Abstract

In Kiruna there is an extensive city development process going on. To enable the important iron ore mining to continue, the original city center needs to be demolished and will be replaced with a new one a few kilometers to the east. The transformation process highlights questions about identity and sense of belonging in relation to a place. Also the power dynamics between different stakeholders, who is in charge of the narrative and who defines what Kiruna is and should be in the future. This results in a thesis question asking how architects can express and revive identities and heritage of a place through a critical perspective on a top-down development.

The identities of a place is defined as the social interactions with a certain space, situated in a network of resources creating a meaningful whole. Since identity is central for issues of meaning, commitment and loyalty, it needs to be valued and handled with care in a city development process.

The traditional perspective of Kiruna is questioned in this thesis and unseen or hidden narratives are brought to the light. Architecture is used to emphasize what challenges Kiruna faces today but also to bring new solutions into the discussion. The proposal in this thesis gives new perspectives of how to view architecture and the power dynamics in the area, such as giving space for bottom-up processes driven by the inhabitants.

It discusses how old and new identities can contribute to each other, correlate in the physical environment and create a framework that is both adaptable and stable. In this process architects should be a catalysator and integrate bottom-up processes with top-down development. Processes of both kinds are needed but the bottom-up ones need to be given space to make sure all narratives are valued equally. Only then will they have its place in the identity network and create the important commitment and loyalty to this particular place.

Architecture and Planning Beyond Sustainability
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Rurban transformation

Examiner: Kristina Grange
Supervisor: Nils Björling
Author: Sofia Selin

Acknowledgement

Table of content

Personal connection

Sweden is a large country with its 1 572 kilometers stretching from north to south. I grew up in Örnsköldsvik, a city geographically located close to the middle of Sweden. Speaking with people from southern parts, their perception is in many cases that I am from the really northern parts. I believe that is because the mental geography of Sweden is in most cases much more important than the actual; everything north of Stockholm is experienced as "the north". This has always made me reflect about how this common perception affects people living in the real northern parts of Sweden. Because, in many ways there are tougher conditions due to more extreme weather, climate and distances, as well as lack of social services and political decisions made from an urban perspective. In the meantime, they should deal with being almost forgotten in daily reports and conversations about our country.

There is a government bill (Näringsdepartementet, 2018) saying that all parts of Sweden should have opportunities to be alive and develop, as a response to the ongoing urbanization. Urbanization can be seen as a threat to rural development and I want to highlight and question that in my master thesis. I believe we need to give everyone an opportunity to feel optimistic about the future, from a local perspective. A sustainable future development should make use of the local strengths and natural differences our large country has, rather than trying to equalize all places. To show and communicate that all parts of Sweden have opportunities to develop, a starting point is to value and recognize the special identities of different places.

Aim

In Kiruna there is an ongoing city transformation, where the original city center will be demolished and the new one is under construction three kilometers to the east. Mining iron ore is the most important industry in Kiruna and in order to continue the business, the mining company must ensure availability to the land that the mining affects. This land is where the original city center is located and to ensure security for both the citizens and the industry, the city needs to be relocated.

The relocation raises questions about identity in relation to the physical environment, both in terms of the new center and the memory of the old. According to me, the process today lacks deeper perspectives on identity and heritage and is missing a lot of important aspects. I also argue the process is too driven from a top-down perspective, not valuing experiences and knowledge from local inhabitants enough.

Therefore, the aim of this master thesis is to explore relations between place identities and architecture. How architecture can give space for different identities to be shown, expressed and also enable them to change and adapt over time. To see correlations between people's behavior and their surrounding physical environment and how these can influence each other.

Research question

How can architects express and revive identities and heritage of a place through a critical perspective on a top-down development?

Methods

The work with this thesis has been an iterative process, where chosen methods have been used both in parallel and over again in different orders. Since findings have evolved along the process, the same methods have come back later to reevaluate or develop new aspects further. Below, the chosen methods are described.

Literature studies
Existing theories about place, identity and heterotopia have been studied and brought into this thesis. Research is found within the field of architecture and planning but also includes some elements from philosophy.

Study of existing environment
Research about the current situation in Kiruna is made through analysis of maps, development plans, literature and a site trip. During the site trip, learnings from the previous research got developed, together with a lot of documentation and observations of the built environment.

Narratives
To be able to understand and communicate the identities of Kiruna, narratives with different perspectives have been included in the thesis. Some of them are from published sources but most from informal conversations with people in Kiruna. The selection of people was mostly made randomly, but with some awareness to get as nuanced perspective as possible.

Design
To test conclusions brought up with the other methods, design processes have taken place along the entire thesis work. This was an important method of translating findings from research to architecture while being able to test and analyze them through drawings and models. This research-by-design process was also the key to come up with the final discussion and answers to the thesis question.

Written words

This chapter explains identity in relation to places and how these influence or affect humans. It also explains the theory of heterotopia, as a concept for an alternative development process of a space. The theoretical references are mainly collected from the architectural and planning discipline but some parts from philosophy are included as well.

What is a space?

To describe the experience of a space David Harvey's model of space as absolute, relative and relational can be used (2006). The absolute space consists of the measurable and material aspects. The relative space describes space in relation to other spaces, taking aspects such as time and speed into account and also highlights the personal experience of a space. The relational space constitutes aspects such as knowledge, memories and associations. Nils Björling (2014) states that the relative and relational aspects can not be placed in hierarchy to each other, instead they work through the absolute aspects. He says that the spatial aspects are in a dynamic relation to each other and change together with the space itself.

