

The mine is the city, the city is the mine.

EXPLORING THE ECONOMICS BEHIND HERITAGE IN THE URBAN TRANSFORMATION OF KIRUNA

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Declaration of originality

I hereby declare that this thesis is an original piece of work, written by me alone. Any information and ideas from other sources are acknowledged fully in the text and notes.
Amsterdam, 01 July 2023.

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1. Introduction

“Kiruna is in many ways one of Europe's, and the world's, **most contemporary** places. It is here that the green transformation of industry begins, and it is also here that climate change cuts through the Arctic landscape. Here, people from all over the world meet to **dig deeper and deeper** into the mountain, and aim for higher and higher spheres. But here there are also **traditions** with their roots in unfathomable historical depth and mile after mile of vast **cultural landscapes**, among rivers, mountains and lakes. In the contrasts, the sparks ignite, in meetings and contradictions, where something new and unique arises. We want to **share** that with the world.”¹

- Markus Forsberg, Head of Culture/Deputy Head of Administration, Kiruna Kommun (*with authors emphasis*).

The intention with which Kiruna announced its application for the cultural capital of Europe in 2029, shows boldness and ambition. It is no mean feat for an industrial city to state that it will be a leading example of the world when it comes to culture. The question arises, how will they do this? More importantly what culture will denote Kiruna in 2029 and does this work together with their industry, green or not? The answers to these questions will arise in the coming years, but first Kiruna will need to solve another challenge. How can the culture of Kiruna and the interests of the mine live together for the foreseeable future? These questions outline the difficulty that comes with redevelopment plans regarding heritage. How is heritage perceived and which place does it take?

The issue discussed in this thesis is related to the economic power of companies over heritage. By discussing in what way the safeguarding of heritage is deemed sufficient, there is an analysis to be made as to why that is sufficient. Is it sufficient because heritage is valued enough or are there other reasons to believe that the effort has been large enough?

With this analysis, a case can be made for careful evaluation of how heritage is dealt with in large-scale transformations and economic operations. The idea seems to be

¹ ‘Europeisk Kulturhuvudstad 2029’, Kiruna Kommun, 5 June 2023, <https://kiruna.se/uppleva--gora/europeisk-kulturhuvudstad-2029.html>.

that heritage has been sufficiently dealt with, within the borders of economic models. Although safeguarding heritage values is a cultural aspect of society, it mostly seems to be managed by economics.

The research question is then as follows: *What are the reasons the relocation of Kiruna has been deemed sufficient to safeguard the heritage and existence of the town?* To establish how such a transformation is deemed sufficient it is necessary to know which principal actors are engaged in the transformation. These actors have certain extents of power and can thus influence decision-making in the town. Hence, how the town will continue in the future will be heavily affected by the aforementioned actors. The question then revolves around when the actors deem the transformation to be sufficient for the future of the town. That is the area that will be researched in this paper.

1.1 FRAMEWORK

In short, to analyse this area, using Rodney Harrison, Laura-Jane Smith, Ashworth & Tunbridge and Anna Storm the complex situation of displacement and its impacts can be analysed. The critical heritage view stems from Harrison. The Authorized Heritage Discourse identified by Smith will be sought in financial areas besides analysing the traditional authorities. By seeing that economics and liberal markets influence heritage practices Anna Storm shows that these scars are evident across the world and must be addressed. The plurality of heritage is often overlooked by economics and Ashworth and Tunbridge could offer a realization.

Companies will for the foreseeable future be able to influence public administrators. They adopt a utilitarian approach and will need to keep making money to sustain their businesses and profits. That means when dealing with heritage, economics will be a leading factor in how to deal with heritage. With smaller entities operating on more local levels, a consensus on what to do with heritage may be easier. However, globally operating companies with considerable impact on the market will be more difficult to steer in a certain direction. This is not speaking of the commodification of heritage but rather the danger of heritage becoming a bargaining point. Heritage scholars have focused on areas where industrialization has affected a place and how its

remains should be dealt with.² It is lacking in the range of where heritage is being managed by industrial activities presently.

To sufficiently research the issues related to Kiruna and due to the complex nature of the relocation, multiple disciplines have to be involved to cover the problem. Not only heritage scholars have something to say, but also political, cultural, indigenous, scientific and artic scholars will deliver insights needed for this research. This then only confirms the notion that heritage is an interdisciplinary field that draws upon multiple expertise to critically analyse a problem.

1.2 METHODOLOGY

To analyse the research question I will be building upon several concepts in critical heritage studies. First of all, Ashworth and Tunbridge distinguished that heritage can be many things such as knowledge, but it also can be cultural or socio-political. This distinction is made as an addition to heritage as a commodity.³ The interplay between these things creates a tension that leads to heritage which includes a complex and discordant set of identifications and conflicts that can ultimately lead to dissonance over what heritage might be. Relating that to the uses of heritage, Ashworth and Tunbridge mention that commodification is explicitly connected to heritage and the ‘economic-cultural dichotomy’ is often ignored.⁴

This finding can help the analysis of this thesis. In this thesis, the reality of the economic-cultural dichotomy in heritage is shown in multiple ways. It is instead less focused on the commodification of heritage. Instead, heritage is used as a subject in financial terms. It is not just the promotion of heritage by the means of making a profit, but also the idea that dealing with heritage is heavily influenced by funding.⁵ This distinction may become more apparent if the theories of Laurajane Smith are referred to.

² Anna Storm, ‘Scars: Living with Ambiguous Pasts’, in *Heritage Ecologies*, ed. Torgeir Rinke Bangstad and Þóra Pétursdóttir (Routledge, 2022), 49–65, <https://urn.kb.se/resolve?urn=urn:nbn:se:liu:diva-180176>.

³ Gregory John Ashworth, Brian J. Graham, and J. E. Tunbridge, *Pluralising Pasts: Heritage, Identity and Place in Multicultural Societies* (London ; Pluto Press, 2007), 36.

⁴ Gregory John Ashworth, Brian J. Graham, and J. E. Tunbridge, *Pluralising Pasts: Heritage, Identity and Place in Multicultural Societies* (London ; Pluto Press, 2007), 40.

⁵ Gregory John Ashworth, Brian J. Graham, and J. E. Tunbridge, *Pluralising Pasts: Heritage, Identity and Place in Multicultural Societies* (London ; Pluto Press, 2007), 40.

Smith argues that in the past there has been an Authorized Heritage Discourse (AHD) in which heritage was determined by people in authoritative positions. This discourse identifies that legitimisation of what heritage consists of is often attributed to a small group and does not capture the broad range of what heritage is. It mainly focuses on the past and what has been heralded then or should be now.⁶ The AHD then results in missing the social and cultural of heritage and focuses more on the grand scale of heritage. That recognition of AHD, in turn, can lead to the identification of barriers that prevent the acknowledgement of conflicting heritages or inclusion of them.⁷

When then combining these two theories, the role of heritage in negotiation processes becomes a complex and conflicting one. There is a slight notion of AHD where a company can influence decisions in which the safeguarding of heritage depends on the height of the investment a company is willing to spend. Company interests hereby determine how, or which heritage is regarded as such. Combining Ashworth and Tunbridge with Smith leaves us with a gap that needs to be explored. The AHD enacted by the company strengthens and steers towards the economic-cultural dichotomy. It is not said that companies don't keep an eye out for the surroundings they impact, especially with corporate social responsibility regulations taking flight, but the pitfall of the economic-cultural dichotomy is easy to overlook.

Why this gap needs to be explored is evident in the third chapter of Smith's *Uses of Heritage*. In this chapter Smith recognizes that an object of heritage under discussion will lead to the exploration of the power and authority behind meanings and that ultimately what is deemed heritage in an authoritative way.⁸ In this case, the heritage of the city is the mine and vice versa, will be put under scrutiny and discuss how this exactly happens. That is then the aim of this thesis. Through the same lens of Smith, we can evaluate how companies also fit into the AHD of countries.

This consequently ties into Harrisons critical thinking as a reaction to AHD. Harrison too admits a connection between economics and heritage. Again, just as the authors mentioned above, he relates it to tourism, an imperative that originates at the state level. There is no mention of an economic influence on heritage exerted by

⁶ Laurajane Smith, *Uses of Heritage* (London; Routledge, 2006), 29, <http://site.ebrary.com/id/10272881>.

⁷ Laurajane Smith, *Uses of Heritage* (London; Routledge, 2006), 11, 42, 43, <http://site.ebrary.com/id/10272881>.

⁸ Laurajane Smith, *Uses of Heritage* (London; Routledge, 2006), 83, 87, 100, 112, 113, <http://site.ebrary.com/id/10272881>.

companies.⁹ It cannot be said that this is completely absent from heritage studies, but it more or less appears as a circumstantial externality.

It is not so much a question of why this all is happening but more the reasons behind it. A transformation on this scale is very much a social transformation and not just an urban one. It is also not meant to solely generate economic welfare but also to strengthen a community. The reasoning why that is necessary will become clear in this thesis.

Research from 2007 shows that in some way the extraction industry is an inevitable process. The way how to deal with change is discussed but not the why.¹⁰ This can be related to Anna Storm's conception of reused and ruined heritage sites and the post-industrialism tied to those sites. The mining sites of northern Sweden represent a significant scar in the landscape, constantly adapting to social, political, economical and environmental regulations. Whereas Storm describes that in post-industrialism services are favoured over traditional industries, there are still locations that are very industrial. In a way northern Sweden has chosen to continue with the industrialisation. Thus as well creating an issue for these landscape scars to heal. There is continuous economic development that does not leave space for evaluation or placement of these sites in a heritage context. These 'scars' are ever changing.¹¹ Exploitation of the mine is continuing and for that, it must expand further into the town.

The extractivist paradigm coined by Sverker Sörlin mentions that there is a set path to industrialise in the extraction industry. Its path dependency shows that a change to a different way of working with the environment and society in this industry is much harder to establish.¹² Because heritage is seen as an intangible concept, it has probably been hard for these extraction companies to deal with something that is not easily addressed in financial terms. How would one put a price on a concept that differs between individuals, spaces, contexts and ideas?

⁹ Rodney Harrison, *Understanding the Politics of Heritage*, Understanding Global Heritage (Manchester: Manchester University Press; 2010), <http://catdir.loc.gov/catdir/toc/fy12pdf02/2010277953.html>, 15.

¹⁰ Steven Zeff, 'Visions for a Sustainable Future Before Relocation of an Arctic Town' (Stockholm University, 2007), 8.

¹¹ Anna Storm, *Post-Industrial Landscape Scars*, Palgrave Studies in the History of Science and Technology (New York, NY: Palgrave Macmillan, 2014), <http://site.ebrary.com/id/10959317>.

¹² Sverker Sörlin, 'The Extractivist Paradigm: Arctic Resources and the Planetary Mine', in *Resource Extraction and Arctic Communities: The New Extractivist Paradigm*, ed. Sverker Sörlin (Cambridge: Cambridge University Press, 2022), 22, <https://doi.org/10.1017/9781009110044.003>.

The employed methods of research have been policy analysis, in-depth semi-structured open interviews and literature research. There has been some communication through email because physical or virtual appointments were not possible. There is also a provision regarding the interviews that have been taken. With respect to the Sami in Kiruna, it was difficult to get a hold of someone that was willing or able to speak. That means that there is a gap in this regard. There is also the possibility that people that were useful to speak to, haven't been on the list of interviewees and thus create a list that may not be as extensive as intended. However, the analysis performed does not build on solely interviews and thus interviews were designated to be exploratory in nature. Therefore, the interviews are used as research material and are naturally open to scrutiny. Sites were visited such as the mine, several company areas, and the new city centre where field notes and photographs were taken for later reference.

Some source criticism regarding the texts that have been studied, many of them were written in English already and many had an English summary available, however in quite a few cases, these were absent or not extensive enough. When this occurred, the translations were done by DeepL Pro, an online translation machine. Most translations seemed to be correct and if not, were easy to translate out of the original texts. However, I do realise that some translations might show misinterpretation of the language or have skipped my attention entirely.

