancement of the transformation in time and space, with all the social, cultural, practical and experiential aspects which have a significant bearing on instilling a sense of security, enthusiasm and optimism in the citizens of Kiruna and the agencies taking part.

Martin uncapped his pen and began sketching a drawing in his leather notebook, which I also sketched in mine as he spoke (Fig. 19). "We have the mining deformations that are eating up the city": he drew an oval and labeled it "MINE", with two squiggly lines to the right depicting the mining deformations. Sketching a bigger oval encompassing the smaller one but extending more to the right, this he labeled CENTRUM. "They think we're going to make a city here" – he drew a small circle labeled "2.0" adjacent to the right edge of the CENTRUM oval – "and this is going to be eaten up as well in a hundred-year perspective." He scribbled over the small circle until it was black with his pen. "And that's crazy, we say, in terms of sustainability, and identity, and everything. It's a huge disadvantage. So, we are saying, ok, we are building a new city like this…" He drew a very elongated, notched oval:

> … Instead of saying, here is the new city core, here is the main square, here is the new square for the church – as we know the church has to be moved again in eighty years or something – it's only optimal for some years when the city center is in the center of the density. In some years,

it will be one side of the density, and in a couple of years it will be on the other side of the density. So that's why we're making a more linear city.

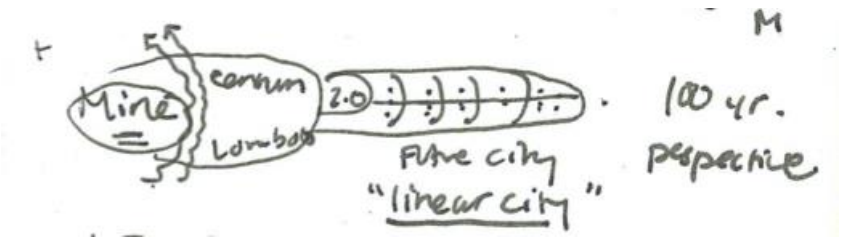

Fig. 19: Sketch after White Architects' design, depicting the New Kiruna resettlement area from author's field notebook, 2012. *Photo and sketch: Elisa López*

There was also a chance that New Kiruna, or parts New Kiruna, may have to be moved again, should LKAB decide to mine ore in the in the future near inhabited areas (RiR 2017:34, 4). Alice observed:

> The city must also be built to handle that things are going to be destroyed all the time. Not like fifty percent, but ten percent, and then you can recover all the time. And evolve all the time. So, you have to be in this process. It's the fact of living in Mine City. To handle the loss and the change.

Martin agreed, pointing to the diagram in his notebook to show how the structure of the city would allow the city to "recover all the time".

> We have this gondola thing (*linbanan*)[71]…kind of moving away from the mine [he continues drawing] but we also have then a clear a connection with the old mine, so it can be transformed into something else when it's excavated. So then it can be a tourist attraction, or I dunno, natural historical industrial landscape. It could be a ski slope, or a hotel, or some new attraction. It can be transformed into something else. With maybe then this gondola thing connected to the airport, as public transport fitting perfectly into the linear city. Public transport on like one main street (drawing a line down the middle of the oblong shape) and connected to the mine. So for many years it's going to be a

71 A gondola lift, or aerial lift (*linbanan*). Kiruna Municipality requested that this be incorporated into the competition entries, as it was a form of public transport that could be more easily moved than rail or roads.

> work place to the mine, but after that it can be transformed into this touristical thing. Something.

Martin continued the narrative, connecting a vision of Kiruna's future to the sketch:

> And then we have this huge wasteland of the deformation. The area which is going to be destroyed. And then we have the new reindeer passage. Because we have some kilometers from the mine to the new city center. And hopefully it can be used again (in a reused way). Like where they used to go, before Kiruna.
>
> So, in one hundred years it's gonna be this super city, good for the reindeers, good for the city, good for tourism, but also of course in the region there's going to be a lot of mining so it can still be this mining head capital and have diversity and other functions.

Another planner, Kristian, noted that a positive tone could also go a long way in supporting this concept:

> Maybe it also defensive to say it is 'moving away from the mine', but rather 'moving towards something new…towards nature, recreation, and tourism.

This sketch in Martin's notebook of the linear city, and the architects' conversation in the room that day was not only one of the earliest depictions of New Kiruna's urban structure, but a new way of imagining the time, space, and nature in the context of urban transformation. In approximately twenty years, Kiruna's current center would be demolished, and New Kiruna would become the main city center. The linear city was not just a design for a single site but showed a process, unfolding in physical space and over time, with a sustainable New Kiruna as the destination and core around which the other parts of the city could be re-built again if necessary. There was a transformative quality to the concept itself: new infrastructure like the gondola lift could both physically link and transform fragmented spaces, such as the old mine (after it is no longer in use) into new heritage spaces. Martin's idea that the mine pit could be used for reindeer migration again – while quite far from the realm of possibility – were useful additions to a spatial imaginary of a sustainable Kiruna. In this vision, a "healed" nature and reclamation of the "wasteland" supported a architectural narrative of a sustainable and resilient Kiruna. This new city would be adaptive and self-healing, capable of transforming industrial

landscape scars into cultural heritage, destruction into potential (Storm 2014; K. Dahlgren 2019). The hypothetical return of reindeer – here functioning as symbols of nature and the possible transformation of these areas into tourist spaces (i.e., spaces of leisure) would signify a healthier, or more ideal, balance between nature and culture in Kiruna, one in which mining, reindeer herding, tourism, and urban life could co-exist with little friction.

The linear city concept thus functioned not only as a way of stitching together broken time created by the resettlement process in space (Askland 2018), but as a *uchronotopia*, a utopian narrative linking time and space in the expression of a desired future (Askland 2021; Sörlin 2021; Thisted, et al. 2021). Uchronotopia, a concept developed by historian Hagen Schulz-Forberg, combines the notion of utopia with Mikhail Bahktin's notion of the chronotope, configurations of time and space in language (Thisted, et al., 2; see also Basso 1984). Uchronotopias, in turn, are narratives which link places to a "vision of a perfect time to come" in extractive resource contexts (Thisted, et al., 2). Within Arctic extractive development, uchronotopias "signif[y]a vision of theperfect future for this particular place", making use of place-specific affective and emotional elements, and can be used by both public and private actors to express their ideal visions (Sejersen and Thisted 2021, 384, Sejersen 2021; Lien 2021; Askland 2021).

Indeed, New Kiruna's design as it emerged on the page and in the conversation of the architect's offices that day conjured a powerful uchronotopic vision. As anthropologist Aina Landsverk Hagen (2017), observed, the process of creating architectural proposals is like magical practice and performance, honed within free-form design meetings like the one I attended in fall of 2012. At this creative stage, Hagen argues, architects are like magicians, conjuring spells in which a dialogue with objects forms a communion, and the resistance that material reality provides – whether creating, or sketching with ink pens or mining deformations – is produced dialectically (ibid., 27). White's linear city, as sketched in the conference room that day certainly conjured a powerful spell: the potential for a better future for Kiruna, in which high-tech architecture and urban design and would help "heal" the city. New Kiruna would counteract the expansion of industrial ruin, of disordered space with an excess of meaning, suffused with memories and traces of the past (Edensor 2005). Because Kiruna was henceforth to exist in a state of constant decay – potentially a "repulsive" city rather than an "attractive"

one – New Kiruna would be key to countering this. In designing a built environment that was at once aware of its impending demise, but which also contained the means to re-constitute its urban structure, the conversation highlighted the narrative potential of the urban master plan to produce these social and spatial visions (Holston 1989, 60, Mack 2017). However, this vision would also be challenged by political and economic forces. In the final section, I turn to municipal planning to make New Kiruna a reality, during which I concluded my fieldwork. Appropriately, it is also the final ethnographic episode of this thesis.

Design Tools, Planning Challenges

Shortly after the deadline for submission in December 2012, an exhibition of the ten anonymized designs (White's among them) opened at the Kiruna City Hall. Six A1 posters from each competition entry, mounted on black display boards lined one side of the open interior hall, the massive brick fireplace temporarily obscured by digital architectural renderings depicting northern lights, snow, and people moving in and around futuristic buildings of every imaginable shape. Visiting the exhibition with Elin and Máret during its opening week in January 2013, we moved through a dense crowd of residents gathered around each of the entries, as people bent closer to read the small text accompanying the images. Like shoppers in a department store, Elin and Máret browsed the designs with titles like "The Second Kiruna" and "A Network of Fire cities", pointing out things that seemed interesting or impractical in the renderings (sled dogs in the middle of the square, a helicopter pad on top of the gondola station) or features they thought sounded fun or interesting (a slide around one of the concrete headframe towers, with a preschool at the base). Residents were invited to vote on their favorite design, and in March 2013, the competition jury announced that White's design, *Kiruna 4-ever* (produced in collaboration with spatial planners Spacescape and Ghillardi+Hellsten Architects) had won and been awarded the commission, having been selected through residents' votes, the municipal council, and a competition jury.

Though the need to build New Kiruna arose from exceptional circumstances, its planning triggered many established policies and laws closely regulating the production of built environment in Sweden. Municipalities have near unilateral decision-making power over planning, regulation, and development of land and water through the Planning and

Building Law (PBL, SFS 2010:900), sometimes said to give municipalities a "planning monopoly" (*kommunalt planmonopolet*). When I returned to Kiruna in 2014, the planning work for New Kiruna was in its early stages. White's winning *Kiruna 4-ever* design was to be the starting point for two new pieces of municipal urban planning policy, the updated in-depth comprehensive plan (*fördjupad översiktsplan*) for the existing Kiruna city center, and the urban development plan *(stadsutvecklingsplan*) for New Kiruna's city center.

The in-depth comprehensive plan and urban development plan are two urban planning policy instruments regulated by the Planning and Building Law. The in-depth comprehensive plans are planning instruments which are more specific than the municipality-wide comprehensive plan (*översiktsplan*), outlining the main design features of a defined area, including roads, neighborhood blocks, and green areas (Boverket 2020b). While in-depth comprehensive plans are not legally binding, they constitute strategic planning for detailed plans *(detaljplaner)*, which are legally binding and govern the issuance of building permits and area zoning designations in specific areas. Detailed plans are considered to bridge public and private interests (Mack 2017, 179), and are part of the consultation process (*remiss*) in which local stakeholders contribute feedback before a plan gains legal force. The urban development plan is a less commonly used planning instrument and is also not legally binding. It is, however, a prominent feature of New Kiruna's planning. In 2017, Boverket, the Sweden's National Board of Housing, Building, and Planning noted that the use of the urban development plan in New Kiruna was a "completely new way of organizing and conducting planning" in Sweden (Boverket 2017, 54), as the development plan has no formal status according to Planning and Building Act. Instead, the urban development plan broadly focuses on the "qualities and functions that the municipality wants to see and clarify where, by whom and when." (ibid.). As Torsten, the city developer for Kiruna Municipality told me, the urban development plan should exist as not only a technical plan, but a set of "guidelines for action," and as "a document in which we try to incorporate the will of residents."

Beginning in late 2013, the production of these planning documents intensified as they were crafted in parallel, with one office of the municipality tasked with updating the in-depth comprehensive plan for the existing Kiruna city center and the other on New Kiruna's urban development plan. Notably, in this case the former included planning for

the future demolition of buildings and homes in the KUJ 1365 deformation zone, as well as parallel site planning for the New Kiruna center, relocation of heating and sanitation infrastructure, as well as identifying other functions which might be affected and needed to be relocated (Kiruna kommun 2014b, 7) Through these plans, existing Kiruna and as-yet-unbuilt New Kiruna were for the first time brought into co-existence as a new entity, a city in transformation. Existing Kiruna and New Kiruna-to-be were both included on maps and geographically defined for the first time (Kiruna kommun 2014a, 8): to the north, west, and southwest, the boundaries of the city followed the newly re-routed railroad. To the south, the city was now defined as including New Kiruna, the village of Tuolluvaara, and the Kiruna Airport, shifting the city center eastwards.

One month before the first submission of the urban development plan to the municipal council in February 2014, I accompanied a group of White's architects and Kiruna Municipality's planners gathered for an early morning meeting in Torsten's office in the Kiruna City Hall. The windows of Torsten's office offered unobstructed views of the terraced waste rock mountain of the mine, lit up against the purple February sky. Torsten and his colleague Sofia, the municipal head of land and development (*mark och exploateringschef*), three architects from White and Ghillardi + Hellsten, and myself sat down to look at the draft the White team had submitted leading up to a bigger meeting later that morning with municipal traffic engineers, plan architects, and others working with the in-depth master plan.

The Urban Plan Working Group pored over piles of documents and maps, in various stages of completion. There was little time for vague concepts. The proposal that had won White the commission now needed to be fleshed out and made to fit into the pattern of policy. Torsten and Sofia quickly pointed out specific improvements they needed the architects to make, as they scribbled on pages of the plan, crossing things out here, outlining things there. "Take away this Erskine[72] apartment building in the rendering", Sofia said. "It won't be able to be moved." The traffic plans had not taken snowmobiles into consideration. Pointing to another architectural rendering depicting a neighborhood block, she said "get rid of the trees in

[72] Ralph Erskine (1939-1998) was a renowned British architect who spent most of his professional and personal life in Sweden, and designed many buildings throughout the country, including Kiruna. Erskine's apartment buildings in the Kvarteret Ortdrivaren housing project such as Snusdosan (The Snuff Box), Spottkoppen (The Spitoon), and Berlinmuren (The Berlin Wall) are considered architectural icons in Kiruna, but will not be able to be saved.

the renderings of the streets. It's not a big issue, but... this would take a hundred years", referring to the extremely slow rate of growth for trees at that latitude and climate. "We need exact numbers of parking places, rooms, apartments, commercial spaces" said Torsten, emphasizing the concreteness of the project's next stage.

The enormity of the task at hand was palatable, and much was at stake. White had two weeks to submit an improved version of the urban development plan, which would be immediately submitted to the city council for review. As the planners raced to the submission deadline, the city council itself was busily working on the Mine City Phase 2 civil law agreement (GP2), which they anticipated signing that spring. Broadly, the Mine City agreements between Kiruna Municipality and LKAB stipulate financial compensation and other obligations on the part of LKAB for the urban transformation. In return, Kiruna Municipality would continue re-zoning municipal land into industrial land (Mine City Park) through ongoing amendments to the detailed plan. White's design would not only give form to the built environment of the resettlement area, but also function as the basis for the key civil law agreement regarding both the liquidation, or demolition (*avveckling*) of old Kiruna and the construction of New Kiruna.

The architects listened carefully and asked clarifying questions, taking hurried notes. One architect, Rikard, commented that they found this somewhat difficult since it was such a "stop and go" process, with key political decisions and conditions necessary for planning not yet decided; indeed, their work would form the basis for GP2 (Mine City Park 2) civil agreement between LKAB and Kiruna Municipality, in which major decisions about the urban transformation, including New Kiruna, would be decided. now, they needed to flesh out as concrete a vision of future New Kiruna as possible, one that would not only be the first official depiction of the municipal resettlement area, but also be the first step in building it. "We'll do the best we can", said Rikard, "but it's hard when things are not decided."

One problem was that the location of the new train station had not yet been finalized. White's winning design, chosen by residents and the municipality, had prominently proposed a travel center in the new city center. Another problem was that the placement of the re-routed stretch of the E-10 highway had also not been decided, and this was crucial for planning the locations of shops, neighborhoods, and access for freight and commercial motor traffic. Sofia reassured Rikard that she and Torsten

would provide quick answers to any questions they might have, but this exchange highlighted the uncertain and complex planning conditions the municipal planners faced and had been facing for many years (Nilsson 2016). Before the meeting adjourned, Torsten reminded the team: "The municipality's first concern is not what is built in the new center, but how to make an "attractive municipality." The architects pondered this for a minute. "That is… really ambiguous," said Rikard finally.

Reflecting on the Urban Plan Working Group's work later that day, Torsten noted that a shift away from qualitative language – and the imaginaries that characterized the proposal stage – was crucial now. "When an architecture firm proposes something like this", Torsten explained, "they must be careful about what kinds of arguments they use, and to be sure that the arguments are strong enough to withstand criticism if the proposed things are controversial." He continued:

> For example, we want the railroad station in the city center. And you cannot just say in a sloppy way that it would be 'so vital for the core of the city and would really give impulses to development.' You need much more...not scientific, but to be much more thorough in your argumentations. So what I'm doing right now is re-writing, and trying to add arguments, trying to...yeah, basically make it more solid, and make it clear as something that has been really worked through very well, that we have really analyzed different options, and that we have really made an analysis of what is realistic and the things that we really want to stress as important, they are well argued.

Torsten's emphasis on "scientific" and "well-argued" justifications for "controversial" municipal plans related to navigating political challenges he anticipated associated with the New Kiruna city center, specifically the new train station. Though residents had begun to be accustomed to the much smaller temporary station north of the city, most people did not doubt that it was temporary and would eventually be replaced with a new station equal or better to the old one. The unmanned temporary station contained limited storage and seating, and no possibility to buy food or drinks. The old train station, on the other hand, in a red brick building designed by the architect Folke Zetterwall, was adjacent to the old Company Hotel, and just a few hundred meters from the city center. The new station was only really accessible by car, limited municipal bus service (timed according to the official railway schedule), and difficult for train-traveling tourists to reach by foot, particularly in the subarctic climate. In the first weeks of the temporary stations' opening, its' relocation had not been well-

communicated, and poor signage and bus schedules only in Swedish led to confused tourists getting lost or dangerously walking on the shoulder of the E-10 highway, which has no lighting and no guardrails (Johansson 2014). In one one of the first public consultation meetings I attended with Kiruna business owners, the entrepreneurs also made clear that they wished for the replacement train station to be built in New Kiruna's city center, as arriving visitors bound for the diverse destinations across the municipality – the Jukkasjärvi Ice Hotel, wilderness tourism in Abisko National Park, or the ESRANGE space research center– were an important source of business revenue.

Torsten's insistence that planners convey the importance of station to the council – who had the power to ensure its place in New Kiruna – were prescient: In April 2017, two years after the urban development plan became policy, LKAB President Jan Moström announced at the company board's annual meeting that that LKAB did not intend to finance a new railway station in Kiruna. Moström told the regional newspaper *Norrländska Socialdemokraten* (NSD) he believed the temporary station built north of the city should suffice, even though it was over eight kilometers away from New Kiruna. In a reaction mirroring that of Mayor Zakrisson in 2012, a representative for the Swedish Transportation Authority (Trafikverket) seemed equally surprised by the announcement when asked for a comment by NSD (Huhtaniska and Johansson 2017):

> NSD: Do you think that LKAB has a responsibility to pay for the new railway station as well?
>
> Trafikverket regional representative: (long hesitation). Uh ... That's how we discussed the matter initially, but we have the groundwork now and will await the outcome. We don't know what the cost will be. Discussions with LKAB on how they will reimburse us for the new station haven't started yet.
>
> But Anders Lindberg, LKAB's CIO, sends word that Jan Moström's notice at the general meeting remains unchanged – that LKAB does not intend to fund any new railway station.
>
> – Our president has the final word. There is no more to say on the subject, says Anders Lindberg.