Doreen Massey (2005) states that the spatial creation of meaning has a direct connection to how we are shaped as individuals. It is not only us shaping the space but the spatial aspects shape us as subjects as well. Society and the subject reproduce each other in a two-way process through spatial constraints and conditions, thus also establishing spatial identities. The narrative of a space depends on which aspect is given precedence. To create a democratic and equal society, there needs to be room for interpretive possibilities and parallel stories, since it becomes problematic when the spatial conditions depend on individual interpretations and social conditions.

In his dissertation Björling (2014) concludes space as being an active tool to influence, open or close social relations between humans. Room plays an important role in shaping us as individuals and the construction of a room can distribute power relations. He argues uneven geographical development requires a critical view on the "successful city", how it is designed, shaped and what consequences it has for society as a whole.

Space, place and identity

Grey and O'Toole (2018) explain how place and identity interact in a dynamic way, contributing to each other. Place is a geographical space that as a result of a person's interaction with it has acquired a meaning. According to issues of meaning, motivation, commitment, loyalty and decision-making, identity is seen as central. They

also describe how identity is not primarily about one place, but rather how a place interacts within a mosaic of resources. A place is constructed and maintained through these resources which also express the historical and emotional attachment to a place.

Grey and O'Toole (2018) argue that everything we do is connected to a place and that place itself can be seen as a social construction. The sociologist Thomas Gieryn (2000), quoted in the research of Grey and O'Toole (2018), saying that place is a space with the unique gathering of things, meanings and values.

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Each place is a mixture of wide and local relations, added to each other in layers of history.

There is a clear connection between place and identity; place has a meaning for identity (Grey and O'Toole, 2018). At the same time, identity plays a role in transforming space into a place, with the specific circumstances at a certain location. Each place is a mixture of wide and local relations, added to each other in layers of history.

What is heterotopia?

Michel Foucault introduced the concept of heterotopia in his book "Les mots et les choses" (1966). Heterotopia, meaning "other places", describes places who are physically separated from normal society and who thus allow or even require a different social norm. Foucault considered a heterotopia to on one hand having power and on the other having the interest of realizing the power. According to Foucault; prisons, mental institutions and schools can

be seen as heterotopias since such spaces are separated from their surroundings and control the in- and outflow of people from them.

Kevin Hetherington (1997) identifies heterotopian places as spaces for innovation, since the differentiated social norm at these places encourages free and creative thinking. Today, some rural areas can be seen as heterotopias. Magdalena Pfaffel (2021) states there are many examples of when innovative processes from rural areas improve both the rural area itself and urban areas. She states systems for circular economy as one example. It was early developed and used in "eco-villages", before it spread to rural settlements and urban areas.

Foucault (1966) claims that by its members, heterotopias are seen as natural and harmless. This even though they are controlling and regulating the behavior of people using the space. As a consequence of this, ideologies and norms will be created within a heterotopia by its members. Foucault means that this process of social construction can differentiate what is normal and what is not, thereby defining the identity of both a group and the individual members of the group.

Power can form meaningful connections and normative processes and thereby be productive (Foucault, 1966). That is a power not striving to limit or lock in but to utilize forces that society enables. Björling (2014) states that this perspective of power confirms that the planning of space can not be distinguished from underlying political, economic, social and cultural processes. In other words, changes in a society are a matter of will, knowledge and negotiation.

Heterotopia within an architectural context

In her report, Smaranda Spanu (2020) concludes her definition of the present concept of heterotopia and states all heterotopic spaces should be seen in relation to all other spaces. The heterotopian spaces are still a part of the society as a relational system and linked to it through a network of shifting relationships.

According to Spanu (2020) there are three conditions important for the construction of the heterotopic profile of a space; the particular materiality of a space, the social practice and the particular event. This means a built object can develop a heterotopic profile through both its practice and its material characteristics. To enable the heterotopian function it needs to be connected to place, time and social interactions at the same time.

The relation to its context defines the built object (Spanu, 2020). According to the definition of heterotopia meaning "other space", relations between an object and its context can be intentionally created as other, or become other in relation to their changing contexts. Spanu states that the concept of heterotopia best suits the cases where relations develop and become something else over time, where the value and otherness emerge due to different events.

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Allow contradicting narratives, let them work side by side and have a voice.

The heterotopic value can be identified through a protected status or be allowed to evolve freely and gradually assimilate within its context. Spanu states (2020) that the heritage status can be understood as an event as well as a series of practices to colonize a built object. The otherness of an object is defined by its alternative and new layers of meaning. The social, political and economic context coexists and allows contradicting narratives and lets them work side by side and have a voice. Within the idealized and theoretical heritage conceptual space all narratives are considered equally valuable as a part of a collective identity of the built object.

Spanu (2020) lists six principles to define a heterotopia and argues that the collaboration between several principles can create a stronger heteropian profile. Considered as a group, the principles can be used to identify heterotopic profile of a built space.

Six principles to define a heterotopia

The first principle describes the object as a particular place and time bound response to a common issue within a group.

The second principle describes the capacity to perform different functions within different contexts. It can be when a space has gone through several changes and through that gained added value, but it can also be when a space has several perceptions attached to it, either as alternative or compensatory meanings.

The third principle deals with the capacity to encompass multiple spaces within a single material emplacement. It can be both from a perspective of how the space appears as a place including several spaces, but also how the multiple spaces constitute the material imprints; each representing a different space and meaning.

The fourth principle describes the break with the traditional time, expressed through the material form and contextual relations. This includes the historical, documentary, uniqueness and representativeness value of a space.