The thesis starts off with an exploration of why exactly Kiruna is important with regards to heritage, with subsequently a section where the context of Sweden and Kiruna is discussed. The second chapter focuses on the reasoning behind the transformation of Kiruna with a focus on decisions, economics and related projects. The final chapter fits in the heritage aspect of Kiruna and how it has been dealt with. The emphasis lies on whose heritage are we talking about and are these social and cultural processes included in the decision-making. Finally, a discussion and conclusion will grasp back onto the research question and offer some insight into other case studies and future research.

2. Relevance and background

This chapter provides a general background for readers who might not be familiar with the heritage field or the Swedish context. In addition to that, it explains who should care about this research and why it is important. The relevance of a north-Swedish town to critical heritage studies might not be apparent. The rest of the chapter is divided into the background where mining in Sweden and the social context of north Sweden is explained, especially concerning the original inhabitants of the region, the Sami. Next, Kiruna as a case study is introduced in which the origins of the mine, the city and the relation to the Sami people are explained. This piece ends with an explanation of the current situation and where Kiruna is headed in the foreseeable future.

2.1 WHO CARES?

1National interest

What is the relevance of Kiruna to heritage studies and the theories mentioned in the previous chapter? In times when communities are becoming more aware of the impact of climate change, adapting to new circumstances is unavoidable. That often means displacement and relocation. The plurality of heritage then is emphasized. People may realize what they will miss or certainly will not want to miss in the future. That means a future- and process-oriented approach to heritage is paramount. The case can of course be made that what heritage is, is always subject to change.¹³ It does not mean that it is therefore not necessary to look at how we manage such changes. In the case of relocation and displacement, the financial burden lies with governments. Large expenditures can be carried by states and hopefully, keep the social impact low. However, in this post-industrial time, companies have a large say in how communities are affected. Mostly because that is where the money is.

2Why is Kiruna relevant?

3Change is ongoing → as heritage is presented in the literature as an ever-evolving state seeing what changes or influences heritage over time is important.

¹³ Laurajane Smith, *Uses of Heritage* (London; Routledge, 2006), 83, 84, 307, <http://site.ebrary.com/id/10272881>.

4Large projects have always had impact on society and find many objections and resistance along the way. [Kiruna's history of dealing with changes can be useful for other large-scale projects.]

5Dealing with contested or uncomfortable heritage within Europe, Sami offers a practical analysis of the heritage field. Contested and dissonant heritage is something that often is neglected. [In Kiruna there is the opportunity to involve these marginalised societies and also look the contested part in the eye.]

6Framing by the state. It is supposed to be a commercial undertaking but the state, country profits. [To not shy away from big actor analysis, accountability is complete?]

7The Dutch disease issue in heritage, Kiruna is presented as a single commodity market, namely the mine and her iron ore. Only by diversifying through the mine and the rare earth deposit Per Geijer, can future for Kiruna be secured. It omits the fact that before, in the 70s, Kiruna was already able to escape its Dutch disease precondition by development of its tourist centre.¹⁴ Now, space and tourism, but also reindeer husbandry, are contributing to the Kiruna market, albeit not significantly according to LKAB/Kiruna.

Dutch disease has a cultural effect, cultural interests are measured in economic terms

8Heritage is also created, 'we are an example for the future/world'.

Heritage as compensation playball for other interests. Secondary to all, secondary to economics

Kiruna case study is a demarcated environment

How does this connect to heritage studies? It connects because heritage is influenced greatly by other externalities. Heritage does not form independently of economics, politics, social and cultural actors. Identifying in this way what impacts Kiruna in what way, shows what is influencing heritage and how dealing with heritage is changed according to the previous three actors.

¹⁴ Moritz Breul and Miguel Atienza, 'Extractive Industries and Regional Diversification: A Multidimensional Framework for Diversification in Mining Regions', *The Extractive Industries and Society* 11, no. 101125 (1 September 2022): 1–11, <https://doi.org/10.1016/j.exis.2022.101125>; Linda Stihl, 'Challenging the Set Mining Path: Agency and Diversification in the Case of Kiruna', *The Extractive Industries and Society* 11, no. 101064 (1 September 2022): 1–9, <https://doi.org/10.1016/j.exis.2022.101064>.

Mines dealt with in isolation, impact assessment less meaningful. Secondary developments also create impact on the landscape. Need for broader perspective, as well as for future prospects?¹⁵

Kiruna can also show heritage scholars the need to combine the object-oriented approach to heritage with the critical heritage approach. Where it is important to realise that critical heritage is the approach to take, there are simply many cases in which objects and sites of heritage need to be managed.¹⁶ To see how this works together in a case like Kiruna offers an example of how these two approaches **come together**. → relate this to people encountering heritage, do they in kirunas case want to or be willing to understand the non object approach?

2.2 THE STATE

Among many others, Sweden has been extracting minerals from the ground for quite some time. The ore fields in the north have been under great scrutiny ever since before the establishment of LKAB. At the turn of the twentieth century, steel was a common **denominator** for the strength of a nation. [Thus, the production of steel soon became an important national interest in which politically much needed to be said.] The government was confident that the ore fields would bring significant wealth and could well be the backbone of Swedish industrialisation.¹⁷

10The Swedish Minerals Act functions as a frame within which companies can extract valuable resources and be mindful of their surroundings. But it also creates an opportunity to protect the environment without really hampering economic growth.

Extraction/mining in Sweden

There are several national interests that the Swedish Government has identified. These interests are areas that have different values for Sweden. It can be a conservation area or an area for exploitation. The area is geographically defined and has for example natural values that Sweden wants to protect, but in this paper also mining exploitation

¹⁵ Christian Fohringer et al., ‘Reindeer Husbandry in Peril?—How Extractive Industries Exert Multiple Pressures on an Arctic Pastoral Ecosystem’, *People and Nature* 3, no. 4 (2021): 882, <https://doi.org/10.1002/pan3.10234>.

¹⁶ Colin Sterling, ‘Critical Heritage and the Posthumanities: Problems and Prospects’, *International Journal of Heritage Studies* 26, no. 11 (1 November 2020): 1042, <https://doi.org/10.1080/13527258.2020.1715464>.

¹⁷ Peder Roberts, ‘The Promise of Kiruna’s Iron Ore in the Swedish Imagination, c.1901–1915’, *Journal of Northern Studies* 13, no. 1 (2019): 53.

areas are of national importance. What then matters most is that on a regional and municipal level, the national interests are fitted into planning. The two examples above already give an indication of how difficult two interests might come together in planning. The exploitation of mineral resources and the conservation of natural areas don't seem to fit together well. This is also determined by planning and the way to solve the issue of friction is to open the national interest to change and revision.

The effects of extraction industries often are local in nature and rarely spread out across a nation. However, the benefits of such industries profit a complete nation, especially with regard to the LKAB being a state company. On top of that, costs do not seem to have been evenly distributed over the nation.¹⁸

iiAn important national interest can also be a cultural environment (Kulturmiljö). These areas are designated by the Swedish National Heritage Board (Riksantikvariämbetet).

Areas of national interest in Sweden are designated since 1987 which are areas that vary considerably. There are areas that are of national interest because of their outdoor recreational values, there are interests related to fishing and also areas that encompass whole areas such as the coast. There are many more distinctions and there is always the possibility to add other areas. For instance, infrastructures, industries and energy production were later added to the list. In short there are two sections that determine what an area of national interest is. Those are the third and fourth chapters of the Swedish Environmental Code, which have a distinction between them. The third is meant to designate single areas or points of specific land uses whereas the fourth is related to entire areas such as a coast or a mountain range which draws upon the natural values of an area.¹⁹

There is also a more legal difference to what extent safeguarding will be exercised between the two chapters. The third formulates that those areas will be protected to the furthest extent possible. The fourth is stricter/enforcing and states that these areas shall

¹⁸ Moritz Breul and Miguel Atienza, 'Extractive Industries and Regional Diversification: A Multidimensional Framework for Diversification in Mining Regions', *The Extractive Industries and Society* 11 (1 September 2022): 2, <https://doi.org/10.1016/j.exis.2022.101125>; Linda Stihl, 'Challenging the Set Mining Path: Agency and Diversification in the Case of Kiruna', *The Extractive Industries and Society* 11 (1 September 2022): 2, <https://doi.org/10.1016/j.exis.2022.101064>.

¹⁹ Lovisa Solbär, Pietro Marcianó, and Maria Pettersson, 'Land-Use Planning and Designated National Interests in Sweden: Arctic Perspectives on Landscape Multifunctionality', *Journal of Environmental Planning and Management* 62, no. 12 (15 October 2019): 2149, <https://doi.org/10.1080/09640568.2018.1535430>.

be protected.²⁰ This difference leaves space for changes in policy or other externalities when multiple areas of national interests overlap and one is deemed more important than the other. But it does mean that an area of national interest is always subject to Swedish policy decisions. Furthermore, solving an overlap of areas should always relate to what is in the public's best interest. What is already present in an area of national interest thus does not lead necessarily to its protection.²¹

This highlights the intention of the Swedish utilitarian mindset when encountering incongruence between areas of national interest. The intention is to handle things in an orderly fashion when incompatible or differing, they do not intend to protect or incorporate these differences. The municipal level has the obligation to incorporate the areas of national interest in local planning and for every new development determine what the risks for the area would be, called a Comprehensive Plan.²² The ANI is restricting but has little power; interviews give restriction reindeer herding towards tourism, but mining was not fully present? overlap is 20%²³

Even before 1987, national interests caused difficult situations for all parties involved. There seemed to be continuous housing shortages and the state felt reluctant to offer housing to the municipality because of the weight of the national mining interest on one side, but also the interest of the reindeer herding grounds on the other.²⁴

Natura2000

2.3 SÁPMI

²⁰ Lovisa Solbär, Pietro Marcianó, and Maria Pettersson, 'Land-Use Planning and Designated National Interests in Sweden: Arctic Perspectives on Landscape Multifunctionality', *Journal of Environmental Planning and Management* 62, no. 12 (15 October 2019): 2149, <https://doi.org/10.1080/09640568.2018.1535430>.

²¹ Lovisa Solbär, Pietro Marcianó, and Maria Pettersson, 'Land-Use Planning and Designated National Interests in Sweden: Arctic Perspectives on Landscape Multifunctionality', *Journal of Environmental Planning and Management* 62, no. 12 (15 October 2019): 2150, <https://doi.org/10.1080/09640568.2018.1535430>.

²² Lovisa Solbär, Pietro Marcianó, and Maria Pettersson, 'Land-Use Planning and Designated National Interests in Sweden: Arctic Perspectives on Landscape Multifunctionality', *Journal of Environmental Planning and Management* 62, no. 12 (15 October 2019): 2148, 2150, <https://doi.org/10.1080/09640568.2018.1535430>.

²³ Lovisa Solbär, Pietro Marcianó, and Maria Pettersson, 'Land-Use Planning and Designated National Interests in Sweden: Arctic Perspectives on Landscape Multifunctionality', *Journal of Environmental Planning and Management* 62, no. 12 (15 October 2019): 2158, <https://doi.org/10.1080/09640568.2018.1535430>.

²⁴ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 194, <https://doi.org/10.1080/17449359.2021.1977142>.