Such a changed stance touched upon what some in the community feared: that LKAB would pull back the promises it had made to the community about the city move when production and profits were reduced, fears exacerbated by the nearly sixty percent decline in the price of iron in

2014. In late October 2017, Kiruna Municipality answered in a striking manner: if LKAB did not pay for the new railway station in the city center, the Municipality would not approve the rezoning of the present city center into an industrial area according to the 2014 GP2 Agreement, a move which would effectively bring LKAB's mining operations to a complete halt (Sternlund 2017). Light was shed on how something like this could happen two months after LKAB's announcement, when the National Audit Office (RiR 2017:34) published a report revealing serious problems with the urban transformations of the Ore Fields. The report concluded that key investment decisions by LKAB – the construction of two new main levels in Kiruna and Malmberget which would necessitate populating resettlement – were insufficiently grounded in decision-supporting data, risk analyses, or critical review. The report noted that the government, LKAB's owner, did not provide sufficient oversight over the urban transformation(s), placed disproportionate on LKAB to lead the process, and that most of the planning conducted through working groups was informal and resulted in non-binding, non-coordinated decisions (RiR 2017:23, 5):

> The Government has been passive in its planning and, in practice, delegated the entire central government responsibility for the community relocation to LKAB. Nor did the Government clarify the central government responsibility in relation to local government responsibility. No analyses were made to assess whether this is the most effective way of implementing community relocations, regardless of the ownership of the company. [original capitalization]

Additional problems identified by the National Audit Office in 2017 (RiR 2017:37) was the government's "assumption" that the relocation would be planned "within the framework of current legislation and the company's commercial remit" (RiR 2017:37, 5). Though LKAB's main responsibility is to be commercially profitable, the government "assumed" planning and executing large-scale population displacement and resettlement projects in two separate towns was something the enterprise could implement (ibid.). The government also failed to provide clarification about the responsibility of central and local governments in relation to LKAB's remit and legal obligations, nor were analyses conducted about whether what was decided was the most effective way of carrying out community resettlement (ibid., 5). In practice, the Swedish government's approach to the urban transformation(s) was therefore that 1.) that LKAB and other stakeholders should be able to negotiate, plan, and resettle residents on their own with little to no government guidance, using

existing legislation and that 2.) that this should be possible despite a serious lack of information or research into the financial, societal, and political risks involved. In sum, the government's stance reflected tendencies toward decentralized, neoliberal governance in Sweden, with LKAB treated as a "local authority" equal to the municipality, and that both could manage complex social, political, and environmental problems that exceeded the local scope (Mack 2019),

This fractured planning process would have significant social, political, and spatial implications. In 2019, LKAB accused Kiruna Municipality of using "gangster methods" againt LKAB (Dahlgren 2019) for refusing to re-zone the GP2 area. Bo Krogvig, an LKAB representative interviewed by *Norrländska Socialdemokraten*, stated that the municipality had taken LKAB and the mine "hostage" by demanding the promise of a replacement hospital and the new train station in the center (instead of compensation money paid to Norrbotten County or the National Transportation Authority) in exchange for approving the re-zoning. Krogvig compared the situation to the Norrmalmstorg robbery in 1973 (the incident where the concept of Stockholm Syndrome originated), in which "the hostages are to start cooperating with those who have taken them hostage" (Dahlgren 2019). Asked to respond Mayor Selberg's statement that the intention behind denying the re-zoning was an effort to get the government more involved in the urban transformation, Krogvig ominously suggested that Kiruna Municipality's attempts to use the planning monopoly to force companies to negotiate could have consequences for municipalities across the nation, and strip power from local authorities (ibid.):

> -First, we must make it clear to the municipal management that this is no playhouse. This is serious.
>
> - Should this become standard, the municipalities will lose the planning monopoly. Then they can no longer make these decisions. The County Administrative Board or another institution may then do so. From a municipal point of view, it is a risky game.

LKAB formally appealed to the government to intervene in May 2020, request a planning injunction against Kiruna Municipality, which would relieve the municipality of the planning monopoly and the right to decide over land development. Per Bolund, then-Minister for Financial Markets, acknowledged the injunction application but re-emphasized the government's ambition that the "parties themselves will be able to reach a joint solution." (Sternlund 2020) Without a resolution, both had much to

lose; without re-zoned land to mine, LKAB might be forced to halt production and reduce its work force (it is illegal to mine under inhabited areas). On the municipality's side, the long-term compensation for the urban transformation would be affected, as the money that LKAB will pay to Kiruna Muncipality for damaged real estate and infrastructure, as required by the Minerals Act, depends on LKAB's future production and profits. One month later, Kiruna Municipality did approve the re-zoning of the GP2:2:4 (Mine City Park 2) area to industrial land, and in turn, LKAB withdrew the planning injunction request.

Kiruna Municipality's refusal to re-zone GP2 unless the company guaranteed to build – not simply pay for – a new hospital and train station also revealed transformations in the relationship between LKAB and Kiruna Municipality[73] in light of the urban transformation. Municipal-corporate cooperation throughout Kiruna's history has long been based on the understanding that "what's good for LKAB is good for the community", the power differentials between the two actors is significant, as the company is considered to have significant power over the municipality (Nilsson 2010). That a small municipality was expected to negotiate with a major state-owned company about the impact of its operations reveals a failure on behalf of the state to acknowledge this stakeholder inequality, their conflicting mandates, complex coordination with non-local actors and agencies, and the time that this would all require (RiR 2017:37). These pointed exchanges between municipal leaders and company representatives, which have been ongoing since 2004, also reflect deep frustrations caused by uncertainty in planning conditions (Nilsson 2016, Tepecik Diş and Karimnia 2021). These frustrations, however, were not contained to meeting rooms or out of the public gaze, and as the exchanges above showed, played out publicly in regional and local media. These frustrations contributed to an exacerbated sense of fractured time and uncertain futures, such as LKAB's threats to halt production and cut jobs if re-zoning was not approved (LKAB 2020b).

Part of the uncertainty in New Kiruna's planning process did stem from typical risks associated with megaprojects: long planning horizons, decision-making involving multiple public and private stakeholders with

73 Within the political lineage of mayors, a significant number were former miners, and until 2018, when Gunnar Selberg (Center Party) was elected Mayor, all had mayors in Kiruna's history had been members of the Social Democratic Worker's Party (Sveriges Socialdemokratiska Arbetareparti, typically referred to as the Social Democrats), whose current leader and Prime Minister (as of October 2021), Stefan Löfven, is a formal metalworker and union representative.

competing interests, changing scope and ambition level of the project over time, and shifts in personnel over the long life of the project, proliferating risks and unknowns (Flyvbjerg 2014, 9). In all, the location of the station took seven years to negotiate, with the final decision ultimately removed from local hands and transferred over to the National Transportation Authority (Trafikverket). In May 2021, Trafikverket chose a location for the new the station both parties could agree on was chosen: two hundred meters from New Kiruna's city center, in what is currently a traffic roundabout. According to a company representative, however, LKAB will pay for the new station but does not intend to pay for the new stretch of railway to the station itself (Perjus 2021) At the time of writing, how this railway will be financed is still unknown, a further proliferation of uncertainty: for what good is a new station house without a railway? While the choice of station location appears as one step closer to leaving this liminal space of waiting for displacement (Harms 2013), the new question over financing of the actual railroad is one step back, with more negotiations and debates ahead.

Finally, the case of the train station mirrors a pattern observed by anthropologists in other mining communities regarding shifting CSR, or corporate social responsibility rhetoric and practices (Welker 2009; Benson and Kirsch 2011; Rajak 2011; Dolan and Rajak 2016). Corporate social responsibility, as anthropologists Catherine Dolan and Dinah Rajak (2016) define it, is a versatile, multiply enacted, evolving, and flexible set of overlapping practices and discourses. Through CSR practices and discourses, business can transform and assert itself as an ethical actor, claiming to rise above the friction between principle and profit by strategically reframing the responsibilities, interest, and priorities of the corporation (Dolan and Rajak 2016, 6). A good example of this is the sentiment expressed the LKAB banners and mounted on fences around demolition zones (chapter one): "Urban transformation is progressing in order to ensure a future together". The slogan suggests that urban transformation is about shared goals, framing LKAB as a caring company carrying out the urban transformation for the benefit of all. The use of the word "together" (*tillsammans*) works to posit the enterprise and community as social equals in relation, with not only shared values but a shared history, which the urban transformation will "ensure" a continuation of. The slogan further evokes a kind of corporate personhood, and – in combination with other urban symbols linked to company history (chapter four) – LKAB is re-positioned as a moral actor, with both a memory and a

moral self (Rajak 2014). Sudden announcements and sharp rhetoric when withdrawing promises made to the community – such as refusing to pay for replacing the passenger railway – however, show how CSR rhetoric allows companies to have it both ways: to both assert their commitment to community progress and development *and* to a "supposedly amoral, asocial, and secular logic of the 'the market'" (Rajak 2011, 240). These shifts in LKAB's corporate responsibility according to market changes only add to the uncertainty and mistrust that residents readily identified: as Mattias, the tour guide put it, "I fear that when they make temporary solutions, they will become permanent because it's the cheapest thing to do". Whether Mattias' fears will be realized remains to be seen – there is nothing to do but wait.

Concluding Remarks

As the voices of residents in this chapter have shown, living with the geophysical effects of mining and social impacts of urban transformation have created rifts in Kiruna's social landscape. The effects of mining upon individuals' bodily sensations, everyday spaces, and temporalities, as I've shown here, have resulted in residents living with uncertainty and difficult emotions, which they express in a wide range of ways. Municipal leaders, tasked with planning a resettlement area for residents, partially sought to address community concerns and uncertainty about the future through the spatial production and imaginary of the New Kiruna resettlement area. They were aided in this task by technical experts – architectural consultants – who could design and materialize these municipal ambitions for a sustainable, future Kiruna, and give form to a positive vision for the future of the city. However, municipal ambitions for a city center that would not only reflect residents' desires, but locally defined notions of sustainability, were ultimately challenged in the planning process, as power inequalities between the company and the municipality came to the fore. Government efforts to contain the social, political, and spatial, complexity the "societal transformation" of Kiruna represents were also undermined, as expectations that local actors (LKAB and Kiruna Municipality) would perform their roles as neutral, technocratic managers, rather than organizations comprised of local people whose everyday lives are intertwined with extractivism in equally complicated ways. In sum, these moments from New Kiruna's early planning show how the production of

space and time in extractive resource communities is a process always already characterized by uncertainty and persistent inequalities, issues which far exceed the capacities of urban design, architecture, and city planning to resolve or overcome.

Chapter 8: Conclusion

I conclude this thesis by returning to the beginning of this research journey. When I first arrived to Kiruna seeking to learn about what residents thought about the "move of the city" – as I first heard it described – I encountered a much greater diversity of meanings and interpretations regarding what this entailed. From LKAB, I learned, this was a "societal transformation" (*samhällsomvandling*), while from the municipal side it was an "urban transformation" (*stadsomvandling*), and for many residents, a "city move" (*stadsflytt*). All three terms were present simultaneously in residents' everyday lives: in local politics, sources of public information, planning work, and daily conversations. But what exactly was being "transformed" in Kiruna, and what did "transformation" mean in this context? During my fifteen months of fieldwork, I encountered a range ideas, practices, and concerns from residents that at first glance appeared indirectly related to the resettlement project itself. These included, among other things, worries over foreign mining companies prospecting in the forests and mountains, reduced land for herding, ensuring a quality of life linked to access to nature, and reflections on the city's history and future with and beyond mining. A common thread, however, was the centrality of extractivism, and the capacity of this mode of production to affect people and land in Giron-Kiruna in substantial and unexpected ways.

Accordingly, I found the concept of space a useful lens to talk about mining-induced transformation in holistic way, and, most importantly, not solely limited to population resettlement. Understanding space as a social product – not as an abstract, neutral container for human action – but as something co-produced physically, mentally, and socially in practice and thought (Lefebvre 1991, 14; West 2006a, 228) provide me with critical tools to examine how mining-induced changes are linked, experienced, and understood by different people I interviewed throughout the research. Indeed, it is not only states, corporations, or planners who produce space, but also everyday humans and non-humans. Social space is cumulative; its form, materiality, and meaning are characterized by "encounter, assembly,

simultaneity"; social space assembles "everything that there is *in space*, everything that is produced by nature or by society, either through their cooperation or through their conflicts." (Lefebvre 1991, 101). At the same time, social space is experienced as lived, local, and specific, in accordance with personal and community histories, individual purposes, and life worlds. For Kiruna's municipal planners, for example, urban space was a means of creating order with, and within, specific social, political, and material realities (Mack and Herzfeld 2020), while for the Čohkkiras Sámi community, urban and non-urban sites comprised spaces of home, herding, movement, and memory (Ingold 1993; Dynesius and Stenberg 2004). Space, as I have shown here, is therefore not an abstract or neutral concept but a powerful "tool of thought and action" (Lefebvre 1991, 26), used in different ways for different ends in Giron-Kiruna.

A unique contribution of this thesis is that it brings together insights from anthropological, sociological, and geographical theories of space into conversation with settler colonial theory, Indigenous theories of space, and environmental anthropology (chapter two). In taking a fine-grained look at historical and contemporary experiences of one local group – the Čohkkiras Sámi community – I have shown that the production of extractive space in Kiruna spatialized not only power but dominant cultural ideas of nature, social difference, and ways of living (chapters two and three, Low 2016). Though state and private economic actors exerted considerable dominance as producers of space (and society) linked to extractive modes of production in the north – mining, forestry, and mill estates – total domination and control over northern space never fully succeeded. This because pre-existing spaces and infrastructures, such as those associated with Sámi society, have long constituted space in the north, and indeed, have been integral to the establishment of early extractive industries in northern Sweden. Moving into the early 20th century, I showed how Sámi people also engaged spaces and infrastructures created by extractive settler colonialism, primarily as a means of resisting displacement caused by the production of living, working, and recreational spaces for mine workers and tourists (chapters three, four and six). Since the 1930s, when Sámi workers first took work on the railroad, mine labor has also become an important material support for some reindeer owners. However, Sámi continue to experience unique dilemmas and double binds underpinned by settler colonialism as historic structure whose legacies persist into the present (Wolfe 2006), and inequalities reinforced through the destruction of the resource base for reindeer herding by the mining industry (chapter

five). These frictions are also present in non-urban space – the mountains and forest – which are contested sites important for different local groups who have differing notions of nature, work, and non-work (chapter six). Finally, while I have primarily focused on the experiences of the Čohkkiras reindeer herders, I have also investigated how urban residents of Giron-Kiruna made sense of mining-induced displacement and resettlement (chapter seven), and how municipal politicians, planners, and architectural consultants articulated future visions for New Kiruna as a sustainable city. I further I argue that what LKAB and the Swedish government call "societal" or "urban transformation" is less a transformation than it is a reproduction and expansion of extractivism as a mode of production (Acosta 2013, Stammler and Wilson, 2015, 1), the consequences of which affect local people in ways that are neither quantifiable nor equitable.

Producing Space, Nature, and Society

After the introduction of the people and places in the first chapter, chapter two unpacks my theoretical toolkit and analytic framework on space. Here, I outline how my notion of space, inspired by the work of philosopher and sociologist Henri Lefebvre, is the product of three processes: 1) *spatial practice*, everyday routines, activities, movements, and labor within a society which "secretes a society's space" (ibid., 38); 2) *representations of space*, or conceptual space, "the space of scientists, planners, urban urbanists, technocratic subdividers and social engineers" who produce the dominant spaces of society, (ibid. 28-39); and 3) *representational spaces*, affective, symbolic, fluid, and dynamic spaces which are "primarily lived through [their] associated images and symbols," in which the imagination can challenge dominant space (ibid., 39, 41-42). Throughout the thesis, I use Lefebvre's thinking as a touchstone to examine how different spaces are co-produced, not only by LKAB through the expansion of mine space but also by Čohkkiras reindeer herders, recreationalists, and urban planners.

A common theme I identify within these diverse spatial practices is regarding the relationship between nature and society. Here, I engage the work of anthropologists and geographers who show that the production of "nature" (sociocultural and material) is also part of the production of space, and thus there are political and social implications to ideas of nature (Smith 2008, 28, and West 2006a, 28-29). In chapter three, for example, I show

how Western, Enlightenment ideas of nature, agriculture, and productivity were used to enact a shift from recognized Sámi land rights in the 17 and 18thth centuries to new interpretations of non-agricultural Sámi livelihoods as non-labor. Northern space was also increasingly promoted as a potent wilderness, frontier, and "land of the future" in the 19th and 20th centuries. As I showed in chapter three, northern space has long been constructed as empty, sparsely inhabited, underused, and its' people vulnerable to foreign incursion, reflecting both state desires and anxieties linked to the north. From the 17th century, large areas of land were made available for settlers and extractive industries, resulting in the production of a new space, a resource frontier (Tsing 2003, 1). As anthropologist Anna Tsing observes, resource frontiers are not just discovered, they are products of social space and time, specifically *imagined* as "zone[s] of not yet" – spaces not yet mapped, planned, or regulated – even as they are being actively mapped, planned and regulated (ibid.) These representations play a crucial role in motivating desire for frontier spaces – frontiers are, indeed, "spaces of desire" (ibid., 5102) – intended to attract those who wish to, or could assist in, extracting economic value from the land. However, these qualities are not inherent to northern space, but co-produced and materialized through scientific knowledge (botany, geology, ethnography), politics (disputes over national borders), and governance (regulating the relationships between settlers, peasants, and Sámi), and a range of cultural ideas about living and labor.