The fifth principle controls access to a space, its presence of spatial boundaries and different degrees of accessibility.

The sixth principle deals with the compensatory function of a space. The space reflects the dominant order that created it, as a scaled down or improved version of it.

According to Spanu (2020) a built object through this theoretical frame assumes heritage status and a heterotopic functioning. One of the main characteristics of both a heritage space and a heterotopic space is the capacity to incorporate several contradicting spaces within one single place. All aspects of both heritage and heterotrophic coordinates can be seen as either a consciously created alterity or one acquired over time.

Research strategy - narratives and identification

Feras Hammami (2012) presents his strategy to understand and get to know the sense of a place. One of the methods he calls "multiple case study", which gives a rich empirical material. It uses narratives, discourses and storylines to reflect on the worldview of different groups and individuals. It is also important to see the links between social practices and narratives, to understand how individuals are in constant influence of its context. In the report, Hammami highlights a description of a narrative. He writes: " Czarniawska (2004) defines narrative as spoken or written text giving an account of … series of events / actions chronologically connected." The narrative only becomes a meaningful whole when these series are linked together in a logical structure within a particular context.

Hammami (2012) categorizes the empirical material of an investigation into five aspects. First; events or actions that frame repeated stories and secondly, different relations between events, actions and actors. The third category is metaphors, expressions and symbols often repeated and the fourth category is common main themes and concepts. The fifth and last category according to Hammami is socio-political networks and spatial relations.

He also describes methods of observations used to enrich the oral descriptions of a specific phenomena. Hammami (2012) states that there are three main types of observations; spatial, nonverbal and relational. The spatial aspect refers to the variation between private and public and how intensively a space is used. The nonverbal aspect is about the emotional expressions that are possible to see or experience in relation to a certain place. Interaction between groups of people and the surrounding built environment at various scales is a part of the third aspect of relational observations.

Understanding spaces and places

Henri Lefebvre (1991) declares that a space becomes alive and fulfilled with meaning through the social relations and language describing it. Our ability to understand spatial codes and place them in a context creates meaning and brings comprehension to a space. Lefebvre states three aspects describing how spaces in society can be explained. The first is named "spatial practice", referring to specific locations and physical characteristics. The second is "representations of space", meaning the spatial representations in relation to knowledge, maps, symbols and codes. The third is called "representational space", including underlying norms and rites.

Lefebvre (1991) has another three-part way of describing how we as subjects experience and understand space, explaining how we produce and are produced by it. The term "perceived space" describes the physically experienced space, the "conceived space" is the imageded space and the "lived space" is the space where fantasies, associations, interpretations and emotions work in relation to the daily life we live and the actions we perform. With these two parallel concepts from Lefebvre, space and its users can be seen in a double-acting interaction and negotiation (Björling, 2014).

Written words

Conclusion of theory

The important learnings from this chapter is how spaces become places as identity gets connected to them. Identity is about loyalty, commitment and meaning in relation to the special characteristics of a certain space. The network of physical places can therefore be seen as a network of identities. A city contains multiple places with weaker or stronger connections in between, meaning the identities influence each other in a pattern of relations. The network of places is constructed by people and in turn, people get shaped by places. This means place and identity shape each other in a dynamic relationship.

The creation of a democratic society must include parallel perspectives and value them equivalent. This means the identity network needs to be broad and enable different narratives to be told at once. That is the reason why it is important to connect the concept of heterotopia with place identity theory. The heterotopian space needs to have several functions or meanings attached to it and should also gain perspectives over time. Since the heterotopian space is seen as innovative, new stories can be expected to develop there.

The identity of a place is important for people to feel attachment and community. A city does not have one identity, it is a network of multiple identities with different narratives present at once. To emphasize that, the concept of heterotopia can be implemented as it is built upon parallel functions and contradicting meanings within a space. These learning are important to bring further and will be implemented in the case of Kiruna later in the thesis.

Context

Kiruna

City: Kiruna
Municipality: Kiruna
Region: Norrbotten
Landscape: Lapland
Country: Sweden
Founded: Year 1900