Sápmi covers the northern part of Finland, Norway, Sweden and a small corner in the northwest of Russia. Industrial expansion results in the Sami land coming under threat and comes with the need to adapt to the new circumstances. Sadly, this has been a one-sided approach. The industrial expansion has not been as accommodating as it should be and still bears a strong resemblance to the colonial occupation of the north. The most clear and present danger to the Sami is that their reindeer grazing pastures and their migration routes are being diminished. This removes the ability to exercise their cultural values and continue a tradition that has been present for centuries, much longer than the presence of extractive industries.²⁵ Sadly, also the endangerment and appropriation of Sami outside of the extractive industries have been present for centuries. Ever since the sixteenth century when Sweden became a kingdom, the capitalistic views of exploitation emerged into the landscape, through structures in the built environment as in structures of social context. For instance, the appropriation of unpaid work and energy delivered by the Sami was not uncommon.²⁶

When looking at Sápmi, the region which encompasses the whole of the Sami community combining Swedish, Norwegian and Finnish indigenous people, the ideas of a border were virtually nonexistent. Therefore, only as recently as 1989, 1995, and 1996 Sami Parliaments for each nation have been erected. The goal is to care for the rights, culture and linguistics, and development of the Sami. That is already broader than the general government. When looking at the Minority Act in Sweden, for instance, only implicitly through their rights and cultural-linguistic autonomy the Sami is recognized. That they are an indigenous people was acknowledged in 2011 but is not present in the constitution. Of the three nations, only Finland does.²⁷

As far back as 1751, when the borders of Denmark, Norway, Finland and Sweden were written up, an appendix to the treaty portrayed the first Sami called the Lapp Coidil. The governments agreed upon unrestricted crossing of the borders for reindeer herding and emphasised the conservation of the Sami nation. Now, although the Sami

²⁵ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 107, <https://doi.org/10.3384/cu.2000.1525.2019111104>.

²⁶ Berta Morata et al., 'Territories of Extraction: Mapping Palimpsests of Appropriation', *Urban Planning* 5, no. 2 (30 June 2020): 138-139, <https://doi.org/10.17645/up.v5i2.2901>.

²⁷ Agnieszka Szpak, 'Relocation of Kiruna and Construction of the Markbygden Wind Farm and the Saami Rights', *Polar Science* 22, no. 100479 (1 December 2019): 3, <https://doi.org/10.1016/j.polar.2019.09.001>.

have access to the welfare state in the form of education and healthcare and assimilation has stopped, there are still plenty of instances of marginalisation.²⁸ Amnesty Sápmi lists four points that it focuses its efforts on, namely: “land exploitation of Sápmi; public opinion formation against racism, hatred and threats against the Sami; repatriation and return of remains and sacred objects to Sápmi; not to hide and forget Sweden's history regarding the Sami population.”²⁹

A similar process of reversal of rights can be seen from the early modern period until the nineteenth century before the mining commenced in full. The early modern times saw a development of a complex common pool resource system in which herders had the right to use lands for herding and grazing. Settling changing circumstances in local courts ensured that even though economic prosperity grew, the common system still stood. When the system of rule changed and the local rule transferred to a County Administrative Board (Länsstyrelsen), these rights disappeared along with their self-governance system. Without this, the Sami had to rely on the government which was focused on privatisation and public property with little to no attention to the system the Sami had developed and used themselves. The very system that let them co-exist and manage their economy among others was abolished. The abolishment caused a lack of understanding of the position the Sami were in.³⁰

Without understanding of the system the Sami had used as self-governance, Sami land became widely regarded in Sweden as wild, inhabitable and undeveloped land. The will and respect for the different systems, that had existed for a long time before, disappeared quickly and the divide between rural and urban areas emerged. That has the effect that the existence of Sami lands and rights is systematically overlooked when the interest in using the land for tourism, mining or infrastructure is deemed more important. The emphasis on uninhabitable and unused land has been used as a promotion for colonisation creating the notion of not harming the environment or the people already present.³¹

²⁸ Else Grete Broderstad, ‘The Promises and Challenges of Indigenous Self-Determination: The Sami Case’, *International Journal* 66, no. 4 (2011): 894-895.

²⁹ DeepL Pro, trans., ‘Om Oss [About Us]’, Amnesty Sápmi, 16 February 2022, <https://amnestysapmi.se/om-oss/>.

³⁰ Jesper Larsson and Eva-Lotta Päiviö Sjaunja, *Self-Governance and Sami Communities: Transitions in Early Modern Natural Resource Management* (Cham: Palgrave Macmillan, 2022), 233-234, <https://doi.org/10.1007/978-3-030-87498-8>.

³¹ Nancy Langston, ‘Marginalia: Mining the Boreal North’, *American Scientist* 101, no. 2 (2013): 98.

16Sami, minorities act, is not a national interest, as the reindeer herding is. It is more rigid than that.³²

17*Swedish mineral act*

18For rules and regulation and compensation, also link to environmental acts.

19*Affected areas round Kiruna → Gallivare, Jokkmokk, Malmberget*

In short, there were three major changes in Sami lands due to the extraction industry. First of all, was the erection of eleven mines and quarries in the region. Second, the construction in 1903 and later expansions in 1964 of the railway system split herding migration routes severely. Which also caused the military to settle and airports to be built. Then in Kiruna, the connection of the mine and the city due to urban development closed off a route entirely to the reindeer.³³

The question may rise why encroachment and splitting of grazing areas is an issue. Reindeer need to be able to move to different pastures when the availability of food becomes low. This can be due to the normal season cycle, but also harsher seasons might cause the reindeer to search for different pastures. As reindeer are indirectly guided instead of led to other grazing areas, they count on the routes they normally travel. Herders have a complicated relationship with the reindeer, **managing all the natural instincts reindeer have as to when they know where to go and when.**³⁴ An obstruction in the route may cause confusion and distress. Additionally, the obstructions decrease the number of pastures for reindeer increasing the impact of **poorer seasons.**³⁵

20*Swedish welfare system*

2.4 LKAB, THE STATE AND THE MALMFÄLTEN (ORE FIELDS)³⁶

³² ‘Om Oss [About Us]’, Amnesty Sápmi, 16 February 2022, <https://amnestysapmi.se/om-oss/>.

³³ Christian Fohringer et al., ‘Reindeer Husbandry in Peril?—How Extractive Industries Exert Multiple Pressures on an Arctic Pastoral Ecosystem’, *People and Nature* 3, no. 4 (2021): 878, <https://doi.org/10.1002/pan3.10234>.

³⁴ Nancy Langston, ‘Marginalia: Mining the Boreal North’, *American Scientist* 101, no. 2 (2013): 98.

³⁵ Christian Fohringer et al., ‘Reindeer Husbandry in Peril?—How Extractive Industries Exert Multiple Pressures on an Arctic Pastoral Ecosystem’, *People and Nature* 3, no. 4 (2021): 883, <https://doi.org/10.1002/pan3.10234>.

³⁶ Peder Roberts, ‘The Promise of Kiruna’s Iron Ore in the Swedish Imagination, c.1901–1915’, *Journal of Northern Studies* 13, no. 1 (2019): 36.

The difficulty of deciding on domestic processing of iron ore or export of it was among depended on of how large the deposit was and thus how much capital would be able to extract from it. A small ore body would mean domestic processing would get out the most value, because then the iron ore was used to its full potential. While if the ore body at Kiruna would be larger, exporting ore would mean that public finance was safe for years to come. Most importantly, it meant that there was ample flexibility to decide, politically, what do to with the generated profits.³⁷

Founded in 1890 as Luossavaara-Kiirunavaara AktieBolag (LKAB) named after the two mountains which contained the iron ore, LKAB **was off** to a rough start. It was only after the appointment of mine manager Hjalmar Lundbohm in 1898 that mining started to become a real prospect. In 1898 the claim towards the land and the iron ore body was solidified by excavating soil to uncover the iron ore. However, not all was in place to start mining directly. To rightfully keep the claim a minimum amount of excavations had to be done per year. If not, the claim would be open to other parties. Then, after several years of preparation including the opening of the railway line at the end of 1902, mining of iron ore could commence.³⁸

The state was involved quite early on as a shareholder and from 1948 to 1957 gradually increased its share in the mine subsequently taking full ownership of the mine in 1957.³⁹

37Hjalmar Lundbohm plus link connection to urban development (managing director)
Take over by state

38Creating culture for the mine/city, community development.⁴⁰

39Miner strike 50s/80s

During the bust and recession of the 70s, the state nearly opted to close the mine and decided to save the mine. That proved to be a good decision because not only did the

³⁷ Peder Roberts, 'The Promise of Kiruna's Iron Ore in the Swedish Imagination, c.1901–1915', *Journal of Northern Studies* 13, no. 1 (2019): 53, 54.

³⁸ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 69-70,
<http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

³⁹ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 193,
<https://doi.org/10.1080/17449359.2021.1977142>.

⁴⁰ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015),
<http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

state persist in providing workers with retirement agreements creating a younger workforce, temporary work in the city and other aid, but the state also managed to adopt a new strategy changing the export production from raw iron ore slugs to pellets. This all amounted to a positive view towards the mine and strengthened the idea of the mine as providing for the town.⁴¹

Gradually the Kirunavaara mountain was relieved of its iron ore and the height of the mountain diminished quickly. In 1952 LKAB decided to continue mining underground.⁴²

2.5 FOUNDING KIRUNA

Kiruna has been a mining town for nearly 100 years. Before that, it consisted of undocumented, illegal housing mostly built with temporary intentions. Along the lines of a better community surrounding the mine, a town was erected where people could eventually live together and bring families. Hjalmar Lundbohm was the first director of the mine and set out to create a community in which the mine and town lived in congruence with each other. The model city of the north was erected.

But the idea of the model city was still far from reality. Around 1900 workers came from neighbouring villages, mostly employed for the excavation works. But the main bulk came from elsewhere and stayed in large tents as wooden huts had not yet been erected. These accommodations were very limited under primitive conditions. The vast amount of people needed to erect various parts of the operation pressured the living conditions. Fresh food, lack of water and sewage were the most pressing issues. To ensure the viability of the mining prospect a railroad connection was essential. There was little to no infrastructure to transport people let alone vast amounts of iron ore. From the outset, Lundbohm, besides mining, was tasked to create a community near the site and this turned out to be one of his main objectives during his employment. His first plan was to

⁴¹ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 196, <https://doi.org/10.1080/17449359.2021.1977142>.

⁴² 'A History of LKAB', LKAB, accessed 1 July 2023, <https://lkab.com/en/who-we-are/a-history-of-lkab/>.

create three housing plans supposed to house mining and railway workers and an area destined for private homes and buildings.⁴³

The town plan was designed by architect Per Olov Hallman who decided to integrate the environment into the planning. The plan was adapted to the climate and geography of the area. for instance, the harsh winds were dispersed by creating irregular roads and minding large open squares. Meanwhile, the company and railroad areas were also designed but not in a similar fashion. These areas did not have a town plan to adhere to which meant that Lundbohm had more influence. The design was more industrial and traditional with straight streets and blocks of housing instead of dispersed housing as in the private area. The private area was in fact only regulated through the sale of plots to private investors. However, there was still influence from the mine. The building committee consisted of Lundbohm and other representatives of the mine. The company area and plan had no restrictions. The state did not need to evaluate the plans which made building much easier. This is where Lundbohm envisioned his model city but also the divisions between on the one hand the company town and on the other hand an unregulated and neglected private area. This model city was regulated to such a degree that patriarchalism was not far to be found. Nearly all of the living conditions were overseen by the mine.⁴⁴

During the next decade, Lundbohm managed to create a community that was ordered to his liking and he thus obtained a patriarchal status among the community.

An exclusively male population was a common view in the mining industry at the turn of the twentieth industry. Males coming to Kiruna sought to work and make some money and take on leave.⁴⁵

In 1908 the directive to become a municipality was officially signed. It came with great benefits to the LKAB and involved an early instance of compensation for the town itself. The town had essentially two options. Either they could become a borough or a

⁴³ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 69-70, 73, 78-79, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

⁴⁴ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 166, 169, 172, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

⁴⁵ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 112, 116, <https://doi.org/10.3384/cu.2000.1525.201911104>.

municipality. The difference lay in the form of organisation. A borough would be relatively independent and would levy taxes on the LKAB to ensure investments in infrastructure and other facilities. The municipality option meant that taxes would not be levied and LKAB could broker some form of influence on the town. Obviously the latter was more beneficial to the LKAB. Even more so, the LKAB reasoned that the borough option with more self-governance was not viable as the town hadn't obtained the stature to do so.⁴⁶

Because the town would miss out on the tax income, Lundbohm devised a compensational agreement in which was stated that the town would receive a single donation to invest in infrastructure including a hospital, fire station and water and sewage system. A plan to build a future church was also included.⁴⁷ The most striking thing was that the decision to become a municipality was voted for in the County Administrative Board. This board included large landowners, like the LKAB, and a wealth-based voting system made sure that the decision was voted in favour easily. On top of that, the chief miner was installed as chairman of the municipality. This strengthened the ties to the town even more.⁴⁸

With that the conception of Kiruna was complete. It has become obvious that although Lundbohm wanted to create the ideal community, what actually was in place after these first decades, was a division between town and mine. There was a section which could be called the Company Town and the other part that could be called the Service Town.⁴⁹ On most grounds the division was visible. Economically there was a wage difference, socially the town didn't have the same welfare standards and politically where even employees were encouraged to take up positions as civil servants. Likewise, the urban planning showed a significant difference as well.⁵⁰

⁴⁶ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 179, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

⁴⁷ Ibidem.