In the late 19th and early 20th century, cultural ideas of nature were also marshalled towards the production of settler space. At this time, the concept of distinct and less civilized races, vis-à-vis racial biology, was used not only as an ingredient toward producing the spatial imaginary of the modern Swedish nation (Anderson 2006), but also used to naturalize and justify Sámi difference, separation, and assimilation in northern spaces (Axelsson, Sköld, and Röver 2019, 124). As I show in chapters three and four, this logic of race was used as a tool of colonial power and spatialized (Low 2016), "producing and locating – physically, historically, affectively, and discursively – social relations, institutions, representations and practices in space." (Low 2016). I show how this was done from a historical perspective, through policies which banned Sámi from living in certain kinds of structures or spending extended time in "civilized" spaces (such as the city) thought to entice Sámi to leave the romantic, "nomadic" life settlers idealized. At the same time, Sámi exclusion was a way of preserving "civilized" space itself, and the appearance of ordered, distinct,

and "natural" spaces for civilized and less-civilized people. Sámi presence in the city, in other words, revealed the reality of early Kiruna to be a much more diverse, unfinished, and contingent space than Hjalmar Lundbohm envisioned for his model city.

Spaces of Continuity, Culture, and Conflict

The thesis examines mining-induced spatial and societal transformation from the perspective of different stakeholders, all of whom are either affected by or involved in Kiruna's mining industry. I have particularly focused attention on one group, Čohkkiras Sámi reindeer herders, whose homeland overlaps with the city of Kiruna. Building on the historical material analyzed in chapters three and four, I argued that extractivism and settler colonialism in Kiruna are interlinked structures, a feature it shares with other Arctic and subarctic resource extraction sites around the world (Preston 2017; Gross 2019; Clinton, Gross and Joly 2019). However, rather than re-enforce the notion of "settler" and "Indigenous" spaces as distinct, I have sought to show how these spaces overlap and interpenetrate each other in the everyday practice. In doing so, I have sought to avoid reproducing settler colonial logics of spatial separation between groups, while also attending to the realities of how these spaces were produced, and how the structures and patterns of inequality introduced by settler colonialism remain a source of concern for people in the present (Lantto 2010).

As I note in the second chapter, the application of settler colonialism as an analytic lens to the Nordic Arctic is somewhat recent and may not be applicable in every site and social context across Sápmi (Hastrup and Lien 2020). Nevertheless, I find settler colonialism useful in the context of Kiruna because of settlement – the creation of Kiruna city – was so important to the establishment of mining. Settler colonialism is also productive when analyzed, as I do here, as a form of space making, and thus also a tool of social engineering and control. This analytic distinction is further helpful in showing how Sámi spaces – in the city, small villages, and the mountains – are co-produced alongside, within, and beyond spaces shaped by settler colonialism and extraction. Indeed, my point of departure for studying these underexamined links between the production of settler colonial and extractive space in Giron-Kiruna was inspired by my interviews with Sámi Elder and cultural worker Margareta Huvva

Stenberg. Stenberg's lifelong work as a community organizer, historian, and researcher for the Čohkkiras Sámi community, not only shed new light on the history of Giron-Kiruna as a city, but also shows how local Sámi people responded to this expansion of extractive-settler colonial space. As I show in chapters four and five, waged labor in the mines or on the railroad, or "double work", was incorporated into the Sámi tradition of diversified livelihoods in Giron-Kiruna. As the historic review in chapter three showed, the dominant popular representation of reindeer herding as a singular livelihood did not uniformly reflect practices in the Čohkkiras area, where people have long maintained diversified household economies including fishing, hunting, and non-reindeer animal husbandry. These strategies were long been used by Sámi across northern Sweden to use available resources in an effective and sustainable way, as well as to survive tough periods, including oppressive taxation practices (in the 16th and 17th centuries) and natural catastrophes leading to the mass death of reindeer. These diverse livelihoods were a way of maintaining mutually cooperative social relations with other local non-Sámi groups, which would come to play an important role in the establishment of Sámi space and infrastructures in the city. These relations also helped Sámi secure access to better representation in negotiations with colonial authorities and securing labor to supplement reindeer herding during a period of crisis, labor which would remain important as the resource base necessary for herding – land – has steadily declined. In finding ways to stay at home and maintain their herds, these Sámi "double workers" – reindeer owners who combine work in the mine with reindeer herding – have continually challenged discourses and representations of Sámi as suited to only certain types of labor and certain kinds of spaces within settler colonial imaginaries.

Another finding of this research is that structures of inequality implemented through the production of extractive space and settler colonialism continue to work upon Sámi people in Giron-Kiruna today. As the voices of Sámi mine workers in chapter five show, these structures of inequality also appear within the context of people's everyday lives and are navigated by individuals in different ways. For double workers with higher positions within the mining industry like Isak (chapter five), one way of navigating spatial and social inequalities related to mining was by informally positing himself as a broker, one who could inform, influence, and hopefully mitigate, the expansion of extractive space and negative impacts on reindeer herding. Isak's strategy to seek a context-specific

means of addressing the impacts of mining through his work also reflects an individual version of what anthropologist Teresa Komu (2020) terms the "refusal to resist": a cooperative, long-term strategy to ensure the continuity of reindeer herding as a livelihood, which creates room for people to manoeuvre difficult situations without risking outer group social relations (ibid., 532, 543). Komu insists that this should not be understood as consent or a community "social license to mine" (ibid, 256) but rather one way in which Sámi herders respond to conditions of inequality in certain communities. For others, like Ante, double binds linked to using mine labor to support herding generated feelings of alienation and moral dilemmas related to participating in an industry which irreversibly transforms herding spaces (Gross 2019a, 2019b). The pressure involved in maintaining herding – to which all Sámi rights to land are legally bound in Sweden – also led some double-workers, like Niklas, to speculate about leaving herding all together, to re-claiming his individual mobility and freedom of choice by hypothetically rejecting both internal and external politics of recognition linked to Sámi Indigenous "authenticity".

In chapter six, I showed how historical inequalities remain spatialized through representations of mountain and forests spaces as wild, for leisure, or as belonging to the "Swedish nation", and political debates about Sámi rights to land as Indigenous peoples in relation to this. Here, I show how two ways of making space that at first seem to be very different – the production of spaces of work and the production of spaces of leisure – are co-produced, and intimately linked in the mountains north of Giron-Kiruna. My argument builds on Lefebvre's insights that spaces of leisure are co-produced as spaces of "non-work" under capitalism, and as such, reflect spatial imaginaries, social relations, and spatial practices of capitalism as mode of production. Examining how new ways of relating to nature – via recreation and outdoor sports– was linked to the establishment of the Swedish welfare state and nation making project, I also argued that forms of spatial planning (such as the national interests, *riksintressen*) and recreational practices can reinforce patters of inequality, when framed as in conflict with Sámi land perceptions, cosmologies, and use. The seasonal conflicts between recreationalists and reindeer herders about snowmobile use in the mountains not only revealed the dense overlapping nature of settler colonial, extractive, and Indigenous spaces, but also how Sámi reindeer herding practices disrupt the creation of "smooth urban [and non-urban] geographies of settler power." (Simpson and Bagelman 2017, 559) However, some residents – such as the authors of the anti-ILO

advertisement – refuse to acknowledge these relations or hybridity of spaces. Tensions generated by settler colonialism's structures of inequality are instead framed as conflict between individual rights versus collective rights (Holder and Corntassel 2002; Johnson 2010).

A further contribution of this thesis to scholarship about the peoples and places of the Nordic Arctic, as noted, is the analysis of reindeer herding as a way of producing space. In chapter six, for example, I show how Sámi reindeer herders produce and sustain Sámi spaces of work, dwelling, and memory. I showed how Sámi spaces such as "the reindeer forest" (*meahcci*) link together Sámi space, time, and tasks in dynamic ways, and which importantly reflect the importance of movement and travel between sites (Ingold 1993; Joks, Østmo, and Law 2020). Spaces like the reindeer forest also constitute a social space. This social space includes not only humans, but also non-humans – domesticated reindeer, herding dogs, wild animals, and plants – some of whom are recognized as having personhood. These entities together also produce the infrastructures and architectures of domestication, the Sámi herding *domus* (Anderson, et al. 2017). Another aspect of local Sámi space I highlight in chapter six is the production and maintenance of representational spaces, spaces that have an "affective kernel", are "alive"," speak", and are "lived through [their] associated images and symbols" (Lefebvre 1991, 39, 41-42). Examples of such spaces I find in excerpts from *muitalusat*, a Sámi oral tradition sometimes translated as "story" or "narrative" that draws its etymology from the word *muitit*, memory, or remembering (Cocq 2008). Some of the *muitalusat* Stenberg and Dynesisus collected in Čohkkiras area show how animals, people, and supernatural beings together co-produce space, such as particular mountain formations or spiritual sites, while others document contemporary events, like the disturbance of a memorial site (a burial ground) by recreationalists. In sum, these *muitalusat* and herding spaces show that co-production of diverse spaces in and around Giron-Kiruna is an ongoing and active process, and indeed, a defining characteristic of space in Giron-Kiruna.

Re-Producing Extractivism and Inequality

As the reader will have noticed, the preceding chapters largely attended to the historic and ongoing co-production of Sámi and settler colonial spaces, both urban and non-urban. However, as noted in the introduction to this

concluding chapter, this thesis is also framed by the question and context of mining based urban/societal/spatial transformation. In taking a closer look at how Kiruna's urban transformation is understood by city residents, I have similarly tacked back and forth between history and the present. In the third chapter, I analyzed urban resident's views of the city and the symbolic ecology of urban Kiruna, working backwards from popular discourses of the model city to examine further dimensions of its spatial production (physical, mental [conceptual], and social). In the seventh chapter, I returned to the space of the city, having already followed mining infrastructure (like rail) and wages from mine labor to the mountains (used in reindeer herding) outwards from the city. In returning to the urban space in the final episode of this ethnography, my intention has been to show how the reproduction of extractive space can take many different forms. These include not only the irreversible transformation of herding lands and urban space, but the irreversible transformation of people's emotional relationships to space and place, their sense of security, and ambitions for individual and community futures.

Since 2004, when the decision was made to resettle residents to continue mining, the choice to resettle was understood by many, including LKAB, the Swedish government, and many local stakeholders as a self-evident decision; ceasing to mine, for better or worse, has never been taken in discussion as an option. For this reason, the framing of this mining-induced displacement and resettlement project by LKAB and its owner, the Swedish state – the two main actors who use term "societal transformation" – indicates that this is not a change bur rather the production of space intended to support extractivism, or the prioritization of resource extraction for export, as a mode of production (Acosta 2013, Stammler and Wilson, 2015, 1). As Henri Lefebvre observed, "…each society offers up its own peculiar space, as it were, as an 'object' for analysis and overall theoretical explication…but it would be more accurate to say each *mode of production*, along with its specific relations of production." (Lefebvre 1991, 31; original emphasis). As I showed in chapter seven, the fact that mining is irreversibly transforming space produced to support a mode of production – a city for workers – presents dilemmas for many local stakeholders, but in very different ways. City residents were now faced with the emergence of double-binds akin to those experienced by Sámi double-workers, in which mine labor, invaluable to the local economy and a major source of local employment, actively contributes to the damage of land necessary for reindeer herding life. As the reflections of residents in chapter seven show,

people respond to these conditions and experiences of mining-induced change in different ways. For some residents like Roger, the embodied experiences of industrial activity led them to question their trust in company information, while for others, like Hannele, uncertainty gave rise to feelings of indifference and powerlessness. Rather than interpret these, at times, ambivalent views of the urban transformation as approval, I consider these resident views as evidence of the complex emotions that mining-induced change generates in extractive contexts, and which residents have different ways of managing (Granås 2012; Askland 2021).

Considering these dilemmas, I argued, the urban/societal transformation process became a way for corporate and state actors to conceal this reproduction of extractive space, and, more importantly, the social relations of extractivism. These relations have historically situated LKAB as a powerful actor with considerable influence over not only economic but political life, a situation exacerbated by increasingly neoliberal governance Sweden. This was evident in the way that the Swedish government effectively "outsourced" responsibility for the displacement and resettlement of residents to LKAB, much like it "outsourced" the planning and development of Kiruna in the late 19th and early 20th entry to Hjalmar Lundbohm, the first mine manager (*disponent*) of LKAB and man credited with founding the city. Indeed, frequent reference to Lundbohm and the "model city" in the planning for the New Kiruna resettlement area revealed how deeply social structures inscribed in space can sustain social orders and relations linked to a mode of production, in this case extractivism. Public debate around the planning for the New Kiruna resettlement area and conflicting municipal and corporate visions of the future for Kiruna also revealed how political and economic inequalities between public and corporate stakeholders play out within, and further shape, physical space. Discourses of sustainability, and sustainability as a spatial imaginary, as I showed in the work of the architectural consultants hired to design the New Kiruna resettlement area, reflected attempts to provide alternative imaginaries for the future of the city. As the case of the train station revealed, however, unequal relations between company and the municipality – a relation that was never itself intended to be transformed, but rather sustained – nearly undermined these efforts.

My research indicates that social and spatial inequality – and its role in supporting the reproduction and further development of extracitvism – will continue for as long as mining remains the dominant mode of production in Kiruna. For this reason, I hope that this thesis will be a small contribution

to future research on mining-induced transformations in the Ore Fields, and the manifold ways in which extractive industries co-produce spaces of everyday life in this part of the world. Overall, this thesis has argued for understanding how inequality is enacted, apprehended, and re-worked through spatial practices, representations, and imaginaries in extractive contexts. As I have shown in the case of Kiruna, analysis of specific community histories and local ways of producing space is fundamental to understanding how extraction is sustained, reproduced, and challenged. These spatial productions, imaginaries, and social relations are both visible and invisible, explicit and implicit, conscious and unconscious, fixed and mobile. These spaces and relations have been co-produced for centuries and continue to transform Kiruna today, from the ground up.

References

Abu-Lughod, Lila. 1996. “Writing Against Culture.” In *Anthropology in Theory: Issues in Epistemology,* edited by Moore, Henrietta L., and Todd Sanders, 466–479. Hoboken: John Wiley & Sons.

Abram, Simone, and Gisa Weszkalnys. 2013. *Elusive promises: Planning in the Contemporary World*. Oxford, New York: Berghahn Books.

Agnidakis, Paul. 2013. *Rätten till platsen: Tillhörighet och samhörighet i två lokala industrisamhällen under omvandling.* PhD diss. Höör: Brutus Östlings Bokförlag Symposion.

Alia, Valerie. 2006. *Names and Nunavut: Culture and Identity in the Inuit Homeland*. Oxford, New York: Berghahn Books.

Allard, Christina. 2011. “The Nordic countries’ law on Sámi territorial rights.” *Arctic Review* 23 (2), 160–183.

——. “The rationale for the duty to consult indigenous peoples: Comparative reflections from Nordic and Canadian legal contexts.” *Arctic Review* 9, 25–43.

Allard, Christina, and Susann Funderud Skogvang. 2015. *Indigenous Rights in Scandinavia: Autonomous Sámi law*. Ashgate Publishing, Ltd.

Allard, Christina, and Malin Brännström. 2021. “Girjas Reindeer Herding Community v. Sweden: Analysing the Merits of the Girjas Case.” *Arctic Review* 12 (March), 56-79.

Allen, John, Allan Cochrane, Nick Henry, Doreen Massey, and Phil Sarre. 2012. *Rethinking the Region: Spaces of Neo-liberalism.* Abingdon: Routledge.

Amatulli, Giuseppe. 2015. *The legal position of the Sámi in the exploitation of mineral resources in Finland, Norway and Sweden*. Åbo: Institute for Human Rights, Åbo Akademi University.

American Anthropological Association. 2012. “Statement on Ethics: Principles of professional responsibilities.” Arlington, VA.

Anaya, James. 2011. *Report of the Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous People: The situation of the Sámi people in the Sápmi region of Norway, Sweden and Finland.* New York: United Nations General Assembly.

Anderson, David G. 2014. “Cultures of reciprocity and cultures of control in the Circumpolar North.” *Journal of Northern studies* 8 (2), 11–27.

Anderson, David G., Robert P. Wishart, and Virginie Vaté. 2013. *About the Hearth: Perspectives on the Home, Hearth and Household in the Circumpolar North*. Oxford, New York: Berghahn Books.

Anderson, David G., Jan Peter Laurens Loovers, Sara Asu Schroer, and Robert P. Wishart. 2017. “Architectures of domestication: On emplacing human-animal relations in the North.” *Journal of the Royal Anthropological Institute* 23 (2), 398–416.

Anderson, Kay. 1998. “Science and the savage: The Linnean society of New south Wales, 1874–1900.” *Ecumene* 5 (2), 125-143.

Anderson, Myrdene. 1986. “From Predator to Pet: Social Relationships of the Saami Reindeer-Herding Dog.” *Central Issues in Anthropology* 6 (2), 3–11.

Andersson, Rikard, Lars Östlund, and Erik Törnlund. 2005. “The last European landscape to be colonised: A case study of land-use change in the far north of Sweden 1850-1930.” *Environment and History* 11 (3), 293–318.

Angus, Siobhan. 2018. “El Dorado in the White Pines: Representations of Wilderness on an Industrial Frontier.” *Radical History Review* 132, 47–67.

Appadurai, Arjun. 1986. “Theory in anthropology: Center and periphery.” *Comparative Studies in Society and History* 28, (2), 356–361.

——. 1996. *Modernity al large: Cultural dimensions of globalization (Vol. 1)* Minneapolis: University of Minnesota Press.

Arell, Nils. Rennomadismen i Torne lappmark: Markanvändning under kolonisationsepoken i fr.a. Enontekis socken. PhD diss., Umeå Universitet, 1977.

Askland, Hedda Haugen. 2018. “A Dying Village: Mining and the Experiential Condition of Displacement.” *The Extractive Industries and Society* 5 (2), 230–36.

——. 2020. Mining voids: Extraction and emotion at the Australian coal frontier. *Polar Record* 56 (e5), 1–10.

Azadi, Mehdi, Stephen A. Northey, Saleem H. Ali, and Mansour Edraki. 2020. “Transparency on Greenhouse Gas Emissions from Mining to Enable Climate Change Mitigation.” *Nature Geoscience* 13 (2), 100–104.

Baer, Lars Anders. 2010. *Study on the impact of climate change adaptation and mitigation measures on reindeer herding.* Working Paper. United Nations Economic and Social Council.

Basiago, Andrew D. 1995. “Methods of defining ‘sustainability’”. *Sustainable development* 3 (3), 109–119.

Basso, Keith H. 1996. *Wisdom Sits in Places: Landscape and Language Among the Western Apache*. Albuquerque: UNM Press.

Basso, Keith H., and Steven Feld. 2003. *Senses of Place*. Santa Fe: School of America Research Press.

Beach, Hugh. “Reindeer-herd management in transition: The case of Tuorpon Saameby in Northern Sweden.” PhD diss., Uppsala Universitet, 1981.