Sweden

Area:
  - urban: 898 hectares
  - municipality: 20 553.28 km²
Population:
  - urban: 16 420 (2020)
  - municipality: 22 555 (2021)
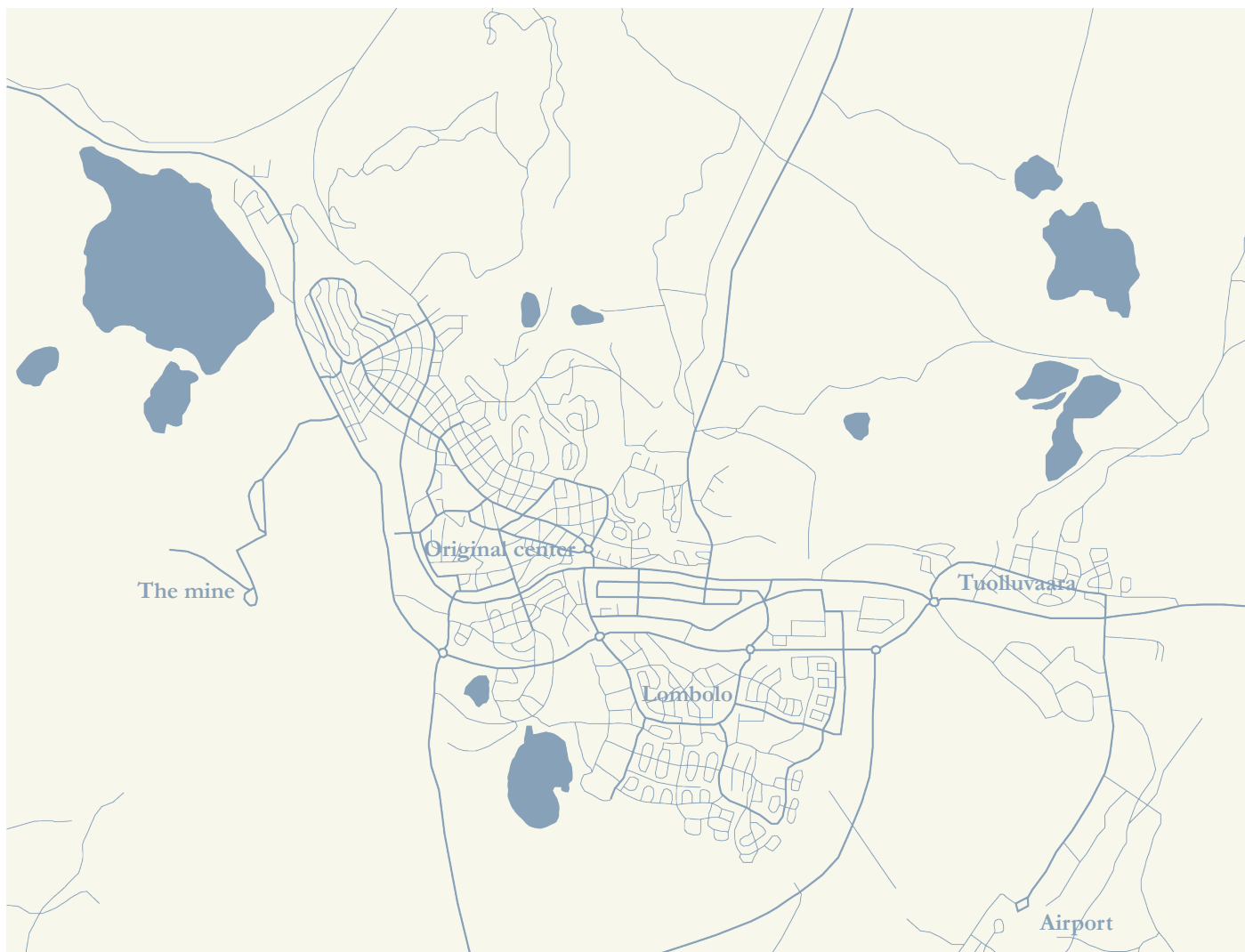
NORWAY

FINLAND

VÄSTERBOTTEN
REGION

GULF OF
BOTHNIA

Norrbotten Region

1. Kiruna
2. Gällivare
3. Jokkmokk
4. Arjeplog
5. Pajala
6. Överkalix
7. Övertorneå
8. Boden
9. Kalix
10. Haparanda
11. Arvidsjaur
12. Älvsbyn
13. Piteå
14. Luleå

NORWAY

FINLAND

E45

Karesuando

NARVIK

Torne träsk

Övre Soppero

Nedre Soppero

Kebnekaise

Kiruna

Vittangi

PAJALA

GÄLLIVARE

Svappavaara

E10

Kiruna Municipality

The mine

Original center

Tuolluvaara

Lombolo

Airport

Kiruna City
Before the transformation

Kiruna

This chapter pictures Kiruna from different perspectives. To understand the transformation process and power distributions in relation to it, the main structure and historical context of the city as a whole is explained in the chapter.

Introduction

The city of Kiruna is undergoing a large transformation, caused by the iron ore mining. In 2004, the mining company LKAB presented a prognos about how the mining would affect the city center in the future. The prognos showed how cracks will reach the present city center, and this became the starting point for the transformation (Nordmark, 2022).

The area affected contains about 3000 residents, 750 hotel beds, the entire commercial center and multiple major public institutions - such as a high school, a primary school, the hospital, the library, the church and the swimming hall - as well as about 1,000 working places. 6000 inhabitants need to be relocated , which is one third of the central city's population.

In 2013 White Arkitekter in collaboration with Ghilardi + Hellsten Arkitekter won the international competition to present a 20 year development plan for the transformation of Kiruna. White Arkitekter broadened the view and their winning proposal contained a 100 year development plan, with the goal of creating a city more independent of the mining industry. They state their strategy and vision in three topics called "Step by step", "Everyone should join" and "the Model City 2.0" (White Arkitekter, 2020). The plan ahead is to implement the proposal in different phases and the first one was started in June 2014. The construction is in progress today and the first inhabitants started to move into the new city center in June 2021.

Trade and industry

In the in-depth development plan Kiruna municipality (2014) states that the financial supply base within the whole municipality has an international character and is strongly connected to the mining industry. That means LKAB has a unique role with special power relations in the region. Sweden's EU membership opens up opportunities for businesses and industries in the area, but the economic structures in the municipality also exposes it to changes in the international steel market. Mining is one of the four main business areas in Kiruna municipality, together with science, space industry and tourism.

Geography

Kiruna municipality (2014) describes how the current city structure is adapted to prevailing climate, topology, landscape and vegetation. The original center is located on a south and southwest sloping hill, 500-570 meters above sea level. This location is chosen on purpose, since the micro climate at this location is calmer than the surrounding area. The south facing slope gives good conditions for sunlight and the height prevents the ambient temperature becoming too low. In the central parts of Kiruna it is rarely below minus 20 degrees at any time. In the closeby areas there are major differences in climate according to temperature and wind, which make Kiruna city strategically located in the area.