⁴⁸ Curt Persson, 'Hjalmar Lundbohm', 180.

⁴⁹ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 190, <https://doi.org/10.1080/17449359.2021.1977142>.

⁵⁰ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 188, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

Why is Lundbohm so important? Because the residents of Kiruna now seem to think that and the LKAB is still a sort of paternal figure and that Lundbohm himself is still venerated through the heritage. Many preserved buildings are related to his legacy.

2.6 SAMI AND KIRUNA

Hjalmar Lundbohm also had the reputation that he maintained a good connection with the Sami around Kiruna. He was seen as a protector and understood the harsh fate that the Sami encountered when settlers came to their lands.⁵¹ This is however spoken from a colonial, settler point of view. Many Sami were used and abused in the extraction industry as cheap labour.⁵² What Lundbohm did envision, was that the church meant to be a meeting place for people of all languages. Which meant that people of every culture were supposed to feel welcome. Some ornamental pieces in the church are Sami and the wooden art piece above the entrance door depicts the greeting of preachers by Sami and Tornedalian Finns.⁵³

This however only highlights the colonisation of the project. The Sami were bereft of their lands and were portrayed as welcoming supporters of the industrial cause. The dependence of Sami, relying on the mine for their existence, stresses how contested this heritage is. Even now Sami need to work in the mine to uphold their occupation as a reindeer herder. One week they work in the mine, the next week they work as reindeer herders. Next to this heavy dependency, there are also migratory struggles within the Sami community as young people cease to take up the vocation of reindeer herding and husbandry.⁵⁴

The irony is even more that the Sami were the first to discover the iron ore fields in northern Sweden and even more so, introduced it to local authorities

⁵¹Border from 1850/1860

⁵¹ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 183, 186, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

⁵² Nancy Langston, 'Marginalia: Mining the Boreal North', *American Scientist* 101, no. 2 (2013): 99.

⁵³ Olle Thoors, Interview with Informatör Kiruna Pastorat, In person, 29 March 2023.

⁵⁴ Thoors, Interview with Informatör Kiruna Pastorat.

Land rights/ownership for settlers as opposed to none for sami⁵⁵

32 The reindeer herding communities

33 Three Sami communities, Laevas, Gabnas, Girjas

34 Protection acts/Riksinteresse related to kiruna

35 Railway issue because of a direct hurdle to crossing lands with reindeer herding. Also explain that Sami Parliament is not really involved in Kiruna, is a local issue.⁵⁶

Apart from the mine other infrastructural developments have increased the encroachment of Sámi lands. Because iron ore needed to be transported the railway was erected, but following this road, quarries, forestry, the military, tourism and later airports all had their impact on the reindeer herding communities. The industrial development of the mine laid the base for what was practically untouched to be exploited.⁵⁷

Although Sami cultural heritage and the reindeer husbandry interests are viewed as second to [most] other national interests, they have managed to survive alongside them due to their capacity to adapt and modernize. This flexibility, however, has also been induced by the mining operation. Funds to modernize the herd and other financial compensation have not compensated for land loss but effectively says to take responsibility in the whole situation.⁵⁸

The urban transformation present in the area around Kiruna has caused the Sami to adapt yet again to industrial expansion. There are several migration routes that pass close to town and these will be restricted when the new city centre is developed. It is then not only routes that are affected. The Sami herd their reindeer through extensive management and a slight change in these circumstances can cause significant trouble. [As seen in the previous section.]⁵⁹

⁵⁵ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 116, <https://doi.org/10.3384/cu.2000.1525.2019111104>. Persson 160?

⁵⁶ Marie Enoksson, 'Correspondence with Sametinget | Sami Parliament', 11 May 2023.

⁵⁷ Christian Fohringer et al., 'Reindeer Husbandry in Peril?—How Extractive Industries Exert Multiple Pressures on an Arctic Pastoral Ecosystem', *People and Nature* 3, no. 4 (2021): 878–880, <https://doi.org/10.1002/pan3.10234>.

⁵⁸ Christian Fohringer et al., 'Reindeer Husbandry in Peril?—How Extractive Industries Exert Multiple Pressures on an Arctic Pastoral Ecosystem', *People and Nature* 3, no. 4 (2021): 873, 882, <https://doi.org/10.1002/pan3.10234>.

⁵⁹ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 107, <https://doi.org/10.3384/cu.2000.1525.2019111104>.

The ANI is restricting but has little power; interviews give restriction reindeer herding towards tourism, but mining was not fully present? overlap is 20%⁶⁰ Hier??

2.7 STATUS QUO

42 Subsidence, mine is caving in, normal for underground mining. Cavity emerge ground falls in. This has been happening since Filling is no solution.

44 Sami left out/development goes too fast

45 No iron ore, LKAB leaves. Too slow, LKAB leaves⁶¹

51 Kiruna is located on top of a single large ore body.

46 No mine, no city. The costs now seem to be in accordance with risk and investment Profits? Estimated cost of transformation

Already before 2000 there were plans to relocate the town.⁶² But in 2004 a letter⁶³ from the mine arrived at the municipality that the town needed to be relocated. In fact, the mine itself hadn't made that decision. It was the Mining Inspectorate which determined that continued mining underneath the city would need a relocation of the city centre. Consequently, the law states that the city should be provided with a new city centre with an equivalent function. This term does not provide much clarity on its own. The state has delegated this to the mine and municipality stating that it should be possible to solve this locally. Therefore negotiations have been going on continuously, mostly behind closed doors.⁶⁴ In some cases that there haven't been any issues but some negotiations were harder than expected and did cause friction.⁶⁵

Eventually, the definitive plans were made in 2010 and in 2014 the involved parties agreed on move. In 2017 the move commenced and for example the first demolition started. The town hall was demolished in 2018 already and the new one constructed in

⁶⁰ Lovisa Solbär, Pietro Marcianó, and Maria Pettersson, 'Land-Use Planning and Designated National Interests in Sweden: Arctic Perspectives on Landscape Multifunctionality', *Journal of Environmental Planning and Management* 62, no. 12 (15 October 2019): 2158, <https://doi.org/10.1080/09640568.2018.1535430>.

⁶¹ Anders Lindberg, Interview with Press Chief LKAB, Microsoft Teams, 18 April 2023.

⁶² Ref needed

⁶³ Nina Eliasson, Interview with Kiruna Municipal Planner, In person, 4 May 2023.

⁶⁴ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 196, <https://doi.org/10.1080/17449359.2021.1977142>.

⁶⁵ Nina Eliasson, Interview with Kiruna Municipal Planner, In person, 4 May 2023; Clara Nyström, Interview with Kiruna Municipal Archivist, In person, 31 March 2023.

its new location. The estimated end date of the project would be in 2035. This is however based on the most recent mining depth of 1365 metres. It is not clear yet if there will be deeper levels and thus more relocation of the town.⁶⁶

Further exploitation of iron ore may cause new movement in the city but the exploitation of rare earth metals under the mountain Per Geijer has gained recent attention in the area. For this, the environmental permit has recently been denied as not being adequately substantiated by the environmental agency of Sweden. However, it is a huge selling point for the mine as they envision themselves to be relieving Europe's dependence on China for rare earth metals and offering Europe much-needed resources for the green transition.⁶⁷

To fund this LKAB is fortunate to have abundant financial resources. LKAB has a very healthy financial position. Of their operating margin of 45%, net profits after tax amount to 15 billion SEK, 1.2 billion EUR. Dividends to the owner consist of more than half of the net profits, around 650 million EUR. The costs of the urban transformation in 2022 amounted to almost 50 million EUR. A far cry away from the profits that are being made. With these margins and profits, it would seem as if an urban transformation of this scale would be relatively easy to bear on the financial statements.⁶⁸

A challenge for the mine, and to a lesser extent the municipality, is how to continue to uphold community cohesion while the transformation proceeds. Having started in 2017 and finishing in 2035 with this stage, people will be living in a rigorously transforming town for a large part of their lives. Even more so, if the ore body or subsistence demands more transformation in the future, what effect will this have on the population? [Especially when the other side of Kiruna at Per Geijer will be exploited.] Perspective for the citizens of Kiruna will be hard to give if exploitation is unsure. Becoming numb or detached from an environment that is constantly changing would not be unlikely....??? Being used to intermittent change is one thing, but being confronted with change constantly is a whole other matter. → Industry comes to town

⁶⁶ Ref needed.

⁶⁷ Ref needed.

⁶⁸ LKAB, 'Annual and Sustainability Report 2022', Annual report, 2022, 6-8.

“The barracks erected for the opening of the railway, next to the station building, decorated with the King's monogram with birch leaves. The event can also be seen as a demonstration of the exploitation of natural resources in Lapland by domestic colonialism.” (Persson, 2015, p. 98) Show of parading the greatness of kiruna

“In a patriarchal system, there are always different kinds of markers, as in the mining community of Kiruna.” (Persson, 2015, p. 188) --> Lundbohm created the environment in which everything ran through or by the company. In doing so he maybe also tried to manage the labour association sentiment and the growing anti patriarchal system. (p187) Thus creating a relationship that continued to exist in the years onward.

“The effect of the municipal system on the new society was that the development of the city plan was severely neglected, in the absence of the necessary tax funds for infrastructure.” (Persson, 2015, p. 189) Meaning that after that the relationship bettered??

“But the image of outdated leadership did not extend beyond the company's sphere. People in the community still regarded Lund-Bohm as the obvious leader of both the mine and the community.” (Persson, 2015, page 202) The mine now has created a similar bond created in the past decades (related to after the strike?) because there is also a strong connection amidst unhappiness?

Back to the model town would be a strange reference as there have been many models and not all good ones. Model for who --> present speeches seems to refer to outsiders as a model town.

3. Reasons behind moving

During the interbellum and World War II, after Lundbohm had resigned, Kiruna followed the general cycles of the world economy, experiencing so-called busts during the great depression and subsequently a rise in demand starting in 1940. Sweden supplied both parties which had a high demand for iron ore continuing in the Post-war period when LKAB experienced a large boom in production.⁶⁹ After 1948 the state gained more influence in the mine in line with the creation of the social welfare state. Before, the state only possessed a small amount of shares but in 1957 they managed to acquire the mine as a whole and became sole owner of it. That ownership was preceded by several major changes in how the state dealt with the mine. First of all, in 1948 Kiruna became a town officially. That meant that the company was supposed to pay taxes bringing significant riches and relative autonomy to Kiruna. However, when the state acquired full ownership, it changed the status back to a municipality again nullifying the tax obligation. Now the discrepancy between being a social welfare state and running a profit-driven company arose. To ensure swift profits, the state ensured that the mine would run on strict capitalistic principles. This gave ample room for the mine to manoeuvre in the local power relations.⁷⁰ These power relations, backed by the financial interests of the state can be seen throughout this chapter. It shows that the freedom to operate along profit minded objectives for the mine, outplays the influence of the state.

52 Large earthquakes begin the 2010s. No reason to stop mining, just adapt to the problems, plans were of course already made in 2004.