——. 1982. “The Place of Women in the Modern Saameby: An Issue in Legal Anthropology.” *Antropologisk Forskning: Ymer* 102.

——. 1997. “Negotiating nature in Swedish Lapland: Ecology and economics of Saami reindeer management.” *Contested Arctic: Indigenous Peoples, Industrial States, and the Circumpolar Environment*, edited by Eric Alden

Smith and Joan McCarter, 122–149. Cambridge: Cambridge University Press.
——. 2007. “Self-determining the self: Aspects of Saami identity management in Sweden.” *Acta Borealia* 24 (1), 1–25.
Beach, Hugh, and Florian Stammler. 2006. “Human and animal relations in pastoralism.” *Nomadic Peoples* 10 (2), 6–30.
Bedoire, Fredric. 1973. *Kiruna kyrka: Lappland, band I:1*. Stockholm: Almqvist & Wiksell.
Bennett, Jane. 2010. *Vibrant Matter*. Durham: Duke University Press.
Benson, Peter. 2014. “Corporate paternalism and the problem of harmful products.” *PoLAR: Political and Legal Anthropology Review* 37 (2), 218-230.
Benson, Peter, and Stuart Kirsch. 2010. “Capitalism and the Politics of Resignation.” *Current Anthropology* 51 (4) 459–486.
Berglund, Martin, and Sofie Karlsson. “Den juridiska odlingsgränsen och dess inverkan på förvärv av statlig mark: En studie av markförvärv i samband med samhällsomvandlingen i Kiruna.” Bachelors’ thesis. Högskolan i Gävle, 2015.
Bernard, H. Russell. 2013. *Social research methods: Qualitative and quantitative approaches*. Thousand Oaks, Calif: SAGE Publications.
Bergsstaten. 2021. “Landowners and those with a usufruct (right of use) to land”. March 3rd, 2021. https://www.sgu.se/en/mining-inspectorate/prospecting-process/landowners-and-those-with-a-usufruct-right-of-use-to-land/
Blake, William. 2002. *William Blake: Collected Poems*, edited by William Butler Yeats, and Tom Paulin. London: Routledge.
Blatman-Thomas, Naama, and Libby Porter. “Placing property: Theorizing the urban from settler colonial cities.” *International Journal of Urban and Regional Research* 43 (1), 30–45.
Blomley, Nicholas K. 2004. *Unsettling the city urban land and the politics of property*. New York: Routledge.
Bourdieu, Pierre. 1970. “The Berber house or the world reversed.” *Information (International Social Science Council)* 9 (2), 151–170.
——. 1977. *Outline of a Theory of Practice*. Vol. 16. Cambridge University Press
——. 1996. “Physical space, social space and habitus.” *Vilhelm Aubert Memorial lecture, Report* 10, 87–101
Boverket. 2013. *Riksintressen – nationella värden och möjligheter*. Accessed October 19, 2015. https://www.boverket.se/sv/om-boverket/publicerat-av-boverket/publikationer/2013/riksintressen/
——. 2017. *Underlag till nationell arkitekturpolicy. Rapportnummer 2017:12.* Accessed March 30, 2019. https://www.boverket.se/sv/om-boverket/publicerat-av-boverket/publikationer/2017/underlag-till-nationell-arkitekturpolicy/
——. 2020a. *Kartor riksintressen.* Last modified June 24, 2020. https://www.boverket.se/sv/PBL-kunskapsbanken/Allmant-omPBL/teman/riksintressen/kartor/

——. 2020b. *Fördjupad översiktsplan och planprogram ur ett brottsförebyggande och trygghetsskapande perspektiv*. Last modified January 8, 2020. https://www.boverket.se/sv/samhallsplanering/stadsutveckling/brottsforebyggande-och-trygghetsskapande-atgarder/samhallsbyggnadsprocessen/fordjupad-oversiktsplanplanprogram/

Brandišauskas, Donatas. 2016. *Leaving Footprints in the Taiga: Luck, Spirits and Ambivalence Among the Siberian Orochen Reindeer Herders and Hunters*. Vol. 1. Oxford, New York: Berghahn Books.

Brunnström, Lasse. 1981. *Kiruna-ett samhällsbygge i sekelskiftets Sverige. D. 1, En bebyggelsehistorisk studie av anläggningsskedet fram till 1910.* Umeå: UTAB.

Brännlund, Isabelle. 2018. "Diverse Sámi Livelihoods: A Comparative Study of Livelihoods in Mountain-Reindeer Husbandry Communities in Swedish Sápmi 1860-1920." *Journal of Northern Studies* 12 (2), 37–62

Brännlund, Isabelle, and Per Axelsson. 2013. "Representation of Swedish Sámi households at the turn of the nineteenth century." In *About the hearth: Perspectives on the Home, Hearth and Household in the Circumpolar North*, edited by David G. Anderson, Robert P. Wishart, and Virgine Valé, 103–130. Oxford, New York: Berghahn Books.

Buchli, Victor. 2013. *An Anthropology of Architecture*. London: Bloomsbury.

Bucken-Knapp, Gregg. 2003. *Elites, Language, and the Politics of Identity: The Norwegian Case in Comparative Perspective*. Vol. 14. New York: SUNY Press.

Burnett, Linda Andersson. 2021. "Sámi Indigeneity in Nineteenth-Century Swedish and British Intellectual Debates." *The Routledge Companion to Global Indigenous History*, 279–301. Abingdon, Oxon; New York : Routledge.

Burow, Paul Berne, Sandra Brock, and Michael R. Dove. 2018. "Unsettling the Land." *Environment and Society* (9) 1, 57–74.

Bäärnhielm, Göran. 1976. *I Norrland hava vi ett Indien: gruvdrift och kolonisation i Lappmarken under 1600-talet.* Stockholm: Ordfront.

Carsten, Janet, and Stephen Hugh-Jones. 1995. *About the House: Lévi-Strauss and Beyond*. Cambridge: Cambridge University Press.

Carstens, Margret. 2016. "Sámi land rights: the Anaya Report and the Nordic Sámi Convention." *Journal on Ethnopolitica and Minority Issues in Europe* 15 (1), 75–116.

Cattelino, Jessica R. 2010. "The Double Bind of American Indian Need-Based Sovereignty." *Cultural Anthropology* 25 (2), 235–62.

Cocq, Coppélie. 2008. "Polyphony in Sámi narratives." *Journal of folklore research*: 193–228.

——. 2014. "Kampen om Gállok." *Platsskapande och synliggörande [The battle for Gállok: Locating and visiting]. Kulturella Perspektiv: Svensk etnologisk tidskrift* 23 (1), 5–12.

Comaroff, John L., and Jean Comaroff. 1992. *Ethnography and the historical imagination*. Boulder: Westview Press.

Coulthard, Glen Sean. 2010. “Place Against Empire: Understanding Indigenous Anti-Colonialism,” *Affinities: A Journal of Radical Theory, Culture, and Action*, 4 (2), 79–83.
——. 2014. *Red skin, White masks: Rejecting the Colonial Politics of Recognition*. University of Minnesota Press.
Cowen, Deborah. 2020. “Following the Infrastructures of Empire: Notes on Cities, Settler Colonialism, and Method.” *Urban Geography* 41 (4), 469–86.
Cruikshank, Julie. 2007. *Do Glaciers Listen? Local Knowledge, Colonial Encounters, and Social Imagination*. Vancouver: UBC Press.
Dahl, Gudrun. 1998. “Wildflowers, nationalism and the Swedish law of commons.” *Worldviews: Global Religions, Culture, and Ecology* 2 (3), 281–302.
Dahlberg, Malin. 2020. “Se mötet mellan samepolitiker och kommunalrådet: “Det här är mina fjäll.” SVT Nyheter Norrbotten, April 18, 2020. https://www.svt.se/nyheter/lokalt/norrbotten/se-motet-mellan-samepolitiker-och-kommunalrad-i-kiruna-det-har-ar-mina-fjall
Dahlgren, Kari. “Digging deeper: Precarious futures in two Australian coal mining towns.” PhD diss., London: London School of Economics and Political Science (LSE), 2019.
Dahlgren, Maria. 2019. “Gangstermetoder att ta LKAB och gruvan som gisslan.” *Norrländska Socialdemokraten*, May 15, 2019. https://nsd.se/nyheter/gangstermetoder-att-ta-lkab-och-gruvan-som-gisslan-nm5108808.aspx
Dankertsen, Astri. 2019. “I Felt So White: Sámi racialization, indigeneity, and shades of whiteness.” *Native American and Indigenous Studies* 6 (2), 110-137.
——. 2021. “Indigenising Nordic Feminism—A Sámi Decolonial Critique.” In *Feminisms in the Nordic Region: Neoliberalism, Nationalism and Decolonial Critique*, edited by Suvi Keskinen, Pauline Stoltz, and Diana Mulinari, 135–54. Cham: Springer International Publishing.
D’Angelo, Lorenzo, and Robert J. Pijpers. 2018. “Mining Temporalities: An Overview.” *The Extractive Industries and Society* 5 (2), 215–222.
Daun, Åke. 1991. “Individualism and collectivity among Swedes.” *Ethnos* 5 (3-4), 165–172.
De Certeau, Michel. 2011. *The Practice of Everyday Life.* Berkeley and Los Angeles: University of California Press.
Deleuze, Gilles, and Félix Guattari. 2014. *A Thousand Plateaus: Capitalism and Schizophrenia.* London: Bloomsbury Academic.
Descola, Philippe. 2013. *Beyond Nature and Culture*, translated by Janet Lloyd. Chicago: The University of Chicago Press.
Dolan, Catherine, and Dinah Rajak. 2016. *The Anthropology of Corporate Social Responsibility*. Oxford, New York: Berghahn Books.
Douglas, Mary. 2003. *Purity and danger: An Analysis of Concepts of Pollution and Taboo*. Abingdon: Routledge.

Douglas, Mary, and Aaron Wildavsky. 1983. *Risk and Culture: An Essay on the Selection of Technological and Environmental Dangers*. Berkeley and Los Angeles: University of California Press.
Durkheim, Emile. 1976. *The Elementary Forms of the Religious Life*. London: Allen & Unwin.
Dynesius, Anna & Margareta Stenberg. 2004. *Muittut ja muitalusat: minnen och berättelser från Rávttasjávri*. Duoddaris 17. Jokkmokk: Ájtte
Eckerberg, Katarina, and Björn Forsberg. 1998. "Implementing Agenda 21 in Local Government: The Swedish Experience." *Local Environment* 3 (3), 333–47.
Eidheim, Harald. 1966. "Lappish Guest Relationships under Conditions of Cultural Change." *American Anthropologist*, 68 (2), 426–37.
Elenius, Lars. "A Place in the Memory of Nation. Minority Policy Towards the Finnish Speakers in Sweden and Norway." *Acta Borealia* 19 (2), 103–123.
Elgstrand, Kaj, and Eva Vingard. 2013. *Occupational Safety and Health in Mining–Anthology on the Situation in 16 Countries.* Gothenburg: University of Gothenburg.
Engels, Friedrich [1884] 2010. *The Origin of the Family, Private Property, and the State*, introduction by Tristram Hunt. London: Penguin Classics.
Engström, Gunnar, Lars Modig, Stina Bergström, and Karl Forsell. 2015 *Miljö och hälsa i Kiruna tätort: Resultaten från en enkät hösten 2015*. October 2015, https://www.regionvasterbotten.se/VLL/Filer/Miljo-och-Halsa-Kiruna-tatort_2016.doc.pdf
Ericsson, Magnus. 1981. "The Rise and Fall of Swedish Iron Ore Min ing." *Minerals and Energy* 1 (1), 60–63.
Evans, Chris, and Göran Rydén. 2013. "From Gammelbo Bruk to Calabar: Swedish Iron in An Expanding Atlantic Economy." In *Scandinavian Colonialism and the Rise of Modernity*, edited by Margareta Naum and Jonas M. Nordin, 53–67. New York: Springer
Finnström, Sverker. 2015. "War stories and troubled peace: revisiting some secrets of northern Uganda." *Current Anthropology* 56 (S12), S222-S230.
Fortun, Kim. 2001. *Advocacy after Bhopal: Environmentalism, Disaster, New Global Orders*. Chicago: University of Chicago Press.
Foucault, Michel, and Jay Miskowiec. 1986. "Of other spaces." *Diacritics* 16 (1), 22–27.
Forsström, Gösta. 1973. *Gällivare kommun: skrifter. D. 1, Malmberget: malmbrytning ochbebyggelse*. Luleå: Norrbottens museum.
Fredriksson, Per-Anders, Linda Jones, and Hans Sternlund. 2019. "LKAB: Malmen tar slut snabbare än förväntat." *SVT Nyheter Norrbotten.* October 26, 2019. https://www.svt.se/nyheter/lokalt/norrbotten/lkab-malmen-tar-slut-snabbare-an-planerat
Fritz, Martin. 1974. *German Steel and Swedish Iron Ore, 1939–1945*. Goteborg: Publications of the Institute of Economic History of the Gothenburg University.
Frykman, Jonas, and Orvar Löfgren. 1987. *Culture Builders: A Historical Anthropology of Middle-class Life*. New Brunswick: Rutgers University Press.

Frändén, Märit. “Att blotta vem jag är’: Släktnamnsskick och släktnamnsbyten hos samer i Sverige 1920–2009.” PhD diss., Uppsala Universitet, 2010.
Fur, Gunlög. 2006. *Colonialism in the Margins: Cultural Encounters in New Sweden and Lapland*. Leiden: Brill.
——. 2013. “Colonialism and Swedish History: unthinkable connections?” In *Scandinavian Colonialism and the Rise of Modernity*, edited by Margareta Naum and Jonas M. Nordin, 17–36. New York: Springer.
——. 2016. “Colonial fantasies–American Indians, Indigenous Peoples, and a Swedish Discourse of Innocence.” *National Identities* 18 (1), 11–33.
Gillberg, Pia, and Carina Ljung. 1983. *Intervju med Anna Dynesius, Rautasvuoma sameby*. Borås: Högskolan i Borås.
Granqvist, Karin. 2004. “Confrontation and Conciliation: The Sámi, the Crown and the Court in Seventeenth-century Swedish Lapland”. *Acta Borealia* 21 (2), 99–116.
Green, Carina. “Managing Laponia: A World Heritage Site as Arena for Sámi Ethno-politics in Sweden.” PhD diss., Uppsala Universitet, 2009.
Gregg, Melissa, and Gregory J. Seigworth, 2010. *The Affect Theory Reader*. Durham: Duke University Press.
Gross, Lena. “The Oil Sands Industry as Magnifier of Inequality: Tales of Land, Labour, Belonging, and Refusal in Northern Alberta, Canada.” PhD diss, University of Oslo, 2019a.
——. 2019b. “Wastelanding the Bodies, Wastelanding the Land: Accidents as Evidence in the Albertan Oil Sands.” In *Extracting Home in the Oil Sands*, edited by Clinton N. Westman, Tara L. Joly, and Lena Gross, 92–100. Abingdon: Routledge.
——. 2021. “Fuelling toxic relations: Oil sands and settler colonialism in Canada.” *Anthropology Today* 37 (4), 19–22.
Gupta, Akhil, and James Ferguson. 1992. “Beyond culture: Space, identity, and the politics of difference.” *Cultural anthropology* 7 (1), 6–23.
Gärdebo, Johan, May-Britt Öhman, and Hiroshi Maruyama. 2014. *Re: Mindings: Co-Constituting Indigenous/Academic/Artistic Knowledges*. Uppsala: Uppsala University.
Gottdiener, Mark. 1993. “A Marx for our time: Henri Lefebvre and the production of space.” *Sociological Theory* 11 (1), 129–134.
Govindrajan, Radhika. 2018. *Animal Intimacies*. Chicago, University of Chicago Press.
Granås, Brynhild. 2012. “Ambiguous place meanings: living with the industrially marked town in Kiruna, Sweden.” *Geografiska Annaler: Series B, Human Geography* 94 (2), 125–139.
Grape, Ove, and Susanne Holst. 2018. “Maktens Ansikte i Malmens Rike–Den Perifera Staten.” In *Brännpunkt Norrland: Perspektiv på en region i förändring*, edited by Anders Öhman and Bo Nilsson, 179–207. Umeå: Bokförlaget h:strom – Text & Kultur.
Grey, Sam, and Rauna Kuokkanen. 2020. “Indigenous Governance of Cultural Heritage: Searching for Alternatives to Co-Management.” *International Journal of Heritage Studies* 26, no. 10 (2020): 919–941.