In the municipality there is a subarctic inland climate where it is almost always windy, from south during winter and from north during summer. The level of precipitation is low. Where the new center is located between the original Kiruna center and Tuolluvaara the terrain is flat, low and partly lacks vegetation. This is a former industrial area which means the land has been decontaminated to be able to use.

History

In many ways, Kiruna is a unique community experiment from the beginning, built at a turning point when Sweden's development into industrial society began to accelerate (Kiruna kommun, 2014). The first city plan was designed by P O Hallman, with aspects of terrain adaptation as main principles. He also prioritized creating several places, instead of one central square. Today the city has undergone many radical changes as a result of technological and societal development in general, but still retains its basic character and strong identity as a mining town.

Identity and local architecture

Kiruna municipality states their directions for how identity and architecture should be developed now and in the future in the in-depth development plan (2014). It is claimed that variation in experience and identity could be achieved through moving some buildings from the old city center and integrating them in the new center. They say that functions and qualities do not necessarily need to be the same but that buildings can be reevaluated in different ways. According to the in-depth development plan this will allow different fragments of time to coexist in dialogue and create the experience of continuity.

The new center should also have an increased centrality and collect a great mix of functions in clusters and paths (Kiruna kommun, 2014). These paths should be planned in the interface between new and old city structures, to create connections and give people reasons to stay. As a part of the step by step plan, at least one place for gatherings in the urban space should be established in every phase. These places could likely be profiled according to function and design, to create spots with diverse identity within the city structure. It is also stated in the in-depth development plan that the transformation means that inhabitants constantly need to reconsider their identities.

In the overall development plan from 2019 (Kiruna kommun), the environment outside the home is described as having a crucial role in the transformation. It should be attractive; which is defined as containing a rich cultural life, different activities, closeness to services and outdoor life. The municipality states that to reach their set goals the transformation has to satisfy needs and expectations from the inhabitants and base the new center upon how people want to live and what they want their environment to look like.

Kiruna from different perspectives

As a part of the competition about the city transformation in Kiruna the design team AIM and Onix Sweden, Noema Culture & Place Mapping, Atkins and Farawaysoclose/Apokalyps Labotek made an investigation of the current prerequisites in Kiruna. From that investigation, which was presented in the doctoral dissertation by Nils Björling (2014), four urban ecologies are described within this chapter to enrich the narrative about Kiruna.

The Kiruna Region

Kiruna has a unique composition based on regional and global connection, because of the local mining industry's role in the global market. At the same time, the global urbanization process influences Kiruna as well, meaning that local development relies on regional investments. This results in the common feeling of Kiruna being separated from Sweden but attached to the global system. Industries in Kiruna are of international interest and the unique climate attracts visitors and tourists from the entire world. At the same time, Kiruna is located in the periphery in Sweden from both a mental and geographical perspective.

Girion
[Giron = Kiruna in Northern Sami]

The Sami understanding and the landscape itself has influenced and shaped the identity of the city. When the city from the beginning was established, the landscape shaped the spaces with climate aspects in mind. The street structure for example is arranged in a way to break the strong wind and buildings are placed in a south slope to enable as much sunlight as possible.

Kiruna in its own right

The first urban ecology about the Kiruna region handles the geographical connections, while this is highlighting the historical context in relation to the future. Kiruna is a young society established over four generations, meaning it must be seen as a coherent system from the beginning until today. This stresses the importance of involving the inhabitants in the transformation and leaving the planning with an open end, possible to interpret and further develop.

Hjalmar Lundbohms Model city
[Hjalmar Lundbohm was LKAB's first manager in Kiruna]

LKAB is a strong component in the identity of Kiruna. The raw material in the ground enables the mine to exist and the mine is the reason why a city was established here from the beginning. Hjalmar Lundbohm had a clear vision about how the ideal mining town should be planned and many of his ideas are present in the city structure of the original center still today. This means that one single company already from the beginning had a major role in creating and shaping the physical space of the town, which creates a special and complex relationship between the town and LKAB.

Sketchbook

Process

The initial phase of identifying the theoretical foundation for this thesis was followed by a phase where design ideas and potential expressions got tested, based on the learnings. The process could be experienced as motley but all explorations have contributed to the collective knowledge base about identity making processes in Kiruna.