This chapter starts by referring to other recent and completed projects the LKAB has undertaken in the region. It then highlights what premise the LKAB operates in. This premise is focused on the economic and profit perspectives many companies employ. This is what underlies most of the decision-making regarding the relocation of Kiruna. It, therefore, serves as a base to which all results regarding cultural and heritage values should relate. The chapter then delves into the rules and regulations LKAB needs to

⁶⁹ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 193, <https://doi.org/10.1080/17449359.2021.1977142>.

⁷⁰ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 194, <https://doi.org/10.1080/17449359.2021.1977142>.

adhere to for its continued operations. This includes the compensational requirements, and the reception of its actions as well. This is then tied back to the previous examples.

3.1 SUCCES STORIES GALLIVARE, MALMBERGET

71

Historical mishaps 1900⁷²

[Put this here??] The industrialisation that occurred in Kiruna and the subsequent alienation of the Sami in that area can also be related to the divide between rural and urban areas. The north was viewed as wild and uninhabited where ample opportunity for expansion was present. The striving of Kiruna to be modern and industrialised only emphasised this divide more with the regions around it.⁷³ This sets the context in which the north was used for profit and industry. The continuous intentions to open new mines in the area will only reinforce this.

53The reasons behind moving are related to the mine and its need to expand. Because this has an economic incentive. It is difficult to

3.2 ECONOMICS AND UTILITARIAN MINDSET

54No iron ore, no income, no city moving, no iron ore.

55Company cannot move too much. Has commercial mindset with risk evaluation and return on investment incentives.

56If these aren't met, then why keep going on.

57Seems to be no leeway⁷⁴

⁷¹ Andrea Luciani and Jennie Sjöholm, 'Norrbotten's Technological Megasystem as a Heritage Discourse: Paradoxes and Controversies', in *AMPS Proceedings Series 15.2 - 13–15 June, 2018*, ed. Maria Alessandra Segantini, vol. 2 (Tangible – Intangible Heritage(s) – Design, social and cultural critiques on the past, the present and the future, University of East London, UK: AMPS C.I.O, 2019), 303–11, <https://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-73214>.

⁷² Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 156, 157, 158 <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

⁷³ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 110-111, <https://doi.org/10.3384/cu.2000.1525.201911104>.

⁷⁴ Anders Lindberg, Interview with Press Chief LKAB, Microsoft Teams, 18 April 2023.

58 Commercial status comes with full independency from state

59 State is only 100% shareholder, management lies with LKAB. This is best way to keep producing and investing in [future?]

In an extraction industry environment, financial risks are mostly larger than in other industries. In addition mining tends to take place by a single dominant company, leaving little room for other ventures. (p2)

The local labour market has been completely tailored to the mining industry. Hence, in combination with the long distance, Kiruna manages its human capital locally and highly specialized. This stimulates and maintains high wages in comparison to other industries, which have less bargaining power when trying to attract labour. In combination with legal status and large influence on the community, the mine is dominant and can impose a transformation of this scale with ease. Also, in 2004 the municipality had just emphasised long term plans to focus on other industries after infrastructural investments in favour of the mine. [Local resources tourism, Sami heritage, architecture, urban planning] p5

When steel industry is ran low in the 1970s-1980s steel crisis, diversification was stimulated to prevent an onesided economy of just mining. p6

The mentality created by the mine lays emphasis on the mine being the motor of the city and the other way round. But this creates a complicated relation between the extraction industry and other ventures. LKAB has more agency and has more financial and legal power to create their preferred reality [costing others]. But have the advantage of supplying a stable environment for Kiruna.[p8] Own words: the continuation of this emphasis limits the very diversification of the town and the social inclusivity. Yes, but only how we want it.⁷⁵

60 State cannot and will not intervene and is adamant that two parties should be able to come to mutual understanding.⁷⁶

61 Separation of mine and city seems evident.

⁷⁵ Linda Stihl, 'Challenging the Set Mining Path: Agency and Diversification in the Case of Kiruna', *The Extractive Industries and Society* 11 (1 September 2022): 1–9, <https://doi.org/10.1016/j.exis.2022.101064>.

⁷⁶ 'Framtiden För LKAB Och Samhällsomvandlingen i Kiruna (Interpellation 2021/22:51 Av Linda Modig (C))', accessed 1 July 2023, https://www.riksdagen.se/sv/dokument-och-lagar/dokument/interpellation/framtiden-for-lkab-och-samhallsomvandlingen-i_h91051/.

Although the LKAB seems to limit their temporary workforce it still seems to be a considerable amount of people which ties into the process of the mine distantiating itself from the city.⁷⁷ This has proven to happen occasionally, in 2007 and 2008 but also in the 50s and 60s.⁷⁸ The LKAB also works with many subcontractors that aren't part of the LKAB group. This share of the workforce has been increasing over time and means that whereas the LKAB tries to limit the fly-in/fly-out workforce, the contractors don't have this obligation whether the obligation is towards the mine or the social cohesion of the city.⁷⁹ That being said, it is not unreasonable that the LKAB needs to hire from outside Kiruna if the labour simply isn't present in Kiruna today. It may show a shift in how dependent the city would be on the mine.

The LKAB has been innovative in limiting their fly-in/fly-out workforce, where temporary labour is flown in and after a few months go on leave to return again afterwards.⁸⁰ However, it is not clear which temporary workforce they instead employ. For instance, a temporary employee might not leave after just a month or two but might stay for a year and then leave permanently. That also might be detrimental to the cohesion among citizens as the involvement of these workers in the city might be smaller than more permanent inhabitants. [I agree that this is a difficult statistic to incorporate for companies but it may be, next to the regular fly-in/fly-out workforce, just as important to focus on or even more important.] The danger is present that this alienates a group without much need for involvement.⁸¹

A more concrete, applied example can be found in recent research where three focussed workshops explored how to co-create solutions for the transformation of Kiruna with the aim of creating an inclusive society for all, instead of just a selective model town as was the aim in the past century. The workshops took place with different compositions of invited participants. They would be interviewed and guided into forming solutions

⁷⁷ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 197, <https://doi.org/10.1080/17449359.2021.1977142>; Anders Lindberg, Interview with Press Chief LKAB, Microsoft Teams, 18 April 2023.

⁷⁸ Reference 50s and 60s

⁷⁹ Sandström and Persson, 'Corporate Paternalism on the Rocks'.

⁸⁰ Lindberg and Lena Abrahamsson et al., *Mining and Sustainable Development Gender, Diversity and Work Conditions in Mining*. (Luleå: Luleå tekniska universitet, 2014), 6, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-22248>.

⁸¹ Lena Abrahamsson et al., *Mining and Sustainable Development Gender, Diversity and Work Conditions in Mining*. (Luleå: Luleå tekniska universitet, 2014), 12, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-22248>.

and ideas. The first workshop consisted of residents. They were interviewed about their wishes and were guided during the workshop by researchers. In the second workshop participants were mainly local authorities combined with researchers and experts on innovation. The third workshop was when the mining company, municipality, researchers and entrepreneurs together participated in workshops.⁸² It is worth noting that the Sami were not mentioned explicitly mentioned as stakeholders. The Sami population should have been explicitly involved regarding their history of marginalisation as we have seen before. Creating an inclusive society therefore must include, at least, the **mentioning** of Sami people.

One of the aims of these workshops was to create an inclusive society coined as being an “innovative urban transformation.” The innovative aspect was that every local actor would play a part in creating this society. The town would thus become attractive to multiple parties and imply diversity.⁸³ Attractiveness and innovation were key to the transformation of Kiruna. This frames the whole approach of participation into a leading perspective that is governed top-down. The city would like to be attractive and innovative, but the wishes laid out by the citizens do not reflect this.⁸⁴ It is symbolic of a focus on business and outward projection. The workshops showed that in total all stakeholders were accounted for but failed to bring these together, separating conflicting interests.

That this separation benefits the economic and entrepreneurial side of the equation can be noted when Kiruna is mentioned as characteristic of the “traditional extraction industries” and the “expanding service industry”. The innovation is directed mainly towards the establishment of a Kiruna brand, so to speak.

⁸² Malin Lindberg et al., ‘Co-Creative Place Innovation in an Arctic Town’, *Journal of Place Management and Development* 13, no. 4 (1 January 2020): 453, <https://doi.org/10.1108/JPMD-02-2019-0009>.

⁸³ Malin Lindberg et al., ‘Co-Creative Place Innovation in an Arctic Town’, *Journal of Place Management and Development* 13, no. 4 (1 January 2020): 448, <https://doi.org/10.1108/JPMD-02-2019-0009>.

⁸⁴ See table 1 in: Malin Lindberg et al., ‘Co-Creative Place Innovation in an Arctic Town’, *Journal of Place Management and Development* 13, no. 4 (1 January 2020): 452, <https://doi.org/10.1108/JPMD-02-2019-0009>.

3.3 COMPENSATION MEASURES

Compensation measures are not uncommon in Sweden. In a recent publication through the Swedish National Heritage Board, several cases were discussed outside of the Kiruna case. But as compensation is set in law, everyone that touches upon another environment must evaluate if compensation is needed. Of course, in Kiruna, this is not any different. We saw earlier on that during the establishment of the municipality compensational measures were implemented to balance missed tax income. This was financial compensation though, the compensation the Minerals Act mentions focuses more on material damages. What is different though, is that under the Minerals Act place dependency plays a role, meaning that the context is most important when determining the height of compensation.⁸⁵ Examples of this will be provided below.

One of the compensation measures in place is that private homeowners are either reimbursed for the value of their homes or that the LKAB will offer them a new home comparable to the old. On top of the first measure, the LKAB offers private homeowners 25% on top of the value of their property. This is to ensure that people can build a home to the new standards. Many houses people currently live in are old and do not conform to current building practices. With the extra compensation of 25%, it is possible for private homeowners to build a new home in another place with relative ease.⁸⁶

Many though, choose the second option. In this option, LKAB provides a new place and supervises the building process. You only need to move to the new place.⁸⁷ At this time it may not be unwise to let the mine build and provide a new place to stay. Building materials are not cheap and the 125% reimbursement still feels like a tight budget to build a new home. To let the LKAB bear that risk is more interesting. Even more so when taking into account that citizens will have to organise the building process themselves. It is not an easy process and getting your foot in between the door at contractors in a town that is fully in development already does not seem appealing.

One reason to choose reimbursement is if someone would be prepared to leave

⁸⁵ Athanasios Kouzelis, Magnus Rönn, and Helena Teräväinen, *Compensation in Architecture and Archaeology – On Compensation as a Project, Method and Professional Practice* (The Cultural Landscape, 2022), 5, <https://research.chalmers.se/en/publication/532360>.

⁸⁶ LKAB site?

⁸⁷ Interview anders Lindberg

the city and live somewhere else. Then there is the option to enter into negotiations with LKAB. Negotiations either regarding the price or value of their home or what they would receive in return when choosing a new home. The LKAB stance during these negotiations is somewhat curious. LKAB mentions that people just always want more money and that it isn't based on the value offer they give actually being too low. It is however so that the 25% people receive on top of the value of their property would be deducted by 3-6% to pay profit tax. Because LKAB actively advertises the 25% as very generous, it is strange why they do not mention the percentage after tax.⁸⁸

The shops and businesses from the old centre get new locations in the new city centre and to compensate for the higher rent, it is adjusted year by year from the old rent. Additionally, there is an option to get help with the moving of their inventory.⁸⁹ The same applies to tenants of residential homes or apartments. Tenants also get an option to move into a newly built home, but the rent will be higher. Again, this will be staged for 5 years to soften the blow.⁹⁰

The question is, would that be fair in comparison to the private home owners. These do not need to put forward any additional funding towards their new home and it is not fully clear in which area they would be offered less.⁹¹ LKAB states that because a newer home requires more adherence to modern building standards, it inevitably will cost more to build and will require higher rents. Reasoning that the building quality is better than the old building, it would make sense to ask for more rent. Again, compensation follows in the form of another **staging process (incremental?)**. [That this has been a contested point that not everyone agrees on, proved itself questions being asked in parliament whether this is a fair measure. The responsible minister has responded that when it comes to these kinds of issues, it is not the minister's responsibility to solve them.] The state referred to the commercial, independent position of the LKAB and did not intervene.⁹²

⁸⁸ Stralberg clara

⁸⁹ Reference lkab stadsomvandling?