Grubbström, Folke. 2005. *Färdas som en människa*. Liv i Sverige, 99-0139769-3. Skellefteå: Ord & visor.
Gullestad, Marianne. 1989. "Small Facts and Large Issues: The Anthropology of Contemporary Scandinavian Society." *Annual Review of Anthropology* 18, no. 1: 71–93.
——. 2002. "Invisible Fences: Egalitarianism, Nationalism and Racism." *Journal of the Royal Anthropological Institute* 8 (1), 45–63.
Hall, Peter. 2014. *Cities of Tomorrow: An Intellectual History of Urban planning and Design Since 1880*, 4th edition. Hoboken, NJ: Wiley-Blackwell.
Hagen, Aina Landsverk. 2017. "Sketching with Knives: Architects & the confidence theory of magic." *Anthropology Today* 33 (2), 24–27.
Hagerman, Maja. 2015. *Käraste Herman: Rasbiologen Herman Lundborgs gåta*. Stockholm: Norstedts.
——. 2016. Svenska kyrkan och rasbiologin." In *De historiska Relationerna Mellan Svenska Kyrkan och Samerna*, edited by Daniel Lindmark & Olle Sundström, 961–992. Skellefteå: Artos
Hannerz, Ulf. 1996. *Transnational Connections: Culture, People, Places*. London: Routledge.
Hansen, Kjell. 1998. *Välfärdens Motsträviga Utkant: Lokal praktik och statlig styrning i efterkrigstidens nordsvenska inland*. Lund: Historiska Media.
Haraway, Donna Jeanne. 1989. *Primate Visions: Gender, Race, and Nature in the World of Modern Science*. New York: Routledge.
——. 2003. *The Companion Species Manifesto: Dogs, People, and Significant Otherness*. Vol. 1. Chicago: Prickly Paradigm Press.
Harris, Cheryl I. 1993. "Whiteness as Property." *Harvard Law Review* 106 (8): 1707–91.
Harnesk, Victoria and Åsa Lindstrand. 2019. *Samefolket: En Sámisk tidningshistoria*. Jokkmokk: Stiftelsen Samefolket.
Harvey, David. 2004. "The New Imperialism: Accumulation Through Dispossession." *Socialist Register* 40, 6–87.
——. 2005. *A Brief History of Neoliberalism.* Oxford; New York: Oxford University Press.
——. 2006. *Spaces of Global Capitalism.* London:Verso.
Hansegård, Nils Erik. 1978. *The transition of the Jukkasjärvi Lapps from nomadism to settled life and farming*. Vol. 39. Stockholm: Almqvist & Wiksell.
Haley, Sharman, Matthew Klick, Nick Szymoniak, and Andrew Crow. 2011. "Observing trends and assessing data for Arctic mining." *Polar Geography* 34 (1-2), 37–61.
Harms, Erik. 2013. "Eviction time in the new Saigon: Temporalities of displacement in the rubble of development." *Cultural Anthropology* 28 (2), 344-368.
Hawthorne, Camilla. 2019. "Black Matters Are Spatial Matters: Black Geographies for the Twenty-first Century." *Geography Compass* 13 (11), 1–13

Heckscher, Eli F. 1907. *Till belysning af Järnvägarnas betydelse för Sveriges ekonomiska utveckling.* Stockholm: Centraltryckeriet.
——. 1954. *An Economic History of Sweden.* Cambridge, Mass: Harvard University Press.
Helander-Renvall, Elina. 2010. "Animism, Personhood and the Nature of Reality: Sámi Perspectives." *Polar Record* 46 (1): 44–56.
Heidegger, Martin. 1971. "Building Dwelling Thinking." *Poetry, language, thought* 154: 1–26.
Herbert, Eugenia W., A. Bernard Knapp, and Vincent C. Pigott. 2002. *Social Approaches to An Industrial Past: The Archaeology and Anthropology of Mining*. Abingdon: Routledge.
Hetherington, Kregg. 2016. "Surveying the future perfect: Anthropology, development and the promise of infrastructure." In *Infrastructures and Social Complexity: A Companion*, edited by Penelope Harvey, Casper Bruun Jensen, and Atsuro Morita, 40–50.
Hojem, Petter. 2015. *Mining in the Nordic Countries: A Comparative Review of Legislation and Taxation.* Copenhagen: Nordisk Ministerråd.
Hocking, Barbara Ann, and Barbara Joyce Hocking. 1999. "Colonialism, Constitutionalism, Costs and Compensation: A Contemporary Comparison of the Legal Rights and Obligations of and Towards the Scandinavian Sámi and Indigenous Australians." *Nordic Journal of International Law* 68 (1), 31–52.
Holder, Cindy L., and Jeff J. Corntassel. 2002. "Indigenous Peoples and Multicultural Citizenship: Bridging Collective and Individual rights." *Human Rights Quarterly* 24 (1), 126–151.
Holston, James. 1989. *The Modernist City: An Anthropological Critique of Brasília*. Chicago: University of Chicago Press.
——. 2020. Afterword: The Problem of the Present in Anthropology and Urban Planning. In *Life Among Urban Planners*, edited by Jennifer Mack and Michael Herzfeld, 235–242. Philadelphia: University of Pennsylvania Press.
Hubbard, Phil, and Rob Kitchin. 2011. *Key Thinkers on Space and Place*. London: SAGE.
Hufva, Lars. 2000. "Giron för och nu – ett renbetesland i förvandling." In *Kiruna:100-årsboken – del I*, edited by Kjell Törmä, 189–195. Kiruna: Kiruna kommun.
Hughes, David McDermott. 2005. "Third Nature: Making Space and Time in the Great Limpopo Conservation Area." *Cultural Anthropology* 20 (2), 157–184.
Hughes, David McDermott. 2006. "Hydrology of Hope: Farm Dams, Conservation, and Whiteness in Zimbabwe." *American Ethnologist* 33 (2), 269–287.
Huhtaniska, Ulrika and Nils Johansson. 2017. "LKAB vill inte betala för ny järnvägsstation." *Norrländska Socialdemokraten.* April 28, 2017. https://nsd.se/nyheter/lkab-vill-inte-betala-for-ny-jarnvagsstation-nm4532412.aspx

Huuva, Kaisa, and Ellacarin Blind. 2016. *"När jag var åtta år lämnade jag mitt hem och jag har ännu inte kommit tillbaka": minnesbilder från samernas skoltid.* Verbum, 2016.
Hägg, Kerstin. 1993. "Kvinnor och män i Kiruna: om kön och vardag i förändring i ett modernt gruvsamhälle 1900–1990." PhD diss., Umeå Universitet.
Hübinette, Tobias, and Catrin Lundström. 2014. "Three Phases of Hegemonic Whiteness: Understanding Racial Temporalities in Sweden". *Social Identities* 20 (6): 423–37.
Idivuoma, Per. 1990. *Minnesbilder*. Svenska Samernas Riksförbund.
Inga, Berit. 2015. *Renen i ett förändrat klimat.* Duoddaris 29. Jokkmokk: Ájtte.
Inga, Berit and Ida Sunna. 2014. *Traderad kunskap på nya arenor: traditionell ekologisk kunskap.*Duoddaris 27. Jokkmokk: Ájtte.
Inga, Katarina. "Skoterförbudsområde i kalvningsland." Research paper, Juridiska institutionen vid Umeå Universitet. 2017.
Ingold, Tim. 1980. *Hunters, Pastoralists, and Ranchers: Reindeer Economies and Their Transformations*. Cambridge: Cambridge University Press.
——. 1993. "The Temporality of the Landscape." *World Archaeology* 25 (2): 152–74.
——. 2000. *The perception of the environment: essays on livelihood, dwelling and skill*. London: Psychology Press.
——. 2002. "From Trust to Domination: An Alternative History of Human-animal Relations." In *Animals and Human Society*, edited by Aubrey Manning and James Serpell, 13–34. London: Routledge
——. 2009. "Against Space: Place, Movement, Knowledge." In *Boundless worlds: An anthropological approach to movement*, edited by Peter Winn Kirby, 29–43. New York: Berghahn Books.
Invest in Norrbotten, 2012. "Moving Town." Accessed May 19, 2012. http://www.investinnorrbotten.se/business/business-oppurtunities/moving-town/
Isenhour, Cindy. 2011. "How the Grass Became Greener in the City: On Urban Imaginings and Practices of Sustainable Living in Sweden." *City & Society* 23 (2), 117–134.
Isenhour, Cindy, Gary McDonogh, and Melissa Checker. 2015. *Sustainability in the Global City: Myth and Practice*. Cambridge: Cambridge University Press.
Jackson, Deborah Davis. 2011. "Scents of Place: The Dysplacement of a First Nations Community in Canada." *American Anthropologist* 113 (4), 606–618.
Jannok, Anneli Kråik. n.d. "Gállok- ett nytt Alta". Accessed September 19, 2021. http://www.samer.se/4262
Jernsletten, Johnny-Leo Ludviksen. "'Med rett til å gjete...': Utfordringer og muligheter i Liehittäjä konsesjonssameby." PhD diss., Uppsala Universitet, 2007.
Johnson, Eva Liedholm, and Magnus Ericsson. 2015. 'State Ownership and Control of Minerals and Mines in Sweden and Finland'. *Mineral Economics* 28 (1–2), 23–36.

Johnson, Jay T. 2010. “Indigeneity’s Challenges to the Settler State: Decentring the ‘Imperial Binary’.” In *Making Settler Colonial Space*, edited by Tracey Banivanua Mar and Penelope Edmonds, 273–294. London: Palgrave Macmillan.

Johansson, Ella. 2008. “Nationens Pigor: Dalkullor i nationell ikonografi och social praxis.” In *Arbete pågår—i tankens mönster och kroppens miljöer*, edited by Anders Houltz, Brita Lundström, Lars Magnusson, Mats Morell, Marie Nisser, Eva Silvén, 71–88. Uppsala: Uppsala Studies in Economic History 86.

Johansson, Thommy. 2014. “Avslag på ansökan om skoterförbud upprör renägare.” *SVT Nyheter Norrbotten*, May 14, 2021. https://www.svt.se/nyheter/lokalt/norrbotten/svt-s-debatt-om-skoterforbud-vackte-kanslor-i-kiruna

Joks, Solveig, Liv Østmo, and John Law. 2020. “Verbing Meahcci: Living Sámi Lands.” *The Sociological Review* 68 (2), 305–321.

Joona, Tanja. 2012. *ILO Convention No. 169 in a Nordic Context with Comparative Analysis: An Interdisciplinary Approach*. Rovaniemi: Lapin yliopistokustannus.

Josefsen, Terje D., Karen K. Sørensen, Torill Mørk, Svein D. Mathiesen, and Kathrine A. Ryeng. 2007. “Fatal Inanition in Reindeer (Rangifer tarandus tarandus): Pathological findings in completely emaciated carcasses.” *Acta Veterinaria Scandinavica* 49 (1), 1–11.

Karlbom, Rolf. 1965. “Sweden's iron ore exports to Germany, 1933–1944.” *Scandinavian Economic History Review* 13 (1), 65–93.

Keskinen, Suvi, Salla Tuori, Sara Irni, and Diana Mulinari. 2016. *Complying with Colonialism: Gender, Race and Ethnicity in the Nordic Region*. Abingdon: Routledge.

Keskitalo, E. Carina H., and Johanna Liljenfeldt. 2012. “Working with Sustainability: Experiences of Sustainability Processes in Swedish Municipalities.” *Natural Resources Forum* 36 (1), 16–27.

Key, Ellen. [1899] 1913. *Skönhet för alla.* Stockholm: Bonnier.

Kimmerer, Robin Wall. 2013. *Braiding Sweetgrass: Indigenous Wisdom, Scientific Knowledge and the Teachings of Plants*. Minneapolis: Milkweed Editions.

Kiruna in Swedish Lapland. “Welcome to Kiruna in Swedish Lapland”. Accessed 21 April 2021. https://www.kirunalapland.se/en/.

Kiruna kommun. 2000. *Kiruna: 100-årsboken*, edited by Kjell Törmä. Kiruna: Kiruna kommun.

——. 2004. *Vision 2099.* Kiruna: Kiruna kommun.

——. 2009. *Detaljplan för Bolagsområdet, Gruvstadspark*. Kiruna: Kiruna kommun

——. 2011. *Avtal angående Gruvstadsparken del 1 m.m*. Kiruna: Kiruna kommun.

——. 2012a. *Program för arkitekttävling: Ny Stadskärna I Kiruna 2012–07/ Architecture Competition Brief: A New City Centre for Kiruna 2012–07*. By Thomas Nylund, Björn Adolfson, Anja Taube, Marianne Schröder-

Maagarrd, Sandra Minde, Knut Erik Dahl, and Christer Larsson. Kiruna: Kiruna kommun.
——. 2012b. *Detaljplan för Mertainengruvan, del av fastigheten Svappavaara 1:25 m.fl*, November 2012. Kiruna: Kiruna kommun. https://kiruna.se/download/18.70c3d424173b4900fc54eba9/1600776828641/ant_pbg_mertainen.pdf
——. 2013. *Kiruna Information, nr 1*. Accessed 20 April 2021.https://kiruna.se/download/18.33a785d31748730339346061/1600264559177/kiruna_information_2013nr1_visionsnummer.pdf.
——. 2014a: *Kiruna Utvecklingsplan 2014.03.17, Kiruna kommuns Arbetsgrupp för Utvecklingplannen, White Arkitekter, Ghilardi+Hellsten Arkitekter, Spacescape*. Kiruna: Kiruna kommun.
——. 2014b: *Fördjupdad översiktsplan för Kiruna centralort.* Kiruna: Kiruna kommun.
——. 2014c. *Tillsammans bygger vi framtidens Kiruna: Avtal mellan Kiruna kommun och LKAB om Gruvstadspark 2 med mera*. Kiruna: Kiruna kommun.
——. 2020. "Riksintressen". Last modified October 28, 2020. https://kiruna.se/stadsomvandling/startsida/besokare/bakgrund/riksintressen.html
Kirsch, Stuart. 2014. *Mining Capitalism: The Relationship Between Corporations and Their Critics*. Oakland: University of California Press.
Kjellman, Ulrika. 2013. "A Whiter Shade of Pale: Visuality and Race in the Work of the Swedish State Institute for Race Biology." *Scandinavian Journal of History* 38 (2), 180–201.
Knobloch, Frieda. 1996. *The Culture of Wilderness: Agriculture as Colonization in the American West*. Chapel Hill: University of North Carolina Press.
Koch, Peter. 2016. "Sámi–State Relations and its Impact on Reindeer Herding across the Norwegian-Swedish Border." In *Nomadic and Indigenous Spaces*, edited by Judith Miggelbrink, Joachim Otto Habeck, Nuccio Mazzullo, and Peter Koch, 129–152. London: Routledge.
Koerner, Lisbet. 2009. *Linnaeus: Nature and Nation*. Cambridge: Harvard University Press.
Komu, Teresa. 2020. "Manoeuvring Conflict: Industrial Land Use Projects and "Refusal to Resist Among Reindeer Herding Communities in Northern Fennoscandia." *Ethnos* 85 (3), 532–49.
Kroik, Lena, Olav Lindqvist, Krister Stoor, and Carol Tishelman. 2020. "The Past is Present: Death Systems Among the Indigenous Sámi in Northern Scandinavia Today." *Mortality* 25 (4), 470–489.
Kropotkin, Petr [Peter] Alekseevich. [1902] 1989. *Mutual Aid: A Factor of Evolution*. Montreal: Black Rose Books.
Körber, Lill-Ann. 2019. "Sweden and St. Barthélemy: Exceptionalisms, Whiteness, and the Disappearance of Slavery from Colonial History." *Scandinavian Studies* 91 (1-2), 74–97.
Kuokkanen, Rauna. 2003. "'Survivance' in Sámi and First Nations Boarding

School Narratives: Reading novels by Kerttu Vuolab and Shirley Sterling." *American Indian Quarterly*, 697-726.
——. 2009. "Indigenous women in Traditional Economies: The Case of Sámi Reindeer Herding." *Signs: Journal of Women in Culture and Society* 34 (3), 499–504.
——. 2020. 'Reconciliation as a Threat or Structural Change? The Truth and Reconciliation Process and Settler Colonial Policy Making in Finland'. *Human Rights Review* 21 (3), 293–312.
Kvist, Roger. 1994. "The Racist Legacy in Modern Swedish Saami Policy." *Canadian Journal of Native Studies* 14 (2), 203–220.
Labba, Elin Anna. 2020. *Herrarna Satte Oss Hit: Om tvångsförflyttningarna i Sverige*. Stockholm: Norstedts Förlag.
Labba, Kristina. 2015. "The Legal Organization of Sámi Reindeer Herding and the Role of the Siida." In *Indigenous Rights in Scandinavia: Autonomous Sámi Law*, edited by Christina Allard and Susann Funderud Skogvang, 141-153: Farnham, Surrey [UK]; Burlington, VT: Ashgate.
Laestadius, Ann-Helén. 2010. "Nonchaladerade språkförbudet". Minoritet.se (Sveriges nationella minoriteter och minoritetsspråk). Last modified March 3rd, 2010.https://www.minoritet.se/1249.
——. 2016. *Tio över ett.* Stockholm: Rabén & Sjögren.
Lagerlöf, Selma, 1922. *The Wonderful Adventures of Nils*. Edited and translated by Velma Swanston Howard, and Mary Hamilton Frye. Garden City, N.Y.: Doubleday, Page & Co.
——. 1989. *Nils Holgerssons Underbara Resa Genom Sverige*. Stockholm: Bonniers Junior Förlag.
Lantto, Patrik. 2005. "Raising their Voices: The Sámi Movement in Sweden and the Swedish Policy, 1900–1960." In *Studies in Folk Culture, vol. V: The Northern Peoples and States: Changing Relationships*, edited by Art Leete and Ulo Valik, 203–234. Tartu: Tartu University Press.
——. 2010. "Borders, Citizenship and Change: The Case of the Sámi People, 1751–2008." *Citizenship Studies* 14 (5), 543–556.
——. 2012. *Lappväsendet: Tillämpningen av svensk samepolitik 1885–1971*. Umeå: Centrum för Sámisk forskning, Umeå Universitet.
——. 2014. "The Consequences of State Intervention: Forced Relocations and Sámi Rights in Sweden, 1919–2012." *Journal of Ethnology and Folkloristics* 8 (2), 53–73.
Lantto, Patrik, and Ulf Mörkenstam. 2008. "Sámi rights and Sámi challenges: The modernization process and the Swedish Sámi movement, 1886–2006." *Scandinavian Journal of History* 33 (1), 26–51.
Larkin, Brian. 2013. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42, 327–343.
Larsen, Rasmus Kløcker, and Kaisa Raitio. 2019. "Implementing the state duty to consult in land and resource decisions: Perspectives from Sámi communities and Swedish state officials." *Arctic Review* 10, 4–23.
Larsson, Gunilla. 2014." Protecting Our Memory from Being Blasted Away: Archaeological Supradisciplinary Research Retracing Sámi History in Gállok/Kallak." In *Re: Mindings: Co-Constituting Indigenous, Academic,*

Artistic Knowledges, edited by Johan Gärdebo, May-Britt Öhman, Hiroshi Maruyama, 41–53. Uppsala: Uppsala University.
Latour, Bruno. 2004a. "Why Has Critique Run Out of Steam? From Matters of Fact to Matters of Concern." *Critical inquiry* 30 (2), 225–248.
——. 2004b. *Politics of Nature*. Cambridge: Harvard University Press.
Lawrence, Rebecca. "Shifting Responsibilities and Shifting Terrains: State Responsibility, Corporate Social Responsibility and Indigenous Claims." PhD diss., Stockholm University, 2009.
——. 2014. "Internal colonisation and Indigenous resource sovereignty: Wind power developments on traditional Saami lands." *Environment and Planning D: Society and Space* 32 (6), 1036–1053.
Lawrence, Rebecca, and Mattias Åhrén. 2017. "Mining as Colonisation: The need for restorative justice and restitution of traditional Sámi lands." In *Nature, temporality and environmental management: Scandinavian and Australian perspectives on peoples and landscapes*, edited by Lesley Head; Katarina Saltzman; Setten Gunhild; Stenseke Marie,149-166. London, Routledge.
Lawrence, Rebecca, and Rasmus Kløcker Larsen. 2017. "The politics of planning: assessing the impacts of mining on Sámi lands." *Third World Quarterly* 38, no. 5: 1164–1180.
——. 2019. "Fighting to Be Herd: Impacts of the Proposed Boliden Copper Mine in Laver, Aulvsbyn, Sweden for the Semisjaur Njarg Sámi Reindeer Herding Community." Stockholm: Environmental Institute.
Lawrence, Rebecca, and Sara Moritz. 2019. "Mining industry perspectives on indigenous rights: Corporate complacency and political uncertainty." *The Extractive Industries and Society* 6 (1), 41–49.
Lefebvre, Henri. [1974] 1991. *The Production of Space*, translated by Donald Nicholson-Smith. Oxford: Blackwell.
Lehtola, Veli-Pekka. 2004. *The Sámi People: Traditions in Transition.* Fairbanks: University of Alaska Press.
Li, Tania Murray. 2007. *The Will to Improve: Governmentality, Development, and the Practice of Politics*. Durham: Duke University Press.
——. 2014. *Land's End: Capitalist Relations on an Indigenous Frontier.* Durham: Duke University Press.
Lindahl, Karin Beland, Anna Zachrisson, Roine Wiklund, Simon Matti, Daniel Fjellborg, Andreas Johansson, and Lars Elenius. 2016. *Konflikter om gruvetablering: Lokalsamhällets aktöreroch vägar till hållbarhet: Slutrapport*. Luleå: Länsstyrelsen Norrbotten.
Lindmark, Daniel. 2013. "Colonial encounter in early modern Sápmi." In *Scandinavian Colonialism and the Rise of Modernity*, 131-146. New York: Springer.
Lindmark, Daniel, and Olle Sundström. 2016. *De historiska relationerna mellan Svenska kyrkan och samerna: En vetenskaplig antologi*. Skellefteå: Artos & Norma bokförlag.
Lindquist, Johan. 2015. "Anthropology of brokers and brokerage." *International Encyclopedia of the Social and Behavioral Science* (2nd edition), 870-874. Amsterdam: Elsevier.