When I was reading about Kiruna in the development documents, the new railway station stood out as an unplanned but important function in relation to the transformation. The discussion about where it should be located was taken into account and based on an investigation from Sweco (2021), did I choose one location as the most profitable one. The location, officially called LON1, is south of the new city center with a straight connection to it. The area in between the new city center and LON1 is today an industrial area, which means it needs to be rearranged to create a pleasant path into the city.
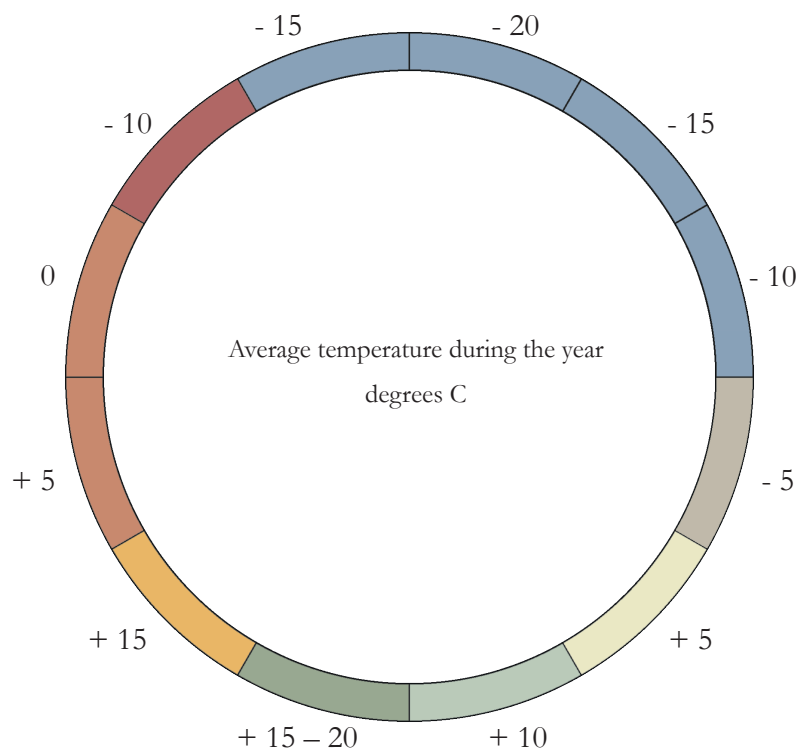

Primary data © Kiruna kommun

This area is analyzed according to Kevin Lynch's five elements; nodes, paths, districts, landmarks and edges (1964), presented in the map. This I did to get a broader understanding of the area and to find sites suitable for a design project. After the city scale analysis I changed to a more detailed scale and started to explore different ways of exploring architectural approaches with connections to the local identities.

Local micro climate

In this work I started to explore the local microclimate in relation to architectural expressions. Both because the local climate is unique in a Swedish context and because of that architecture in Kiruna today is clearly shaped according to weather on both a small and large scale. This also connects back to history, since ideas about it have been present from the beginning of the city's construction. The process started with learning about what the local climate in the region actually is, which gave snow, wind and sun as main principles to take into account.

These laborations mainly concerned specific elements; such as window placements and roof angles but also a bit about building locations in a larger context. My initial thought was that the local microclimate could be a design method in my final proposal, which leads to the next step of the laboratory to identifying functions and use.
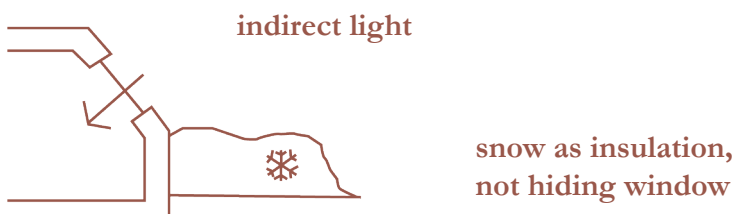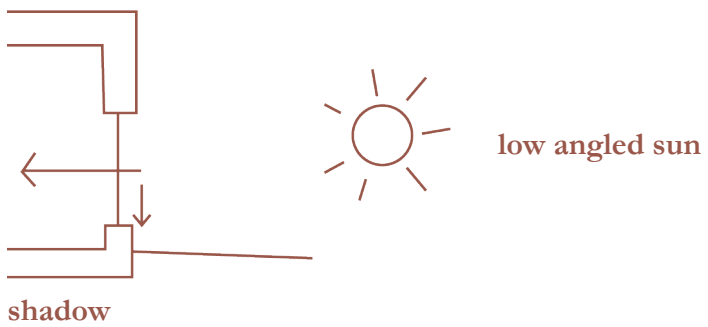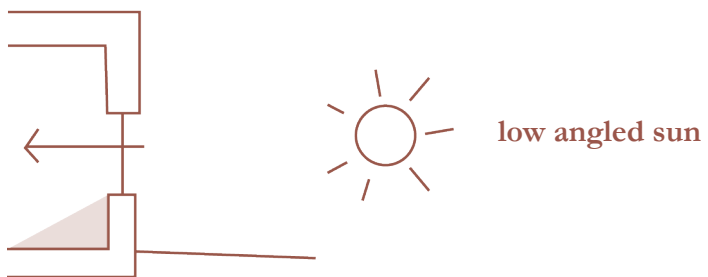
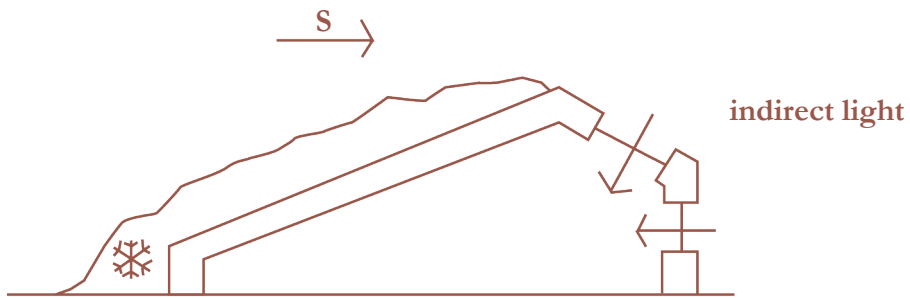| Dálvi Winter	Giđđadálvi Spring-winter	Giđđa Spring	Giđđageassi Spring-summer	Geassi Summer	Čakčageassi Autumn-summer	Čakča Autumn	Čakčadálvi Autumn-winter