⁹⁰ Idem? Of kiruna stadsomvandling

⁹¹ Checken

⁹² https://www.riksdagen.se/sv/dokument-och-lagar/dokument/interpellation/hyresgasterna-i-stadsomvandlingen-i-kiruna-och_H310237/

For Sami, saying no to the relocation of Kiruna simply doesn't seem a viable option. Several Sami work in the mine to help with their subsistence levels besides herding. For instance, a herder could work one week in the mine and then the other week herding reindeer. Additionally, the Swedish government believes to uphold the rights of the Sami in the process. Two Sami communities were informed and involved in the planning process and thus the government fulfilled its obligation.⁹³ This causes a conflict in what is sufficient or not. As the Sami communities had complained about the process and the government opted to refer to rules and regulations a **stalemate ensues in which neither party will leave satisfied**. Recently though, the communication with the municipality and the LKAB has been picked up again and the Sami have had a say in where the new city centre should be located. The new location seems to be just acceptable enough because it now just misses one of the reindeer herding tracks.⁹⁴ Nevertheless, the question remains how much agency the Sami communities really had on this occasion.

The Sami have also **[had trouble]** with several infrastructural projects because roads and railways mostly have not been able to circumvent grazing areas or herding routes. To compensate for this, as the mine is obligated to do, when the railway needed to be rerouted an ecoduct for the reindeer to cross over was constructed. However, this bridge was too narrow to entice reindeer to cross and **proved to be an obstacle**. There was also an initiative to track reindeer with collars which did not work because the collars hurt the reindeer. On top of that, the initiative mainly meant to map reindeer behaviour towards the mine.⁹⁵ This shows that the focus here was not on adequately compensating the loss of herding routes and grazing areas for the reindeer herding community, but rather on optimisation. The narrow width of the bridge could be due to trying to minimize expenses, a larger bridge would cost more. The collaring project did not provide any actual compensation for the herds of the Sami, even if it had been successful. The loss of area is not adequately compensated. Thus, it seems to have been a simple equation where LKAB has tried to find the most cost-effective result for compensation. Admittedly,

⁹³ Thoors, Interview with Informatör Kiruna Pastorat; Agnieszka Szpak, 'Relocation of Kiruna and Construction of the Markbygden Wind Farm and the Saami Rights', *Polar Science* 22 (1 December 2019): 4, <https://doi.org/10.1016/j.polar.2019.09.001>.

⁹⁴ Marie Enoksson, 'Correspondence with Sametinget | Sami Parliament', 11 May 2023.

⁹⁵ Christian Fohringer et al., 'Reindeer Husbandry in Peril?—How Extractive Industries Exert Multiple Pressures on an Arctic Pastoral Ecosystem', *People and Nature* 3, no. 4 (2021): 880, <https://doi.org/10.1002/pan3.10234>.

there is the possibility that the right width for the ecoduct was not known or researched. Yet, that should have been part of the responsibility of the LKAB as the **infringer**.

Compensational practices therefore should focus more on the actual impact on the living environment and landscapes where the reindeer herding communities preside. For instance, explicit protection of pastures and routes would benefit **the cultural values** instead of modernizing the herding practices. On top of that, a recommendation to restore other areas in the future may also be an option for compensation.⁹⁶

3.4 DECISION-MAKING PROCESSES

The 'detailed plans' are an essential part of the demolition process. They convey to citizens, businesses, companies and other stakeholders what a specific area will house. For example, it can indicate an area to be residential, commercial or industrial. The municipality decides on these plans and ensures that rules and regulations are all accounted for in these plans. When the LKAB needs to buy property the detailed plans need to be reviewed to see if they are in accordance with the purchase. Because LKAB is an industrial enterprise, the detailed plans need to be designated as industrial areas before LKAB can **perform any activity**. Although the mine is not in fact using the land above ground for **industrial activities** it will be part of the mine. That is why the plans need to be altered by the municipality. Only then can the LKAB purchase the properties and start the demolition process.⁹⁷

This is seen as a frustrating process to the LKAB because it limits and could delay their future prospects. The slower this process goes, the more uncertain the continuity and future mining activities become. Another aspect that slows down the process of transformation is that in order to build on new locations outside of the city, this land needs to be bought from the state under strict environmental laws. For LKAB this is yet again a deterring factor which causes them to keep up the pace. According to LKAB, the

⁹⁶ Christian Fohringer et al., 'Reindeer Husbandry in Peril?—How Extractive Industries Exert Multiple Pressures on an Arctic Pastoral Ecosystem', *People and Nature* 3, no. 4 (2021): 882, 883, <https://doi.org/10.1002/pan3.10234>.

⁹⁷ 'Avtal Med Kommunen', LKAB Samhallsomvandling, 17 February 2022, <https://samhallsomvandling.lkab.com/sv/kiruna/vi-flyttar-en-stad/avtal-med-kommunen/>; Lindberg, Interview with Press Chief LKAB.

timeframe is very tight and with each delay, the viability of the mine is decreased.⁹⁸ This is a very narrow timeframe for a project this large. LKAB couldn't provide a more substantial timeframe for the whole project making it difficult to understand what influences the time pressure exactly.

An explanation for delays could also be found in the political dimensions of the transformation. In the previous electoral period, the urban planning office has not always been involved to its full capacity. The LKAB decided on designs together with politicians. That means that the transformation is very much politically dependent on who is elected as public representatives.⁹⁹ Some parties had a different attitude towards involving the municipalities planners and counted on the mine and architects to make planning decisions. With this effect of elections on the transformation, it would be difficult to create a coherent policy and timeframe towards citizens. In a project this large the conditions should not change over time and communication towards the public should be clear. That is currently not the case.

Clarity is also an issue with regard to funding. Some projects are funded by LKAB some by the municipality, municipal projects are funded entirely themselves. What is strictly necessary for the move is what LKAB will pay for. LKAB says that they have in principle no say in what is or isn't built.¹⁰⁰ The law only states that something equivalent to the former state needs to be built. The question then arises how to define equivalent. That is when negotiations and cost estimations between LKAB and the municipality are involved. Additionally, LKAB has their own real estate agency with properties all around town increasing their leverage when housing is an issue. This emphasises the divide in the city where being connected to and employed at the mine circumvents the negotiation processes in what is deemed sufficient as a city.¹⁰¹ [explain further with own analysis]

70In practice, this seems to be different. When you pay, you have a say.¹⁰²

71*Have decision-making processes adapted to circumstances?*

⁹⁸ Lindberg, Interview with Press Chief LKAB.

⁹⁹ Nina Eliasson, Interview with Kiruna Municipal Planner, In person, 4 May 2023.

¹⁰⁰ Lindberg, Interview with Press Chief LKAB.

¹⁰¹ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 198, <https://doi.org/10.1080/17449359.2021.1977142>.

¹⁰² Nina Eliasson, Interview with Kiruna Municipal Planner.

*Add union discussion?*¹⁰³

Transparency in the democratic process is largely convoluted and people are not aware of how the processes work or where the power lies. This is, according to the municipality, a direct cause of the mine interfering with municipal decisions. The mine was always located behind the fence and has now moved outside of the fence into the democratic process of the city.¹⁰⁴ This created confusion and conflict which didn't contribute to the planning of the transformation. Of course, earlier in this research the involvement of the LKAB was certainly still there. LKAB was less 'behind' the fence than people think. The difference is that LKAB needed to relocate the city and citizens could actively notice changes that would affect their lives and environment.

3.5 RECEPTION AND ACCEPTANCE

To close off this chapter about the reasoning behind the transformation is to evaluate how the reasoning is received. To introduce this section an encounter I had in Kiruna could be illustrative. Although this research did not involve extensive interviews of citizens about the process, this was one encounter that I would like to share to highlight the diverse attitudes in which people deal with changes. I was walking through the old city part just past the church when I noticed some beautiful houses. I started to take a few pictures of them when an elderly man popped up behind a window and stuck up his thumb. He then addressed me in Swedish. I had to confess that my Swedish was insufficient to understand and he told me in English: "It's beautiful, right?". I wholeheartedly agreed and rather bluntly asked if these buildings would be demolished. He nodded, politely bid me a good day and ended the encounter by ostentatiously shutting his window.

This is not representative of the Kiruna population, but it shows the subject's uneasy and precarious nature. Even more so, the building this man lives in is not actually in the area that is being planned to be demolished according to the municipality's maps.¹⁰⁵ The mines' maps do show that this building is set to be demolished somewhere

¹⁰³ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 192, 195-196, <https://doi.org/10.1080/17449359.2021.1977142>.

¹⁰⁴ Nina Eliasson, Interview with Kiruna Municipal Planner.

¹⁰⁵ 'Kiruna Municipality - Map', Stadsomvandling, accessed 20 June 2023, <https://karta.kiruna.se/Stadsomvandling/>.

between 2029 and 2032. This example shows two ways in which unease is stimulated. First, it shows that some people might not be fully accustomed to a new reality, albeit in the near future or further down the line. Second, the discrepancy between the municipality's information and the mines' information might hinder the public to grow accustomed. [These two issues will return in more cases in the last section of this chapter.]

Communication is difficult. Many organisations, companies and people struggle to reach others or to communicate clearly what one wants to convey to the other. At LKAB this does not seem any different. LKAB try to contact people in every way possible but still, sometimes people don't get informed. Intentions aside, the manner of communication is very pragmatic. LKAB mentions that a lot of information is communicated through the municipality, social media and the company newsletter but people just don't read these.¹⁰⁶ That does not excuse the LKAB from having fulfilled their obligation. A proactive stance might keep people informed better and might ease the feeling about the demolitions. There have been people that want to say goodbye but did not know when. LKAB gives a timeframe indication for demolitions that often include a whole neighbourhood with several blocks of buildings at the same time. It is often unclear to the citizens of Kiruna when which part exactly will be closed off which limits their opportunities to say goodbye on their own accord. To overcome this problem, the municipality has organized goodbyes for several buildings. This helps citizens close off a chapter in their lives and shift focus to their new reality.¹⁰⁷

75Focus on the municipality (for instance using detail plans as a weapon), Sami and citizens. And the framing of the LKAB, annual report numbers.

76Look back at examples at beginning of chapter

77Documentary Britta

78Expositions

79Sami → Digital free zones?

80French resource website article?

¹⁰⁶ Moa Strålberg, Interview with Urban Transformation Communications Officer LKAB, In person, 3 April 2023.

¹⁰⁷ Clara Nyström, Interview with Kiruna Municipal Archivist, In person, 31 March 2023.

In an interview with the Belgian TV broadcaster VRT, the press chief of LKAB mentioned that a solution will be found for the displacement due to the new rare earth deposit at Per Geijer. For instance, the ski tracks can be replaced and with regard to the Sami he said that LKAB has been finding solutions for these issues for 130 years already.¹⁰⁸ The press chief implies that all has been well solved regarding the encroachment of Sami lands. This is hardly the case though. Arguably, the Sami are involved better now but certainly since the origins of LKAB, the Sami have been consistently marginalised and solutions have always served the state and the mine first.

¹⁰⁸ *Zweden ontginnen zeldzame aardmetalen: ‘Ze zijn nodig voor windmolens en elektrische auto’s’* (Belgium: VRT, 2023), 2:09-2:29, <https://www.vrt.be/vrtnws/nl/kijk/2023/03/23/fast-tza-zweden-aardmetalen-kiruna-arvato-56256535/>.

4. Which role does heritage play?

This chapter starts with an overview of where goes what. Briefly touched upon in previous chapters it is useful to know why these places have specifically been chosen. Expanding that further, this chapter highlights what choices regarding heritage and social spaces have been made. Which places have been preserved and who has decided on them? For instance, LKAB mentions that they have nothing to do with decisions regarding the set-up of the city. Nevertheless, there have been several instances where the LKAB has stepped in. Budgets, location or aesthetics of architecture have all been negotiated. This is where the chapter ties into a significant finding, negotiation of heritage is very much on the table. Contradictory, the general attitude and actions highlight that it isn't supposed to be part of negotiations.