Linnaeus, Carl. 1811. *Lachesis Lapponica, or a tour in Lapland*. London: White and Cochrane.
Little, Peter C. 2014. *Toxic Town: IBM, Pollution, and Industrial Risks*. New York: NYU Press.
LKAB [Luossavaara- Kiirunavaara AB]. 2012a. *Integrated Report / Annual and Sustainability Report 2012*. Accessed January 19, 2017. https://www.lkab.com/en/SysSiteAssets/documents/finansiell-information/en/annual-reports/lkab_2012_annual_and-sustainability_report.pdf
——. 2012b. "Kiirunavaaragruvans utbredning mot detaljeplanlagt område". Letter to Kiruna kommun. March 19, 2004.
——. 2012c. *LKAB Framtid* (5). Kiruna: LKAB. Accessed October 19, 2021. https://www.lkab.com/sv/SysSiteAssets/documents/publikationer/lkab-framtid/lkab_framtid_2012_nr5.pdf
——. 2015. *Annual and Sustainability Report 2015.* Accessed July 10, 2018.https://www.lkab.com/en/SysSiteAssets/documents/finansiell-information/en/annual-reports/lkab_2015_annual_and_sustainability_report.pdf
——. 2016. "Modeller för kompensation klara." Press release, January 18, 2016, https://www.lkab.com/sv/nyhetsrum/pressmeddelanden/modeller-for-kompensation-klara/
——. 2019. "Allvarligt Talat". *LKAB Framtid* (2), 17. Accessed October 13, 2019.https://www.lkab.com/sv/SysSiteAssets/documents/publikationer/lkab-framtid/lkab_framtid_2020_nr2.pdf
——. 2020a. *Annual and Sustainability Report 2020.* Accessed July 10, 2020. https://www.lkab.com/en/SysSiteAssets/documents/finansiell-information/en/annual-reports/lkab_2020_annual_and_sustainability_report.pdf
——. 2020b. "LKAB vänder sig till regeringen med begäran om planföreläggande i Kiruna." Press release, May 11, 2021.https://www.lkab.com/sv/nyhetsrum/pressmeddelanden/lkab-vander-sig-till-regeringen-med-begaran-om-planforelaggande-i-kiruna/
Locke, John, and Peter Laslett. [1797] 1993. *Two Treatises of Government*. Cambridge: Cambridge Univ Press.
Loftsdóttir, Kristín, and Lars Jensen. 2016. *Whiteness and Postcolonialism in the Nordic Region: Exceptionalism, Migrant Others and National Identities*. London: Routledge.
López, Elisa. 2021. "Stadsomvandlingen in Kiruna: Planering och politik i ett urbant megaprojekt". In *Ymer Årsbok: Svenska Sällskapet för Antropologi och Geografi.* Edited by Gabriella Körling and Susann Baez Ullberg, 77–95. Horsens: Stilbo Complete A/B.
Low, Setha M. 1996. "The anthropology of cities: Imagining and theorizing the city." *Annual Review of Anthropology* 25 (1), 383–409.
——. 2003. "Embodied space (s): Anthropological theories of body, space, and culture." *Space and Culture* 6 (1), 9-18.
——. 2009. "Towards an anthropological theory of space and place." *Semiotica* 2009, no. 175: 21-37.

——. 2016. *Spatializing Culture: The Ethnography of Space and Place*. London: Routledge.
Low, Setha M., and Denise Lawrence-Zúñiga. 2003. *The Anthropology of Space and Place: Locating Culture*. Oxford: Blackwell.
Laula, Elsa. 1904. *Infor lif eller död? Sanningsord i de Lappska förhållandena*. Stockholm: Wilhelmsons Boktryckeri AB.
La Mela, Matti. 2014. "Property rights in conflict: Wild berry-picking and the Nordic tradition of *allemansrätt*." *Scandinavian Economic History Review* 62 (3), 266–289.
Lipsitz, George. 2011. *How Racism Takes Place*. Philadelphia: Temple University Press.
Lundbohm, Hjalmar. 1910. *Kiruna 7 Juli 1910*. Stockholm: Norstedt.
Lundmark, Bo. 1973. *Samerna i Gruvstad.* Luleå: Norrbottens Museum.
Lundmark, Lennart. 2006. *Samernas skatteland i Norr-och Västerbotten under 300 år*. Stockholm: Institutet för rättshistorisk forskning.
——. 2008. *Stulet land: svensk makt på samisk mark*. Stockholm: Ordfront.
Lundström, Catrin, and Benjamin R. Teitelbaum. 2017. "Nordic whiteness: An introduction." *Scandinavian Studies* 89 (2), 151-158.
Luleå Tekniska Universitet. 2009. "New Giron". Last updated 1 June 2010. https://www.ltu.se/proj/Nya-Giron/Valkommen-till-Nya-Giron-1.52457?l=en
MacCormack, Carol, and Marilyn Strathern. 1980. *Nature, Culture and Gender*. Cambridge: Cambridge University Press.
Mack, Jennifer. 2017. *The Construction of Equality: Syriac Immigration and the Swedish city*. Minneapolis: University of Minnesota Press.
——. 2019. "An awkward technocracy: Mosques, churches, and urban planners in neoliberal Sweden." *American Ethnologist* 46 (1), 89–104.
Mack, Jennifer, and Michael Herzfeld. 2020. *Life Among Urban Planners: Practice, Professionalism, and Expertise in the Making of the City*. Philadelphia: University of Pennsylvania Press.
Mar, Tracey Banivanua, and Penelope Edmonds. 2010. *Making Settler Colonial Space: Perspectives on Race, Place and Identity*. Basingstoke: Palgrave Macmillan.
Marakatt, Lars-Ola and Stefan Karlsson. 2019. "Samer förvånade över kommunalrådets uttalande i skoterdebatten." *Sameradion and SVT Sápmi*, May 15, 2019. https://sverigesradio.se/artikel/7220888
Martinsson, Magdalena. 2010. "'Bygg Inte På Malmen' - P4 Norrbotten." *Sveriges Radio*, October 25, 2010.https://sverigesradio.se/sida/artikel.aspx?programid=98&artikel=4129357.
Marx, Karl. [1867] 1990. *Capital: A Critique of Political Economy, Vol. 1*, translated by Ben Fowkes, with an introduction by Ernest Mandel. New York: Penguin Random House.
Massey, Doreen. 1995. *Spatial Divisions of Labour: Social Structures and the Geography of Production*. London: Macmillan.
Mattis, Hjordis. 1996. "Järnvägens kvinnor." *Spår: Järnvägmusei vänners årsbok 1996*, 53–62. Gävle: Sveriges Järnvägsmuseum.

——. 1998. “Linjebor – 1908 och 1958.” *Spår: Järnvägmusei vänners årsbok 1998*, 19–32. Gävle: Sveriges Järnvägsmuseum.
Mattsson, Helena, and Sven-Olov Wallenstein. 2010. *Swedish Modernism: Architecture, Consumption, and the Welfare State*. London: Black Dog Publishing.
McKenna, Rebecca Tinio. 2017. *American Imperial Pastoral: The Architecture of U.S. Colonialism in the Philippines*. Chicago: University of Chicago Press.
Miggelbrink, Judith, Joachim Otto Habeck, Nuccio Mazzullo, and Peter Koch. 2016. *Nomadic and Indigenous Spaces: Productions and Cognitions*. London: Routledge.
Mikko, Ida, Lars-Ola Marakatt, and Merthe Kuhmuhnen. 2014. “För mycket Sámiskt inflytande i nya Kiruna enligt Centerpartiet.” *Sameradion and SVT Sápmi*, September 12, 2014. https://sverigesradio.se/artikel/5962606
Minde, Henry. 2003a. “The challenge of Indigenism: The struggle for Sámi land rights and self-government in Norway 1960–1990.” In *Indigenous Peoples: Resource Management and Global Rights*, edited by Svein Jentoft, 75–104. Delft, Eburon.
——. 2003b. “Assimilation of the Sámi–Implementation and consequences.” *Acto Borealia* 20 (2), 121–146.
Moffitt, Morgan, Courtney Chetwynd, and Zoe Todd. 2015. “Interrupting the northern research industry: Why northern research should be in northern hands.” *Norther Public Affairs*, December 3 2015. http://www.northernpublicaffairs.ca/index/interrupting-the-northern-research-industry-why-northern-research-should-be-in-northern-hands/
Moore, Donald S. 1998. “Subaltern struggles and the politics of place: Remapping resistance in Zimbabwe's eastern highlands.” *Cultural Anthropology* 13 (3), 344–381.
——. 2005. *Suffering for Territory: Race, Place, and Power in Zimbabwe*. Durham: Duke University Press.
Moreton-Robinson, Aileen. 2004. *Whitening Race: Essays in Social and Cultural Criticism*. Canaberra: Aboriginal Studies Press.
Morgan, Lewis Henry. 1881. *Houses and House-Life of the American Aborigines*. Washington: Government Printing Office.
Morgensen, Scott Lauria. 2011. “The Biopolitics of Settler Colonialism: Right Here, Right Now.” *Settler Colonial Studies* 1 (1), 52–76.
Mosse, David. 2005. *Cultivating Development: An Ethnography of Aid Policy and Practice*. London: Pluto Press.
Munn, Nancy D. 1996. “Excluded spaces: The figure in the Australian Aboriginal landscape.” *Critical Inquiry* 22 (2), 446–465
Murphyao, Amanda, and Kelly Black. 2015. “Unsettling Settler Belonging: (Re) naming and territory making in the Pacific Northwest.” *American Review of Canadian Studies* 45 (2), 315–331.
Myers, Fred R. 2002. “Ways of Place-Making.” *La Ricerca Folklorica* 45, 101–19.
Myrdal, Gunnar. 1964. *An American Dilemma*. New York: McGraw-Hill.

Mörkenstam, Ulf. 2019. “Organised Hypocrisy? The Implementation of the International Indigenous Rights Regime in Sweden.” *The International Journal of Human Rights* 23 (10), 1718–41.
Mörner, Cecilia. 2010. “Film in Falun–Falun on Film: The Construction of An Official Local Place Identity.” In *Regional Aesthetics: Locating Swedish Media*, edited by Erik Hedling, Olof Hedling, and Mats Jönsson, 153 – 168. Stockholm: National Library of Sweden.
Müller, Dieter K., and Stina Kuoljok Huuva. 2009. “Limits to Sámi tourism development: The case of Jokkmokk, Sweden.” *Journal of Ecotourism* 8 (2), 115–127.
Müller-Wille, Ludger, Dirk Heinrich, V-P. Lehtola, Pekka Aikio, Yulian Konstantinov, and Vladislava Vladimirova. 2006. “Dynamics in human-reindeer relations: reflections on prehistoric, historic and contemporary practices in northernmost Europe.” In *Reindeer Management in Northernmost Europe*, edited by Bruce C. Forbes, Manfred Bölter, Ludger Müller-Wille, Janne Hukkinen, Felix Müller, Nicolas Gunslay, and Yulian Konstantinov, 27-45. Berlin, Heidelberg: Springer.
Nadasdy, Paul. 2007. “The gift in the animal: The ontology of hunting and human–animal sociality.” *American Ethnologist* 34 (1), 25–43.
Napoleon, Val. 2013. “Thinking about Indigenous legal orders.” In *Dialogues on human rights and legal pluralism*, 229-245. Dordrecht: Springer.
Naturvårdsverket. 2021. “Allemansrätten och friluftsliv.” Accessed March 30, 2021, http:// https://www.naturvardsverket.se/amnesomraden/allemansratten/allemansratten-och-friluftsliv/
Nielsen, Niels Kayser. 1997. “Welfare-Nationalism? Comparative Aspects of the Relation between Sport and Nationalism in Scandinavia in the Inter-war Years.” *Sports Historian* 17 (2), 63–79.
Niemi, Seija A. 2018. “The Historical Roots of A. E. Nordenskiöld’s (1832–1901) Conservational Philosophy.” *Scandinavian Journal of History* 43 (5), 581–600.
Nilsson, Bo. 2009. *Kiruna: staden som ideologi*. Umeå: Borea
——. 2010. “Ideology, environment and forced relocation: Kiruna-a town on the move.” *European Urban and Regional Studies* 17 (4), 433-442.
Nilsson, Kristina L. 2009. “Place reinvention by real changed image: The case of Kiruna’s spectacular make-over.*” In Place Reinvention: Northern Perspectives*, edited by Torill Nyseth and Arvid Viken, 33-52. London: Routledge.
——. 2016 “Complexity in spatial planning practice and theory: the case of Kiruna mining town.” *A Planner's Encounter with Complexity*, edited by Gert de Roo, and Elisabete A. Silva. and Elisabete A. Silva, 63-80. London, New York: Routledge.
Nilsson, Ragnhild. 2020. “The Consequences of Swedish National Law on Sámi Self-Constitution—The Shift from a Relational Understanding of Who Is Sámi Toward a Rights-Based Understanding.” *Ethnopolitics* 19 (3), 292–310.

Nordin, Jonas M. and Carl-Gösta Ojala. 2015. “Mining Sápmi: Colonial histories, Sámi archaeology, and the exploitation of natural resources in northern Sweden.” *Arctic Anthropology* 52 (2), 6–21.
Nordin, Åsa. “Relationer i ett Sámiskt samhälle: en studie av skötesrensystemet i Gällivare socken under första hälften av 1900-talet.” PhD diss., Umeå Universitet, 2002.
Nordmark, Marianne. 2021. “Background: Kiruna stadsomvandling.” Kiruna kommun. Last updated July 23, 2021. https://kiruna.se/stadsomvandling/startsida/besokare/bakgrund.html
Nuttall, Mark. 2010. *Pipeline Dreams: People, Environment, and the Arctic Energy Frontier*. Copenhagen: IWGIA.
——. 2012. “Imagining and governing the Greenlandic resource frontier.” *The Polar Journal* 2 (1), 113-124.
Nutti, Ylva Jannok. 2018. “Decolonizing Indigenous Teaching: Renewing Actions through a Critical Utopian Action Research Framework.” *Action Research* 16 (1), 82–104.
Nyström, Clara. 2014. *Dokumentation av Hjalmar Lundbohmsgården, Kiruna. Fjällrösen 1, Kiruna kommun. Rapport 2014:2*. Luleå: Norrbottens Museum.
Odell, Scott D., Anthony Bebbington, and Karen E. Frey. 2018. “Mining and Climate Change: A Review and Framework for Analysis.” *The Extractive Industries and Society* 5 (1), 201–14.
Ojala, Carl-Gösta. 2017. “Contested colonial history and heritage in Sápmi.” *Archaeologies of Us and Them: Debating History, Heritage and Indigeneity*, edited by edited by Charlotta Hillerdal, Anna Karlström, and Carl-Gösta Ojala, 258– 271. London; New York: Routledge.
Ojala, Carl-Gösta, and Jonas M. Nordin. 2019. “Mapping Land and People in the North: Early Modern Colonial Expansion, Exploitation, and Knowledge.” *Scandinavian Studies* 91 (1-2), 98–133.
Olivecrona, Karl. 1974. “Appropriation in the State of Nature: Locke on the Origin of Property.” *Journal of the History of Ideas*, 211-230.
Olsen, Lise Smed. 2016. “Sami Tourism in Destination Development: Conflict and Collaboration.” *Polar Geography* 39 (3), 179–95.
Ong, Aihwa. 2007. “Neoliberalism as a mobile technology.” *Transactions of the Institute of British Geographers* 32 (1), 3–8.
Ortner, Sherry B. 1972. “Is female to male as nature is to culture?” *Feminist studies* 1 (2), 5–31.
Oscarsson, Eric-Oscar. 2016. “Rastänkande och särskiljande av samer”. In *De historiska relationerna mellan kyrkan och samerna. En vetenskaplig antologi, 2,* edited by Daniel Lindmark & Olle Sundström, 943–959. Skellefteå: Artos.
Oskal, Nils. 2000. “On nature and reindeer luck.” *Rangifer* 20 (2–3), 175-180.
Overud, Johanna. 2019. “Memory-making in Kiruna: Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town.” *Culture Unbound. Journal of Current Cultural Research* 11 (1), 104-123.