Average temperature during the year
degrees C

- 15   - 20   - 15   - 10   - 5   0   - 10   + 5   + 5   + 15   + 10   + 15 – 20

Average wind speed during the year
m/s

3,7   3,4   3,6   3,7   3,8   3,7   3,5   3,9   3,1   3,5   3,4   3,9
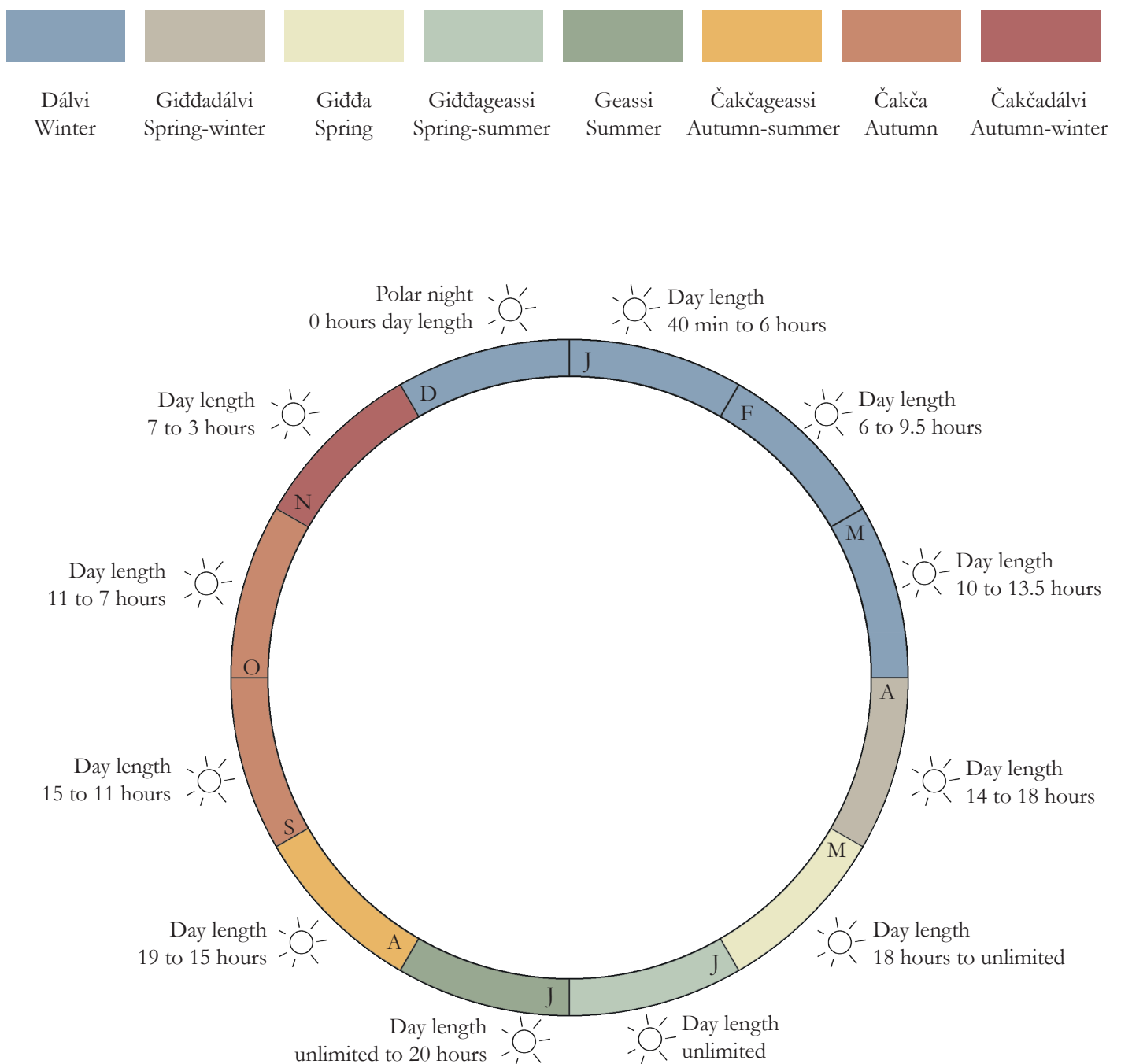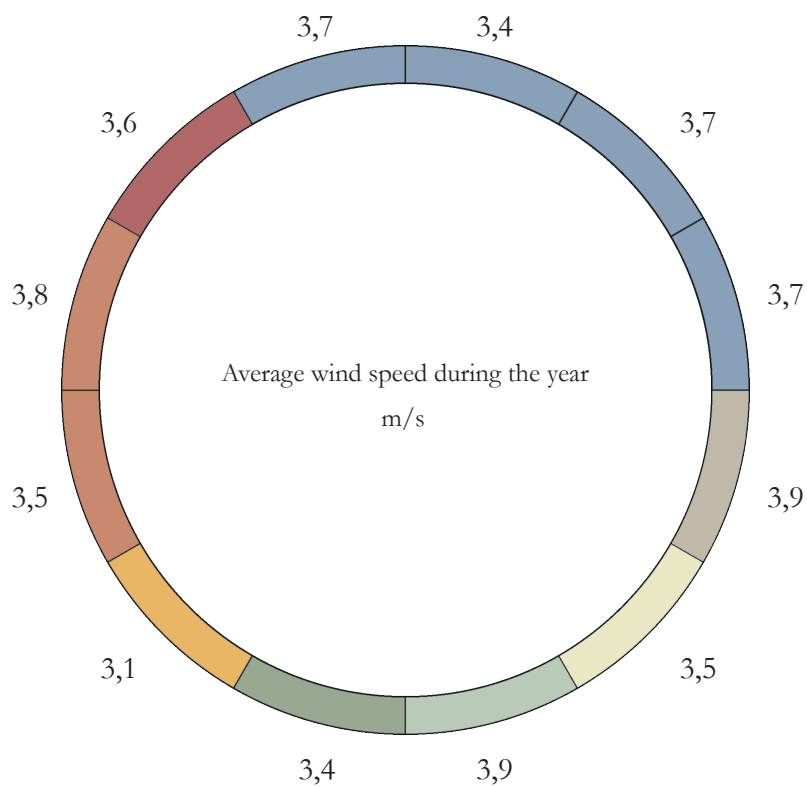
S / SW