Begin with the previous chapter leading to how to deal with this reception/complacency regarding an individual's heritage.

Memory study could focus on which narratives should be selected by selecting points of value.¹⁰⁹

4.1 LOCATION, LOCATION, RELOCATION?

83 Relocating nearly a third. Part company owned, part municipality

84 Company town versus service town. Separated intentionally?

85 New city centre is further away from the mine, sightlines will disappear

The issue with relocating is not new in Kiruna. In 1953 the town, at the time an actual town not a municipality, created a new town plan. It suggested building up in an area the mine contested. That was an area that would be forced to relocate in thirty years. The town did not concede and started building which took until deep into the 1970s. The town hired renowned architects like Ralph Erskine to design apartments.¹¹⁰ Those

¹⁰⁹ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 108, <https://doi.org/10.3384/cu.2000.1525.201911104>.

¹¹⁰ Johan Sandström and Curt Persson, 'Corporate Paternalism on the Rocks: A Historical Analysis of Power Relations in a Mining Town', *Management & Organizational History* 16 (17 September 2021): 193, <https://doi.org/10.1080/17449359.2021.1977142>.

apartments are still here today, but ready to be demolished. The LKAB was right about the need to relocate but did miss the timeframe by another forty years. [More critique?]

4.2 WHERE IS HERITAGE REGARDED IN THE PROCESS?

86Not at the LKAB level of negotiating with residents. Heritage is looked at the municipality, or heritage is valued by the company/mine itself. This perfectly correlates with the Authorized Heritage Discourse.

When evaluating what heritage is the area is and then of course a social construct, it seems that the miners labour movement and working class is less represented. The mine didn't have a reasonable and amicable stance towards the workers. By preserving the objects that are planned to be or have been relocated the origins of the town are represented but the full history from 1950s onward is somewhat neglected. Ralph Erskine's built heritage are now remembered through an exhibition and seem neglected as a shared heritage.¹¹¹

There has been a call for mining communities to pay more attention to social inclusivity, especially regarding indigenous people.¹¹²

In the earlier discussed case study research of participatory and co-creative methods, heritage is not included in either the approach nor the ultimate findings. Conversely, heritage was deemed important by the residents in terms of social and cultural identity, and history. The ambition to achieve that during the urban transformation was apparent in combination with other factors such as nature and the environment. The later participants, mainly civil servants, experts, entrepreneurs, and mining representatives did not employ the same broad view of what Kiruna's society was like. The ideas or solutions proposed had a limited view of society and did not represent inclusivity. For instance, most proposals included entrepreneurial initiatives and mentioned generalities instead of inclusive actions.¹¹³

¹¹¹ Jennie Sjöholm, 'Reshaping Remnants of the Recent Past in Transforming Swedish Mining Towns', in *Transcending the Nostalgic*, ed. George Jaramillo and Juliane Tomann (Berghahn Books, 2022), 126, <https://doi.org/10.1515/9781800732223-008>.

¹¹² Lena Abrahamsson et al., *Mining and Sustainable Development Gender, Diversity and Work Conditions in Mining*. (Luleå: Luleå tekniska universitet, 2014), 12, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-22248>.

¹¹³ Malin Lindberg et al., 'Co-Creative Place Innovation in an Arctic Town', *Journal of Place Management and Development* 13, no. 4 (1 January 2020): 457–458, <https://doi.org/10.1108/JPMD-02-2019-0009>.

The effect of these workshops is then further decreased by the lack of transparency of who will decide what to implement. The exclusion of residents in workshops with decision-making actors does not help co-creating the Kiruna of the future for all. It again reinforces the notion that goals and ambitions in transforming Kiruna have a financial nature, thus also impacting the valuation of heritage. Albeit the built environment or the social and cultural processes that the residents highlighted.

[Negotiations of amount of buildings according to cultural analysis 2007, 2014, 2019

How does listing effect things, or the raa/county]

In the urban transformation, Sami influences do not seem to appear that much in governing documents or in the LKAB ambitions. There are though, a few influences that represent Sami culture. Naming streets and giving land back were two options that the municipality mentioned. These both create friction and have strong opinions. Giving old mining land back to the Sami is difficult because the land is expensive and determining exactly which part to return. The street names cause friction because the although the Finnish Sami are included as well, there is a discussion amongst the Sami as to who was first in the region. On top of these more practical examples, the Sami have mentioned to the municipality that they haven't thought about these issues. The municipality also struggles with showing every minority equally.¹¹⁴ This is of course no reason to not continue to pursue how to involve the Sami heritage in the new Kiruna as a contested heritage. It also doesn't mean that because the issue is not easily solved, it excuses the municipality or LKAB of taking responsibility.

How to portray and include Sami heritage in a justified manner is a difficult problem to solve. Yet it is more than necessary as mentioned earlier, continuous encroachment of Sami lands takes place and does not show signs of slowing down. One way of dealing with this uncomfortable heritage is through artist expressions. Three things have been done in this regard. First of all, an exhibition covering the whole transformation in cooperation with ArkDes was realised. This is an Architectural Design centre in Stockholm which hosts an array of exhibitions. In this exhibition, the Sami view was partly shown next to nearly all the other aspects of Kiruna, including the miners'

¹¹⁴ Eliasson, Interview with Kiruna Municipal Planner.

strike. A book was also launched to present this exhibition.¹¹⁵ The next thing was a movie about Kiruna in which famous Sami artist Britta Marakatt-Labba was filmed telling the story of Kiruna as well from the Sami perspective, but more related to the threat of climate change.¹¹⁶ The final artist expression is an exhibition in the city hall which covers research and artist impressions about the 'Data Free Zones'. These are zones where there is no data coverage and are essentially still untouched from a cartographic perspective.¹¹⁷

These are all initiatives that have memory making functions and do show how diverse Kiruna is. However, none actually move towards placing the social and cultural processes of Kiruna's heritage in the transformation.

4.3 WHAT WILL BE DEMOLISHED?

There are many objects that will be and have been since 2015, demolished during this urban transformation. This area will not reflect on all cases as that would go beyond the scope of this thesis and has been extensively covered in various cultural environment analyses and academic research already.

Kiruna holds a preservation obligation towards buildings that have been deemed of such value that these should not be demolished. However, in the case of Kiruna, this is not necessarily as rigid a law as one would think. The preservation of the town hall has managed to be overturned. In this case, the municipality and the LKAB decided to delist the preservation status to demolish the town hall. It was first denied by the County Board and was later taken to the administrative court as well which denied the delisting as well. However, the Court of Appeal eventually permitted the demolition stating that other interests, the development of the mine, should in this case be valued more.¹¹⁸

The company part of town has been demolished already. These workers' homes were part of the town that was LKAB property. That means that there weren't any objections or legal hurdles that the mine had to take to demolish the properties. The only

¹¹⁵ Daniel Golling, Carlos Minguez Carrasco, and Arkitektur- och designcentrum, *Kiruna forever* (Stockholm: Arkitektur Förlag, 2020).

¹¹⁶ *Historjå - Stitches for Sápmi* (IDFA, 2022), https://www.npostart.nl/close-up/04-04-2023/AT_300010860.

¹¹⁷ 'Data Free Zone SWE/SAPMI_1', Norrbotten's County Art Museum, 2023, http://konstmuseetinorr.se/en/programme/data-free-zone-swesapmi_1/.

¹¹⁸ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 112, <https://doi.org/10.3384/cu.2000.1525.2019111104>. +OTHERS

prerequisite consisted of making sure that inhabitants had replacement properties set up. These homes

88Ralph Erskine.

89Personal heritage, the bench where people first met or the playground.¹¹⁹ However, many people do come from somewhere else, what does that do with heritage?¹²⁰

4.4 WHAT WILL REMAIN?

Following the previous chapter, demolished buildings are not completely forgotten. There have been a number of ways in which old places and objects are remembered. We have seen that the town hall has been demolished but the new town hall does bear some resemblances to the old. The architect was tasked with creating an open entrance hall in which people could freely convene, also without an appointment. This was a feature that the old town hall was liked for. Smaller details, such as the door handles of the entrance were brought to the new town hall as well, hoping to evoke some memory of the old. The same principle was applied to the entrances of the indoor shopping areas. The design reminisces the old town hall entrance overhang and the concrete decorations of the hallways within the town hall.¹²¹ On top of this object- and visual-oriented approach to heritage, a 360-degree digital scan viewable online was made so people could take a look even when it was gone.¹²² [analysis of how it relates to which narrative]

An interesting economical feature that LKAB has implemented is that the reuse of objects or parts of buildings that will be demolished has to be paid for by the municipality. This monetizes the memorisation of what will be demolished. The municipality has just sold the property to the LKAB and would like to reuse a part and must rebuy it back from the mine. That this process is not streamlined into the prior negotiations seems counterproductive. That aside, this is a very literal commodification of objects of heritage.¹²³

¹¹⁹ *Historjå - Stitches for Sápmi* (IDFA, 2022), https://www.npostart.nl/close-up/04-04-2023/AT_300010860.

¹²⁰ Thoors, Interview with Informatör Kiruna Pastorat.

¹²¹ Eliasson, Interview with Kiruna Municipal Planner; Nyström, Interview with Kiruna Municipal Archivist.

¹²² Photographer Daryoush Tahmasebi, 'Kiruna Stadshus -©LKAB & Norrbottens Museum Foto Daryoush Tahmasebi | Virtual Tour Generated by Panotour', Norrbotten's County Art Museum, 2016, https://norrbottensmuseum.se/panorama/kiruna_stadshus/stadshus.html.

¹²³ Nyström, Interview with Kiruna Municipal Archivist.

41 buildings have been designated as valuable enough to move. These buildings include public spaces but also some residential housing and other buildings. These have all been identified as valuable. Some of these buildings have been determined valuable enough by the LKAB. For instance, the company hotel will be rebuilt in another location in the same fashion as it was originally. It was demolished because the state of the building was not fit to be moved.¹²⁴

Hjalmar Lundbohm's home has been moved in its entirety to the Luossavaara area. It was seen as a significant part of Kiruna and should be preserved. The Luossavaara area sits close to the mine, **it looks over the mine**, but away from the new city centre. When LKAB started building more housing for its workforce [when?] they built it at Luossavaara giving this area a sense of a company part of town. When LKAB has moved company property it has been moved to this place. Being located 3 or 4 kilometres away from the city, one could argue that a division of culture is taking place.

A very monumental, glorified history of Lundbohm is preserved in keeping the original buildings. Which building that is preserved represents the workers or the people that lived in the service area of the town, and thus had little connection to the company?

The church is an interesting example where the parish was afraid its members would dislike the move and cease coming to the church. Instead, the residents presented themselves as very supportive and wished to help the church wherever they could. The mourning process of moving the church has been taking place since 2014. That means that currently most people are used to the church being moved. The sentiment also arose that the other consequence, demolition, was much worse. Besides that, people have been used to change since the 1950s. However, the new location is regarded as aesthetically worse than the old one. The orientation of the church will also turn 180 degrees. That will mean that it will look at the city hall from a slight hill instead of looking at the mine.¹²⁵

It may symbolise a closer relation to the community than the mine and the church is not moved to the Luossavaara neighbourhood. However, despite its strong connection to the mine, including it being a gift, being presented as an incorporation of the mine and city and the vicars' salaries being paid for a long time by the LKAB, the LKAB has said not to pay for a chapel of equivalent capacity. The LKAB is prepared to build a new

¹²⁴ Dan Lundstrom, Interview with local tourguide, In person, 2 April 2023.

¹²⁵ Thoors, Interview with Informatör Kiruna Pastorat.

chapel that is smaller. That means that some ashes of the deceased are not able to move to the new location. The descendants of the ashes have taken a constructive attitude and decisions about who's ash to leave behind are taken responsibly.¹²⁶ The fact remains, that the LKAB has negotiated once again over what can or cannot be moved. The chapel cannot relocate, according to the principle that stone buildings are difficult and expensive to move.¹²⁷ Presenting people with this difficult choice does not seem to align with providing equivalent alternatives for what will need to be demolished or relocated.