Östlund, Emil. 2012. “Sprickorna närmar sig Kiruna snabbare än väntat.” *Sveriges Radio*, August 13, 2012. https://sverigesradio.se/artikel/5243223.
Paine, Robert. 1977. “The path to welfare colonialism.*” The White Arctic: Anthropological Essays on Tutelage and Ethnicity*, edited by Robert Paine, 7-28. St. John's: Memorial University of Newfoundland
——.1982. *Dam a River, Damn a People? Saami (Lapp) Livelihood and the Alta/Kautokeino Hydro-Electric Project and the Norwegian Parliament*. Copenhagen: International Work Group for Indigenous Affairs.
——.1996. “Saami reindeer pastoralism & the Norwegian state, 1960s-1990s.” *Nomadic Peoples*, 125–135.
——. 1999. “Reindeer theft”? Notes on how a culture is put at odds with itself, *Acta Borealia*, 16 (1), 63–82.
Perjus, Marcus. 2021. “Trafikverket: Här ska Kirunas nya järnvägsstation placeras.” *SVT Nyheter Norrbotten.* May 10, 2021. https://www.svt.se/nyheter/lokalt/norrbotten/trafikverket-dar-ska-kirunas-nya-jarnvagsstation-placeras
Persson, Curt. 2013. *På disponentens tid: Hjalmar Lundbohms syn på samer och tornedalingar*. Luleå: Tornedalica.
——. 2015. “Hjalmar Lundbohm: en studie om ledarskap inom LKAB 1898–1921.” PhD diss., Luleå Tekniska Universitet, 2015.
Persson, Sofia, David Harnesk, and Mine Islar 2017. “What local people? Examining the Gállok mining conflict and the rights of the Sámi population in terms of justice and power.” *Geoforum* 86, 20–29.
Pink, Sarah. 2008. “An urban tour: The sensory sociality of ethnographic place-making.” *Ethnography* 9 (2), 175–196.
Poirier, Sylvie. 2010. “Change, resistance, accommodation and engagement in indigenous contexts: A comparative (Canada–Australia) perspective.” In *Anthropological Forum* 20 (1) 41–60.
Porter, Libby, and Oren Yiftachel. 2019. ‘Urbanizing Settler-Colonial Studies: Introduction to the Special Issue’. *Settler Colonial Studies* 9 (2), 177–86.
Povinelli, Elizabeth A. 1993. “'Might be something': The language of indeterminacy in Australian Aboriginal land use.” *Man*, 679-704.
——. 1995. “Do Rocks Listen?: The Cultural Politics of Apprehending Australian Aboriginal Labor.” *American Anthropologist* 97 (3), 505–18.
——. 2002. *The Cunning of Recognition: Indigenous Alterities and the Making of Australian Multiculturalism*. Durham: Duke University Press.
——. 2011. *Economies of Abandonment: Social Belonging and Endurance in Late Liberalism*. Durham: Duke University Press.
Pratt, Mary Hannele. 1985. “Scratches on the Face of the Country; Or What Mr. Barrow Saw in the Land of the Bushmen.” *Critical inquiry* 12 (1), 119-143.
Pred, Allan. 1997. “Somebody else, somewhere else: racisms, racialized spaces and the popular geographical imagination in Sweden.” *Antipode* 29, no. 4: 383-416.
——. 1998. “Memory and the cultural reworking of crisis: racisms and the current moment of danger in Sweden or wanting it like

before." *Environment and Planning D: Society and Space* 16, no. 6: 635-664.
——. 2000. *Even in Sweden: Racisms, racialized spaces, and the popular geographical imagination*. Berkeley: University of California Press.
——. 2001. "Unspeakable Spaces: racisms past and present on exhibit in Stockholm, or the unaddressable addressed." *City & Society* 13, no. 1: 119-159.
Price, David H. 2011. *Weaponizing Anthropology: Social Science in Service of the Militarized State*. Oakland: AK Press.
Pålsson, Ale. "Smugglers before the Swedish throne: Political activity of free people of color in early nineteenth-century St Barthélemy." *Atlantic Studies* 14 (3), 318–335.
Polk, Merritt. 2010. "Sustainability in Practice: The Interpretation of Sustainable Development in a Regional Planning Arena for Dialogue and Learning in Western Sweden." *Planning Theory & Practice* 11 (4), 481–97.
Rabinow, Paul. 1995. *French Modern: Norms and Forms of the Social Environment*. Chicago: University of Chicago Press.
Raibmon, Paige. "Living on Display: Colonial visions of Aboriginal domestic spaces." *BC Studies: The British Columbian Quarterly* 140, 69–89.
Raitio, Kaisa, Christina Allard, and Rebecca Lawrence. 2020. "Mineral extraction in Swedish Sápmi: The regulatory gap between Sámi rights and Sweden's mining permitting practices." *Land Use Policy* 99 (105001), 1–15.
Rajak, Dinah. 2011. *In Good Company: An Anatomy of Corporate Social Responsibility*. Palo Alto: Stanford University Press.
——. 2014. "Corporate Memory: Historical Revisionism, Legitimation and the Invention of Tradition in a Multinational Mining Company." *PoLAR: Political and Legal Anthropology Review* 37 (2), 259–80.
Ravna, Øyvind. 2020. "A Sámi Community Wins Case against the Swedish State in the Supreme Court." *Arctic Review* 11, 19–21.
Regionfakta. n.d "Största arbetsgivare i Kiruna kommun 2019." Accessed March 28, 2021, https://www.regionfakta.com/norrbottens-lan/norrbottenslan/kiruna/arbete1/kommunens-15-storsta-arbetsgivare/
Rehbinder, Claes. 1990. "Management stress in reindeer." *Rangifer* 10 (3), 267–288.
Reichwald, Astrid, and Brita Svedlund. 1977. *Laevas: Sameby i dag - historia i morgon?* Stockholm: Pan/Norstedt
Reinert, Hugo. 2018 "Notes from a projected sacrifice zone." *ACME: An International Journal for Critical Geographies* 17 (2), 597–617.
Robbins, Bruce. 2015. "Blue Water: A Thesis." *Review of International American Studies* 8 (1), 47–66.
Roche, Gerald, Hiroshi Maruyama, and Åsa Virdi Kroik. 2018. *Indigenous efflorescence: Beyond revitalisation in Sápmi and Ainu Mosir*. Acton: ANU Press.
Rogers, Douglas. 2015. *The Depths of Russia: Oil, Power, and Culture after Socialism*. Ithaca: Cornell University Press.

Rudling, Per Anders. 2014. “Eugenics and racial biology in Sweden and the USSR: Contacts across the Baltic Sea.” *Canadian Bulletin of Medical History* 31 (1), 41–75.
Ruong, Israel. 1937. *Fjällapparna i Jukkasjärvi socken*. Uppsala: Appelbergs boktryckeriaktiebolag.
——. 1967. *Samerna.* Stockholm: Bokförlaget Aldus/Bonniers.
——. 1991. *Samerna i historien och nutiden*. Stockholm: Bonnier Fakta.
Sandell, Klaus. 1998. “The Public Access Dilemma: The Specialization of Landscape and the Challenge of Sustainability in Outdoor Recreation.” In *Sustainability, the Challenge: People, Power, and the Environment*, edited by Sorlin, Sverker, and L. Anders Sandberg, 121–129. Montreal: Black Rose Books.
Sandell, Klas, and Sverker Sörlin. 2000. *Friluftshistoria: Från* “*härdande friluftslif” till ekoturism och miljöpedagogik: Teman i det svenska friluftslivets historia*. Stockholm: Carlssons bokförlag.
Salmon, Patrick. 1981. “British Plans for Economic Warfare against Germany 1937-1939: The Problem of Swedish Iron Ore.” *Journal of Contemporary History* 16 (1), 53–72.
Saltzman, Katarina, Lesley Head, and Marie Stenseke. 2011. “Do Cows Belong in Nature? The Cultural Basis of Agriculture in Sweden and Australia.” *Journal of Rural Studies* 27 (1), 54–62.
Sametinget. 2018a. “Trafikdödade renar.” Last modified January 25th, 2018. https://www.sametinget.se/110823
——. 2018b. “Laevas.” Last modified November 22, 2018. https://www.sametinget.se/Leaváš
——. 2020. “Rennäringen i Sverige”. Last modified: April 27, 2020. https://www.sametinget.se/rennaring_sverige
Sametinget and Anders Sunneson. n.d. “Karta över Sveriges samebyar.” Accessed March 20, 2019. https://www.sametinget.se/66815
Sasvari, Anett, and Hugh Beach. 2011. “The 2011 Swedish supreme court ruling: A turning point for Saami rights.” *Nomadic Peoples* 15 (2), 130–135.
SBL [Svensk biografisk lexicon]. n.d. “JO Hjalmar Lundbohm”. Accessed March 21, 2015. https://sok.riksarkivet.se/sbl/artikel/9777,
Schramm, Katharina. “Introduction: Landscapes of Violence: Memory and sacred space.” *History & Memory* 23 (1), 5–22.
Scott, James C. 1998. *Seeing like a State: How Certain Schemes to Improve the Human Condition Have Failed*. New Haven: Yale University Press.
Schorkowitz, Dittmar, John R. Chávez, and Ingo W. Schröder. 2019. *Shifting Forms of Continental Colonialism: Unfinished Struggles and Tensions*. Singapore: Palgrave Macmillan.
Sehlin MacNeil, Kristina. 2015. “Shafted: A case of cultural and structural violence in the power relations between a Sámi community and a mining company in Northern Sweden.” *Ethnologia Scandinavica* 45, 73–88.
——. “Extractive violence on Indigenous country: Sámi and Aboriginal views on conflicts and power relations with extractive industries.” PhD diss., Umeå Universitet, 2017.

Sehlin MacNeil, Kristina, and Niila Inga. 2019. “Extraktivt våld och urfolks koppling till mark.” *Kulturella perspektiv–Svensk etnologisk tidskrift* 28 (1-2), 42-51.
Sejersen, Frank. 2020. “Brokers of hope: Extractive industries and the dynamics of future-making in post-colonial Greenland.” *Polar Record* 56 (e22), 1–11
SFS 1971: 437 *Rennäringslag [The Reindeer Herding Law)*
——. 1972: 719: *Expropiationslag [Expropriation Law)*
——. 1998: 808: *Miljöbalken [The Environmental Code]*.
——. 2003: 460. *Lag om etikprövning av forskning som avser människor [Law on ethical reveiw on research involving humans]*.
——. 2010: 900. *Plan- och bygg lag [Planning and Building Law]*.
SGU [Sveriges Geologiska Undersökning]. 2021.” Landowners and those with a usufruct (right of use) to land”. The Mining Inspectorate of Sweden. Last modified March 3, 2021. https://www.sgu.se/en/mining-inspectorate/prospecting-process/landowners-and-those-with-a-usufruct-right-of-use-to-land/
Sillitoe, Paul. 2016. *Indigenous Studies and Engaged Anthropology: The Collaborative Moment*. Abingdon: Routledge.
Simpson, Audra. 2014. *Mohawk Interruptus: Political Life Across the Borders of Settler States*. Durham: Duke University Press.
——. 2016. “The state is a man: Theresa Spence, Loretta Saunders, and the gender of settler sovereignty.” *Theory & Event* 19 (4).
Simpson, Michael. 2019. “Resource Desiring Machines: The Production of Settler Colonial Space, Violence, and the Making of a Resource in the Athabasca Tar Sands.” *Political Geography* 74, 1–12.
Simpson, Michael and Bagelman, Jen. 2018. “Decolonizing urban political ecologies: The production of nature in settler colonial cities.” *Annals of the American Association of Geographers*, 108(2), 558–568.
SIND PM: 1981:8. *Utredning från Statens Industriverk: Malmfältens framtid.* https://www.riksdagen.se/sv/dokument-lagar/dokument/proposition/om-verksamheten-vid-statens-industriverk-mm_G603113/html
Sitte, Camillo. [1889] 1965. *City Planning According to Artistic Principles,* translated by George R. Collins and Christiane Crasemann Collins. London: Phaidon Press.
Sjöholm, Jennie. 2019. “Norrbotten's Technological Megasystem.” *TICCIH Bulletin* 85, 3–6.
Sjögren, Pia. 2013. “Hur många samer finns det egentligen?” Sámiskt Informationscentrum, January 22, 2013. http://www.samer.se/4075
Skarin, Anna, and Birgitta Åhman. 2014. “Do Human Activity and Infrastructure Disturb Domesticated Reindeer? The Need for the Reindeer’s Perspective.” *Polar Biology* 37 (7), 1041–54.
Sköld, Peter. 2015. “Perpetual adaption? Challenges for the Sámi and reindeer husbandry in Sweden.” In *The New Arctic*, edited by Birgitta Evengård; Joan Nymand Larsen; Øyvind Paasche, 39–55. Cham: Springer.

Smith, Adam [1777] 2012. *An Inquiry into the Nature and Causes of the Wealth of Nations: Two Volumes in One*, edited by Edwin Cannan and George J. Stigler. Chicago: University of Chicago Press.
Smith, Linda Tuhiwai. 2013. *Decolonizing Methodologies: Research and Indigenous Peoples*. London: Zed Books Ltd.
Smith, Neil. 2010. *Uneven Development: Nature, Capital, and the Production of Space*. University of Georgia Press.
Sluka, Jeffrey A. 1995. "Reflections on managing danger in fieldwork: Dangerous anthropology in Belfast." In *Fieldwork Under Fire*, edited by Carolyn Nordstrom and Antonius C.G.M. Robben, 276–294. Berkeley: University of California Press
Soja, Edward W. 1989. *Postmodern geographies: The reassertion of space in critical social theory*. London: Verso.
——. 2014. *Thirdspace: Journeys to Los Angeles and Other Real-and-Imagined Places*. Oxford: Blackwell.
Solbär, Lovisa, Pietro Marcianó, and Maria Pettersson. 2019. "Land-Use Planning and Designated National Interests in Sweden: Arctic Perspectives on Landscape Multifunctionality." *Journal of Environmental Planning and Management* 62 (12), 2145–65.
SOU 1937:49. 1937. "Betänkande med lag om förslag till semester – avgivet av 1936 års Semestersakkuniga." Stockholm: Socialdepartementet.
——. 2006:14. "Samernas sedvanemarker: Betänkande av Gränsdragningskommissionen för renskötselområdet." Stockholm: Statens offentliga utredningar.
Speck, Robert C., and Robert W. Bruhn. 1995. "Non-uniform mine subsidence ground movement and resulting surface-structure damage." *Environmental & Engineering Geoscience* 1 (1), 61–74.
Statistics Sweden [*Statistikmyndigheten SCB*]. 2021a." Population by localities by every fifth year. Kiruna (Kiruna kommun)." Accessed April 25, 2021.https://www.statistikdatabasen.scb.se/pxweb/en/ssd/START__MI__MI0810__MI0810A/LandarealTatortN/table/tableViewLayout1/
—. 2021b. "Gainfully employed 16+ years by region of residence (RAMS) by region, industrial classification NACE Rev. 2 and year." Accessed April 25, 2021. https://www.statistikdatbasen.scb.se/pxweb/sv/ssd/START__BE__BE0101__BE0101A/BefolkningNy/table/tableViewLayout1/
Stenberg, Karin. 1920. *Dat Läh Mijen Situd! Det är vår vilja: En vädjan till Svenska Nationen från Samefolket*, edited by and Valdemar Lindholm. Stockholm: Svenska förlaget.
Stenberg, Margareta. 2002. "Sameförening – de svåra åren skapade behovet av en organisation." In *Kiruna 100-årsboken – del I*, edited by Kjell Törmä, 196–199. Kiruna: Kiruna Kommun.
Sternlund, Hans. 2013. "Sista tåget har gått*." SVT Nyheter Norrbotten.* August 30, 2013.https://www.svt.se/nyheter/lokalt/norrbotten/sista-taget-har-gatt
——.2019. "Nu ska Trafikverket utreda Kirunas järnvägsstation." *SVT Nyheter Norrbotten.* October 18, 2019.

https://www.svt.se/nyheter/lokalt/norrbotten/nu-ska-trafikverket-utreda-kirunas-jarnvagsstation
——. 2020. “LKAB-konflikten: Regeringen lovar inte något snabbspår.” *SVT Nyheter Norrbotten.* May 12, 2020. https://www.svt.se/nyheter/lokalt/norrbotten/lkab-konflikten-regeringen-lovar-inte-nagot-snabbspar
Sténs, Anna and Camilla Sandström. 2013. “Divergent interests and ideas around property rights: The case of berry harvesting in Sweden.” *Forest Policy and Economics* 33, 56–62.
Stoor, Jon Petter A., Niclas Kaiser, Lars Jacobsson, Ellinor Salander Renberg, and Anne Silviken. ““We Are Like Lemmings”: Making Sense of the Cultural Meaning (s) of Suicide Among the Indigenous Sámi in Sweden.” *International Journal of Circumpolar Health* 74 (1), 1–8.
Stoor, Krister. “Juoiganmuitalusat-jojkberättelser: en studie av jojkens narrativa egenskaper.” PhD diss., Umeå Universitet, 2007.
Storm, Anna. 2014. *Post-Industrial Landscape Scars*. New York: Palgrave Macmillan US.
Strathern, Marilyn. 1988. *The Gender of the Gift: Problems with Women and Problems with sSociety in Melanesia*. Berkeley: Univeristy of California Press.
Stöckel, Britt-Mari, Jonny Sjöberg, Karola Mäkitaavola, and Tomas Savilahti. 2012. “Mining-induced ground deformations in Kiruna and Malmberget.” *Rock Engineering and Technology for Sustainable Underground Construction. Eurock 2012 – the 2012 ISRM International Symposium (Stockholm, May 28–30, 2012)*, 1–14. Stockholm: BeFo
Suopajärvi, Leena, Thomas Ejdemo, Elena Klyuchnikova, Elena Korchak, Vigdis Nygaard, and Gregory A. Poelzer. 2017. “Social impacts of the “glocal” mining business: case studies from Northern Europe.” Mineral Economics 30 (1), 31–39.
Svensson, Tom G. 1997. *The Sámi and Their Land: The Sámi vs the Swedish Crown: A Study of the Legal Struggle for Improved Land Rights: The Taxed Mountains Case*. Oslo: Novus Förlag.
Sveriges riksdag. 2013. “Avskaffa Sametinget. Motion 2013/14: K201 av Olle Larsson (SD).” September 18, 2013. Accessed October 31st, 2019. https://www.riksdagen.se/sv/dokument-lagar/dokument/motion/avskaffa-sametinget_H102K201
Swedish Research Council. 2017. *Good Research Practice*. https://www.vr.se/download/18.5639980c162791bbfe697882/1555334908942/Good-Research-Practice_VR_2017.pdf
Sörlin, Sverker. 1988. *Framtidslandet: Debatten om Norrland och naturresurserna under det industriella genombrottet*. Stockholm: Carlssons.
——. 2000. “Ordering the world for Europe: science as intelligence and information as seen from the northern periphery.” *Osiris* 15, 51-69.
——. 2021. “Wisdom of affect? Emotion, environment, and the future of resource extraction.” *Polar Record* 57 (e27), 1–9.

Sörlin, Sverker, and Christer Nordlund. 2003. “Modernizing the National Landscape.” *The Kenyon Review* 25 (3-4), 301–15.
TallBear, Kim. 2017. “Beyond the life/not-life binary: A feminist-indigenous reading of cryopreservation, interspecies thinking, and the new materialisms.” *Cryopolitics: Frozen Life in a Melting World*, edited by Joanna Radin and Emma Kowal, 179-202.Cambridge, MA: The MIT Press.
Tepecik Diş, Aslı, and Elahe Karimnia 2021. “Reframing Kiruna’s Relocation—Spatial Production or a Sustainable Transformation?” *Sustainability* 13 (3), 1–22.
Terminski, Bogumil. 2012. “Mining-induced displacement and resettlement: Social problem and human rights issue (a global perspective).” *SSRN* 2028490, 1- 45.
Tillväxtanalys and Copenhagen Economics. 2016. “Sveriges attraktivitet som gruvland”. September 2, 2016, https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/5/355/1485181841/sveriges-attraktivitet-som-gruvland_2sep2016.pdf
Tillväxtverket. 2021. “Norrbotten - minskad arbetslöshet.” Last updated March 4, 2021. https://tillvaxtverket.se/statistik/regional-utveckling/lansuppdelad-statistik/norrbotten.html
Thomasson, Fredrik. 2016. “Thirty-Two Lashes at Quatre Piquets: Slave Laws and Justice in the Swedish Colony of St. Barthélemy ca. 1800.” In *Ports of Globalisation, Places of Creolisation*, edited by Holger Weiss, 280–305. Ledien: Brill.
Thisted, Kirsten, Frank Sejersen, and Marianne Elisabeth Lien. 2021. “Arctic Uchronotopias: Resource Extraction, Community Making and the Negotiation of Arctic Futures.” *Polar Record* 57 (e28), 1-4.
Thrift, Nigel. 2008. *Non-Representational Theory: Space, Politics, Affect*. Abingdon: Routledge.
Thuen, Trond. 1995. *Quest for Equity: Norway and the Saami Challenge.* St. John's, Nfld.: ISER
Tidholm, Po. 2018. “Kiruna Mitt i Förvandlingen – Nu Flyttas Staden Bit För Bit.” *Dagens Nyheter*, May 27, 2018. Accessed October 20, 2019. https://www.dn.se/kultur-noje/kiruna-mitt-i-forvandlingen-nu-flyttas-staden-bit-for-bit/
Tjarnlund, Nils Johan and Daniel Henningson. 2014. “Kiruna – mönstersamhället i ödemarken.” Last modified November 11, 2017. https://popularhistoria.se/civilisationer/stader/kiruna-monstersamhallet-i-odemarken
Todd, Zoe. 2014. “Fish pluralities: Human-animal relations and sites of engagement in Paulatuuq, Arctic Canada.” *Études/Inuit/Studies* 38, no. 1-2: 217-238.
——. 2018. Refracting the state through human-fish relations.” *Decolonization: Indigeneity, Education & Society* 7, no. 1 (2018): 60-75.
Torp, Eivind. 1992. “Från kåtor till egnahem–samerna och den statliga Bostadspolitiken.” *Bebyggelsehistorisk tidskrift* 24, 107–125.

Trouillot, Michel-Rolph. 1995. *Silencing the Past: Power and the Production of History*. Boston: Beacon Press.
Tryland, Morten. 2012. "Are we facing new health challenges and diseases in reindeer in Fennoscandia?" *Rangifer*, *32*(1), 35–47.
Tsing, Anna Lowenhaupt. 2003."Natural resources and capitalist frontiers." *Economic and Political Weekly*, 5100–5106.
Tunström, Moa. 2007. "The Vital City: Constructions and meanings in the contemporary Swedish planning discourse." *Town Planning Review* 78 (6), 681-698.
Tuori, Kaius. 2015. "The theory and practice of indigenous dispossession in the late nineteenth century: The Saami in the far north of Europe and the legal history of colonialism." *Comparative Legal History* 3 (1), 152–185.
Turi, Johan Olafsson. 1931. *Turi's book of Lappland*. Edited and translated by Emilie Demant Hatt and E. Gee Nash. New York and London: Harper & Brothers.
Veracini, Lorenzo. 2010. *Settler Colonialism: A Theoretical Overview*. Basingstoke: Palgrave Macmillan.
Vladimirova, Vladislava. "Just Labor: Labor Ethic in a Post-Soviet Reindeer Herding Community." PhD diss. Uppsala Universitet, 2006.
Viklund, Roine, Lasse Brunnström, and Jennie Sjöholm. 2015. "The Book of LKAB: The National Treasure of Sweden." Lulea: LKAB.
Vistnes, Ingunn, and Christian Nellemann. 2001. "Avoidance of cabins, roads, and power lines by reindeer during calving." *The Journal of wildlife management*, 915–925.
Voyles, Traci Brynne. 2015. *Wastelanding: Legacies of uranium mining in Navajo country*. U of Minnesota Press.
Wahlund, Sten. "Demographic Studies in the Nomadic and the Settled Population of Northern Lapland'. PhD diss, Stockholms Högskola, 1932.
Watts, Vanessa. 2013. "Indigenous place-thought and agency amongst humans and non-humans (First Woman and Sky Woman go on a European world tour!)" *Decolonization: Indigeneity, Education & Society* 2 (1), 20–34.
Welker, Marina. 2014. *Enacting the corporation: an American mining firm in post-authoritarian Indonesia*. Univ of California Press.
West, Paige. 2005. "Translation, value, and space: theorizing an ethnographic and engaged environmental anthropology." *American Anthropologist* 107, (4), 632-642.
——. 2006a. *Conservation is Our Government Now: The Politics of Ecology in Papua New Guinea*. Durham: Duke University Press, 2006.
——. 2006b. "Environmental conservation and mining: Between experience and expectation in the Eastern Highlands of Papua New Guinea." *The Contemporary Pacific*: 295-313.
West, Paige, James Igoe, and Dan Brockington. 2006. "Parks and Peoples: The Social Impact of Protected Areas." *Annual Review of Anthropology* 35, 251-277.
West, Paige, and Dan Brockington. 2006. "An anthropological perspective on some unexpected consequences of protected areas." *Conservation biology* 20 (3), 609-616.

Westman, Clinton N., Tara L. Joly, and Lena Gross. 2019. *Extracting Home in the Oil Sands: Settler Colonialism and Environmental Change in Subarctic Canada*. Abingdon: Routledge.
Wildcat, Matthew. 2015. "Fearing Social and Cultural Death: Genocide and Elimination in Settler Colonial Canada—an Indigenous Perspective." *Journal of Genocide Research* 17 (4), 391–409.
Willow, Anna J., and Sara Wylie. 2014. "Politics, Ecology, and the New Anthropology of Energy: Exploring the Emerging Frontiers of Hydraulic Fracking". *Journal of Political Ecology* 21 (1), 222–36.
Wilson, Emma, and Florian Stammler. 2016. "Beyond Extractivism and Alternative Cosmologies: Arctic Communities and Extractive Industries in Uncertain Times." *The Extractive Industries and Society* 3 (1), 1–8.
Wishart, Robert P. 2013. "Building a Home for Circumpolar Architecture." In *About the Hearth: Perspectives on the Home, Hearth and Household in the Circumpolar North*, edited by David G. Anderson, Robert P. Wishart, and Virgine Valé, 103-130. Oxford, New York: Berghahn Books.
Whitaker, Ian. 1955. *Social relations in a nomadic Lappish community*. Oslo: Norsk folkemuseum.
White Arkitekter, Ghilardi + Hellsten Arkitekter, Spacescape AB, Vectura Consulting AB. 2013. *Kiruna 4-ever.* Accessed December 10, 2014. https://www.arkitekt.se/app/uploads/2014/06/T%C3%A4vlingar-2013-Ny-stadsk%C3%A4rna-i-Kiruna-Kiruna-4-ever.pdf
Whyte, Kyle, Jared L Talley, and Julia D. Gibson. 2019. "Indigenous Mobility Traditions, Colonialism, and the Anthropocene." *Mobilities* 14 (3), 319–35.
Wolfe, Patrick G. 1999. *Settler Colonialism and the Transformation of Anthropology: The politics and Poetics of an Ethnographic event*. London: Cassell.
—. 2006. "Settler Colonialism and the Elimination of the Native." *Journal of genocide research* 8 (4), 387–409.
Young, Oran R. 1992. *Arctic Politics: Conflict and Cooperation in the Circumpolar North.* Hanover: Dartmouth College Press.
Younging, Gregory. 2018. *Elements of Indigenous style: A guide for writing by and about Indigenous peoples*. Edmonton: Brush Education.
Yupsanis, Athanasios. 2010. "ILO Convention No. 169 Concerning Indigenous and Tribal Peoples in Independent Countries 1989–2009: An Overview." *Nordic Journal of International Law* 79 (3), 433–456.
Åhrén, Mattias. 2004. "Indigenous peoples' culture, customs, and traditions and customary law - the Saami people's perspective." *Ariz. J. Int'l & Comp. L.* 21, 63–112.
Åström, Yngve. 1964. *Hjalmar Lundbohm: Lapplands okrönte kung.* Stockholm: LT:s Förlag.
Össbo, Åsa. 2020. "Från lappmarksplakat till anläggarsamhällen: Svensk bosättarkolonialism gentemot Sápmi." *Historisk Tidskrift* 140 (3), 420–443.

Össbo, Åsa, and Patrik Lantto. 2011. “Colonial tutelage and industrial colonialism: Reindeer husbandry and early 20th-century hydroelectric development in Sweden.” *Scandinavian Journal of History* 36 (3) 324-348.
Östlund, Emil. 2012. “Sprickorna närmar sig Kiruna snabbare än väntat.” *Sveriges Radio.* August 13, 2012. https://sverigesradio.se/artikel/5243223.

Acta Universitatis Upsaliensis
Uppsala Studies in Cultural Anthropology
Editor: Sten Hagberg

1 Anita Jacobson-Widding: *Red-White-Black as a Mode of Thought.* A Study of Triadic Classification by Colours in the Ritual Symbolism and Cognitive Thought of the Peoples of the Lower Congo. 1979.
2 Lisa Colldén: *Les Trésors de la Tradition Orale Sakata*. Proverbes, mythes, légendes, fables, chansons et devinettes de Sakata. 1979.
3 Hugh Beach: *Reindeer-Herd Management in Transition*. The Case of Tuorpon Saameby in Northern Sweden. 1980.
4 Kaj Århem: *Makuna Social Organization*. A Study in Descent, Alliance and the Formation of Corporate Groups in the North-Western Amazon. 1981.
5 Anita Jacobson-Widding (ed): *Identity. Personal and Socio-Cultural.* A Symposium. 1983.
6 Jürgen Zwernemann: *Culture History and African Anthropology*. A Century of Research in Germany and Austria. 1983.
7 Mick Johnsson: *Food and Culture among Bolivian Aymara*. Symbolic Expressions of Social Relations.1986.
8 Sven Cederroth, Claes Corlin and Jan Lindström (eds): *On the Meaning of Death.* Essays on Mortuary Rituals and Eschatological Beliefs. 1988.
9 Alf Hornborg: *Dualism and Hierarchy in Lowland South America.* Trajectories of Indigenous Social Organization. 1988.
10 Thomas Håkansson: *Bridewealth, Women and Land:* Social Change among the Gusii of Kenya. 1988.
11 Jan-Åke Alvarsson: *The Mataco of the Gran Chaco*. An Ethnographic Account of Change and Continuity in Mataco Socio-Economic organization. 1988.
12 Fernando Giobellina Brumana & Elda Gonzales Martinez: *Spirits from the Margin:* Umbanda in São Paulo. A Study in Popular Religion and Social Experience. 1989.
13 Anita Jacobson-Widding & David Westerlund (eds): *Culture, Experience and Pluralism:* Essays on African Ideas of Illness and Healing. 1989.
14 Michael Jackson & Ivan Karp (eds): *Personhood and Agency.* The Experience of Self and Other in African Cultures. 1990.
15 Anita Jacobson-Widding & Walther van Beek (eds): *The Creative Communion*. African Folk Models of Fertility and the Regeneration of Life.1990.
16 Anita Jacobson-Widding (ed): *Body and Space.* Symbolic Models of Unity and Division in African Cosmology and Experience. 1991.
17 Jan Ovesen (ed): *Texts and Contexts.* Models, Metaphors and Meanings in African Symbolism. (In press.)
18 Daniel Kyaruzi Ndagala: *Territory, Pastoralists and Livestock*. Resource Control among the Kisongo Maasai. 1992.
19 Jitka Kotalová: *Belonging to Others*. Cultural Construction of Womanhood among Muslims in a Village in Bangladesh. 1993.
20 Peter Bretschneider: *Polygyny: A Cross-Cultural Study*. 1995.

21 Ing-Britt Trankell: *Cooking, Care, and Domestication.* A Culinary Ethnography of the Tai Yong, Northern Thailand. 1995.
22 Mikael Kurkiala: *"Building the Nation Back Up."* The Politics of Identity on the Pine Ridge Indian Reservation. 1997.
23 Ingela Edkvist: *The Performance of Tradition.* An Ethnography of Hira Gasy Popular Theatre in Madagascar. 1997.
24 Ing-Britt Trankell & Laura Summers (eds): *Facets of Power and Its Limitations.* Political Culture in Southeast Asia. 1998.
25 Sten Hagberg: *Between Peace and Justice*. Dispute Settlement between Karaboro Agriculturalists and Fulbe Agro-pastoralists in Burkina Faso. 1998.
26 Clarissa Kugelberg: *Perceiving Motherhood and Fatherhood*. Swedish Working Parents with Young Children. 1999.
27 Juan Carlos Gumucio: *Hierarchy, Utility and Metaphor in Mapuche Botany.* 1999.
28 Anita Jacobson-Widding: Chapungu: *The Bird that Never Drops a Feather.* Male and Female Identities in an African Society. 2000.
29 Ivana Macek: *War Within.* Everyday Life in Sarajevo under Siege. 2000.
30 Sten Hagberg & Alexis B. Tengan (eds): *Bonds and Boundaries in Northern Ghana and Southern Burkina Faso.* 2000.
31 Stefan Bekaert: *System and Repertoire in Sakata Medicine.* Democratic Republic of Congo. 2000.
32 Åsa Nilsson Dahlström: *Negotiating Wilderness in a Cultural Landscape.* Predators and Saami Reindeer Herding in the Laponian World Heritage Area. 2003.
33 Marie Perruchon: *I Am Tsunki*. Gender and Shamanism among the Shuar of Western Amazonia. 2003.
34 Bernhard Helander: *The Slaughtered Camel.* Coping with Fictitious Descent among the Hubeer of Southern Somalia. 2003.
35 Sverker Finnström: *Living with Bad Surroundings.* War and Existential Uncertainty in Acholiland, Northern Uganda. 2003.
36 Charlotta Widmark: *To Make Do in the City.* Social Identities and Cultural Transformations among Aymara Speakers in La Paz. 2003.
37 Jan-Åke Alvarsson & Rita Laura Segato (eds): *Religions in Transition*: Mobility, Merging and Globalization in the Emergence of Contemporary Religious Identities. 2003.
38 Michael Barrett: *Paths to Adulthood*: Freedom, Belonging, and Temporalities in Mbunda Biographies from Western Zambia. 2004.
39 Ann Cassiman: *Stirring Life*. Woman's Paths and Places among the Kasena of Northern Ghana. 2006.
40 Vladislava Vladimirova: *Just labor.* Labor ethic in a post-Soviet reindeer herding community. 2006.
41 Titti Kristina Schmidt: *Morality as Practice.* The Santo Daime, an Eco-Religious Movement in the Amazonian Rainforest. 2007.
42 Anna Sofia Hedberg: *Outside the World.* Cohesion and Deviation among Old Colony Mennonites in Bolivia. 2007.
43 Claudia Merli: *Bodily Practices and Medical Identities in Southern Thailand.* 2008.

44 Sita Zougouri: *Derrière la vitrine du développement*: Aménagement forestier et pouvoir local au Burkina Faso. 2008
45 Sten Hagberg & Charlotta Widmark (eds): *Ethnographic Practice and Public Aid*. Methods and Meanings in Development Cooperation. 2009.
46 Hugh Beach, Dmitri Funk & Lennard Sillanpää (eds): *Post-Soviet Transformations.* Politics of Ethnicity and Resource Use in Russia. 2009.
47 Carina Green: *Managing Laponia*. A World Heritage Site as Arena for Sami Ethno-Politics in Sweden. 2009.
48 Níels Einarsson: *Culture, Conflict and Crises in the Icelandic Fisheries.* An Anthropological Study of People, Policy and Marine Resources in the North Atlantic Arctic. 2011.
49 Helga Ögmundardottir: *The Shepherds of Þjórsárver.* Traditional Use and Hydropower Development in the Commons of the Icelandic Highland. 2011.
50 Ulrika Andersson Trovalla: *Medicine for Uncertain Futures*. A Nigerian City in the Wake of a Crisis. 2011.
51 Gabriella Körling: *In Search of the State.* An Ethnography of Public Service Provision in Urban Niger. 2011.
52 Lars Kaskija: *Images of a Forest People.* Punan Malinau – Identity, Sociality, and Encapsulation in Borneo. 2012.
53 Jesper Bjarnesen: *Diaspora at Home?* Wartime Mobilities in the Burkina Faso-Côte d'Ivoire Transnational Space. 2013.
54 Molly Sundberg: *Training for Model Citizenship*. An Ethnography of Civic Education and State-Making in Rwanda. 2014.
55 Nikolas Århem: *Forests, Spirits and High Modernist Development.* A Study of Cosmology and Change among the Katuic Peoples in the Uplands of Laos and Vietnam. 2015.
56 Yulian Konstantinov: *Conversations with Power?* Soviet and post-Soviet developments in the reindeer husbandry part of the Kola Peninsula. 2015.
57 Mari-Elina Ekoluoma: *Everyday Life in a Philippine Sex Tourism Town.* 2017.
58 Anna Baral: *Bad Guys, Good Life.* An Ethnography of Morality and Change in Kisekka Market (Kampala, Uganda). 2018.
59 Per Brandström: *Mhola – The Utopia of Peace*. An Ethnographic Exploration of the Sungusungu Movement in Tanzania. 2020.
60 Nika Rasmussen: *Embodied Citizenship in the Making.* Bolivian Urban Youth at the Crossroads of Social Hierarchies. 2021.
61 Ann-Britt Bernhardsdotter: *The Power of Being.* A Study of Poverty, Fertility and Sexuality among the Kuria in Kenya and Tanzania. 2021.
62 Elisa Maria López: *Transforming Kiruna*. Producing Space, Society, and Legacies of Inequality in the Swedish Ore Fields. 2021