Looking at what remains or what is lost doesn't offer much solace to the cultural and social process that heritage is. Rather, it remains an evaluation of what has happened in the past and should represent Kiruna now. A picture presentation meant to portray the identity of Kiruna. The unique setting of Kiruna with its unique aspects all relate to the mine.¹²⁸ In essence the model city has to be recreated again.

4.5 WHO INFLUENCES HERITAGE?

91LKAB has influence but hopes it doesn't. [For a company that continues to stress the dependence of the mine on the city, they try to leave the city the city?]

92*Stakeholder participation, top down, manipulative/eductional ladder of arnstein*¹²⁹ County vs municipality in town hall discussion. Kiruna wanted to decide for themselves what to use and was planning on using elements in new buildings. Where did they eventually? What is preserved? 1984 conservation plan doesn't mean that much

Negotiations of amount of buildings according to cultural analysis 2007, 2014, 2019

How does listing effect things, or the raa/county

New spaces such as the marketplace, connected shopping areas, and a shopping street/district. All these have been citizen informed through surveys. These things were not present before. When asked, people see it as a new chance.¹³⁰

The conservation of heritage has instigated several conflicts between local authorities internally and also between local authorities and the mine. Initially, the

¹²⁶ Thoors, Interview with Informatör Kiruna Pastorat.

¹²⁷ Strålberg, Interview with Urban Transformation Communications Officer LKAB.

¹²⁸ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 111, <https://doi.org/10.3384/cu.2000.1525.201911104>.

¹²⁹ Ladder of Arnstein/ jeroen en rodenburg

¹³⁰ Nina eliasson en clara nystrom

municipality approved a conservation plan in 1984. In 2009 this conservation plan ensured that the first area where the mine needed to expand to, would preserve all historical buildings. This was too much according to the LKAB and a subsequent plan was submitted in which only 5 out of 23 buildings would be preserved. Meanwhile, a plan was drawn up that applied to the whole town and in this plan, 21 buildings were listed to be preserved. LKAB had concluded from internal inquiries that moving historic buildings would prove to be too costly and were thus reluctant to move large numbers of buildings. The county then stepped in and complained that the cultural values weren't safeguarded. LKAB then threatened to close the mine if the current agreed detailed plan between the municipality and themselves wouldn't be approved. The county then settled for an extra two buildings and a cultural heritage analysis of Kiruna. Ever since that analysis in 2014, as mentioned earlier more buildings have been added to the preservation list, but significant others have not.¹³¹

4.6 WHAT EFFECT DOES COMPENSATION/NEGOTIATION HAVE?

As seen in the previous section, even though LKAB has a compensation and a preservation duty, under the act that deems Kiruna a valuable heritage site, they still initiate tough negotiations. The financial analysis shows that it isn't meant to determine what actually is Kiruna's heritage, it is to determine where costs can be cut. It must be stressed that for a company operating under a profit-maximisation policy, this is not an odd practice. It is however strange that the mine is able to influence both the county and the municipality to end up with what they want. It means that the negotiation of heritage or compensation for that matter, is not very relevant to the case at hand. It is the height of compensation for costs and effort that matter to the mine. Heritage is second to all in that respect and safeguarding heritage comes to the local administration, which already know that the bargaining power leans heavily towards the mine.

At the time of writing 41 buildings have been designated as valuable enough to move. In April the number of buildings was 37. Some buildings were still under

¹³¹ Jennie Sjöholm, 'Reshaping Remnants of the Recent Past in Transforming Swedish Mining Towns', in *Transcending the Nostalgic*, ed. George Jaramillo and Juliane Tomann (Berghahn Books, 2022), 121, <https://doi.org/10.1515/9781800732223-008>.

negotiations with LKAB but now have been added. This highlights the fact that this is an ongoing transformation and that heritage is something that reflects the present. Not only in appreciation towards old buildings but also that heritage is negotiated. Looking back at the first two cultural values analyses, different approaches have been used to determine what to preserve.

An object-oriented approach is not necessarily the approach LKAB wants. The transformation should include as much as possible. However, the negotiation process, the economic and utilitarian mindset leaves very little room for the social and culture processes of heritage. If economics is what determines the value of the heritage, objects will always lead the formation of heritage in urban transformation.¹³² That also affects how heritage is regarded in Kiruna. With these influences and skewed bargaining power, heritage itself has changed actively. Heritage isn't a result of a social and cultural process but is predetermined by two parties, one driven by money, the state and a national duty. To put it this way, the mine is driven solely by the outward perception of a sustainable transformation highlighting the achievements the mine has made and will make.¹³³

Another perceivable effect of the focus on tangible, object-oriented heritage and neglecting of intangible contexts, is that by movement alone heritage will lose some of its intangible meaning. Relocating heritage can work when placed in the correct circumstance but it will not be the same. Let alone relocate numerous buildings which all had their own specific heritages.¹³⁴ This is still focused on the monumental, grand narrative of heritage. When trying to seek how heritage is dealt with in people's private lives, it is mainly disregarded or confined to public spaces. There is no time nor funding to relocate private homes. There is no agency when talking about places where tenants lived. How is their personal, individual heritage safeguarded? It is not. This could partly explain the dichotomy of citizens being sad or discontent with the move but still appreciating what is being done for them, as earlier seen in the ratings of LKAB. It means

¹³² Sterling, 2020, p. 1031 [check](#)

¹³³ Bo Nilsson, 'Ideology, Environment and Forced Relocation: Kiruna - a Town on the Move', *European Urban and Regional Studies* 17, no. 4 (1 October 2010): 441, <https://doi.org/10.1177/0969776410369045>; Ash Tepecik Diş and Elahe Karimnia, 'Reframing Kiruna's Relocation—Spatial Production or a Sustainable Transformation?', *Sustainability* 13, 3811, no. 7 (January 2021): 17–22, <https://doi.org/10.3390/su13073811>.

¹³⁴ Jennie Sjöholm and Andrea Luciani, 'Adaptation and Relocation of Built Heritage: What Can We Learn from the Urban Transformations of Swedish Mining Towns?', in *Adapting Historic Places to Climate Change Proceedings of the International Virtual Conference of the Project Adapt Northern Heritage*, ed. Emma Houston, Vanessa Glindmeier, and Carsten Hermann, 2020, 193.

that when a citizen will relocate to a new place, there is no choice. A feeling of complacency and adaptation has risen because LKAB is funding the relocation.¹³⁵ An added observation to this dynamic would be that this citizen could have less difficulty adapting to the absence of heritage in the new location, acknowledging that their individual heritage will not be restored.

Use this text to highlight how the sami structure their strategy? Bear in mind that this is not data of 2022 but 2019/20. Response of sami parliament to me was, we have no stance with regards to kiruna. Did I state the question wrong? ¹³⁶

Gruvstadsparken are made to be heritage, and transferral? and photographs → maybe in a different subheader?¹³⁷

The church was completed in 1912 and was presented as a gift from LKAB to the town. However, as argued earlier, the decision to build a church on behalf on LKAB was already decided upon as compensation for the loss in tax income when Kiurna became a munivipalitcy. Besides that the ownership of the church still belonged to LKAB and the vicar was paid by LKAB. [add sami engraving door?] ¹³⁸

¹³⁵ Bo Nilsson, 'Ideology, Environment and Forced Relocation: Kiruna - a Town on the Move', *European Urban and Regional Studies* 17, no. 4 (1 October 2010): 441, <https://doi.org/10.1177/0969776410369045>.

¹³⁶ Agnieszka Szpak, 'Human Security of the Sámi in the New Sámi Arctic Strategy', *European Security* 29, no. 2 (2 April 2020): 212–34, <https://doi.org/10.1080/09662839.2020.1758071>.

¹³⁷ Johanna Overud, 'Memory-Making in Kiruna - Representations of Colonial Pioneerism in the Transformation of a Scandinavian Mining Town', *Culture Unbound* 11, no. 1 (12 April 2019): 119-121, <https://doi.org/10.3384/cu.2000.1525.201911104>.

¹³⁸ Curt Persson, 'Hjalmar Lundbohm: En studie om ledarskap inom LKAB 1898-1921' (Luleå tekniska universitet, Institutionen för ekonomi, teknik och samhälle, 2015), 182, 183, <http://urn.kb.se/resolve?urn=urn:nbn:se:ltu:diva-25994>.

5. Conclusion

The conclusion grasps back onto the previous questions stated throughout the thesis. The findings of the individual chapter create a context for evaluating the processes that have been at play during the relocation of Kiruna. The reasons behind the move are summarized and then the validity of the employed processes is reviewed. This means that there is no all-encompassing answer to the question of whether the methods were sufficient. It is an exploration and indication of how a large company is able to influence heritage and cultural values.

It is recognized in Kiruna that citizens are affected by the move, however it still builds on the AHD to determine what should be preserved or not.

This is still more a critical explanation of what has happened over the past 5 years than it is an analysis of how it should be done. A study into that should for example also be led by determining how the participation is provided or what the direct outcomes of the housing projects have been.

In this conclusion I would once again like to refer to what Tunbridge, Ashworth and Graham mentioned in their decennial reflection on *A geography of heritage*. There was concern as to how financial dynamics influence heritage beyond the tourist perspective. Little research was **done** and this research has thus shown that it can play an immense role in heritage studies.¹³⁹ Failing to recognize the streams and power of money is a failure of grasping what heritage is influenced by.

This is of course a fact heritage experts are aware of, but it is often seen as an overarching theme **untouchable** by **mere mortals**. I would beg to differ, not only can heritage find its place in the economic realm but it can surely influence the financial streams. By for example firstly determining the impact on the social and cultural environment before investments are committed.

¹³⁹ J.E. Tunbridge, G.J. Ashworth, and B.J. Graham, 'Decennial Reflections on A Geography of Heritage (2000)', *International Journal of Heritage Studies* 19, no. 4 (1 June 2013): 367, <https://doi.org/10.1080/13527258.2012.695038>.

Both oversimplifications, in the context of the Sámi culture and community, as over complexification, as in the case of, mean that stressing different perspectives on social and cultural processes is **the least** that can be done in creating an inclusive society among the demarcations set out for Kiruna by others.

A social and cultural process as heritage, is ultimately also a political or economical one.¹⁴⁰

It must be evident that in order to create an inclusive and collaborative/joint future of Kiruna the damage that the mine has done in her 120 odd years of existence, and others before them, cannot be swept under any kind of rug. Whether this is politically, economically or otherwise motivated.

Robert Pedersen/Frank Sejersen – Proxy futures?

By exhibiting heritage in museums and temporary exhibitions, the city is destined to the past.

I have called, as is done in all the documents and literature, what is happening the urban transformation of Kiruna. However, reviewing all the available data it would suit more to call it an industrial transformation.

As this thesis has shown, the emphasis of the transformation of Kiruna is quite literally transforming the city. What previous social and cultural processes have created is largely left out, intentionally or not. Heritage is mostly defined as old buildings from specific time periods and has little to do with heritage being a social and cultural process. The most apparent way this is shown is that the period after the war and up until the large miners' strike is not represented anywhere. The exhibition dedicated to Ralph Erskine is up until now the most that represents the period along with the digital remembrance of the old city hall.

¹⁴⁰ Check for earlier literature.

This leads to the fact that Kiruna has not yet fully grasped the paradigm shift in heritage being a social and cultural process. Although the literature does reflect this more, the city is still focused on attractiveness and outside perception. A modern, sustainable, industrial city is the goal and maybe the only heritage that lives on is the contested, narrow and selective heritage of the model city erected in the early twentieth century. The environment and indigenous people are consistently overlooked aided by the national interest policy of Sweden. This enables the LKAB to approve, steer and make decisions, in some cases diminishing local administrative work. In essence all guided by profit maximalisation.

Heritage is actively formed and transformed

Why was Anna Storm introduced?

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