N

N	–	NE	–	E	–	SE	–	S	–	SW	–	W	–	NW	–	Calm	
14,6	–	7,1	–	4,7	–	5,2	–	19,3	–	24,1	–	6,5	–	8,2	–	10,4	%

Main wind direction   Frequency of wind direction during the year

S →

snow as insulation,
reducing icicles
and falling snow

S →

indirect light

low angled sun

shadow

low angled sun

indirect light

snow as insulation,
not hiding window
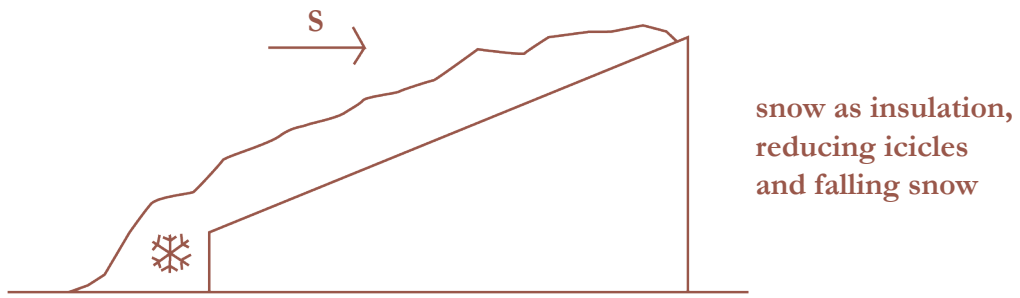
Combined functions

I tested two different function programs. The first was a facility combining housing with some shared common functions. This combination is also a part of a financial model, where common and public functions could support building housing to an affordable price. The common functions in this case are rentable offices of different kinds, who share common facilities for breaks and hygiene. Also a public café and spaces possible to use for youth gatherings and courses are included on the entrance floor.

The architectural language here is inspired by the one explored in the microclimate laboration, as a test to combine weather adaptations with concrete building design. This facility could be located at some of the identified spots from the laboration about the railway station and should adapt to the local climate at that specific location.

I left this idea since I could not see the clear connections to my theoretical framework. It was an interesting idea but the connections did not appear clearly and I felt the programme was too weak in relation to my aim of the thesis. Therefore, I moved further and tried another function program.
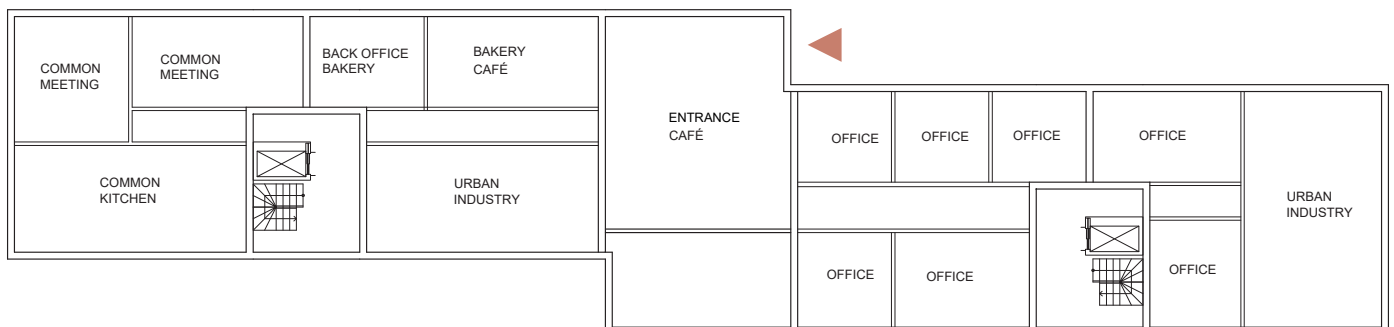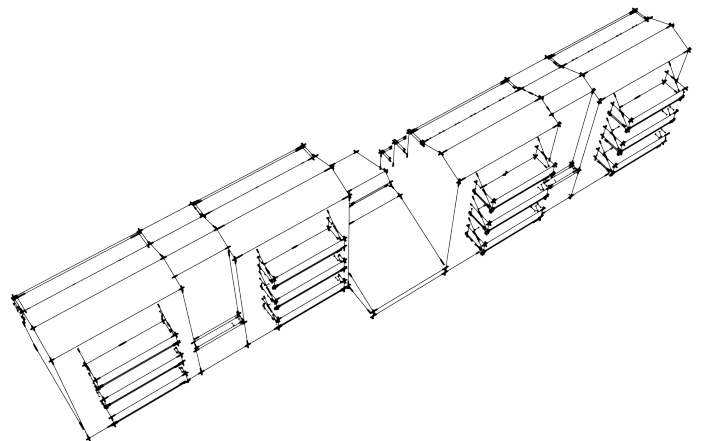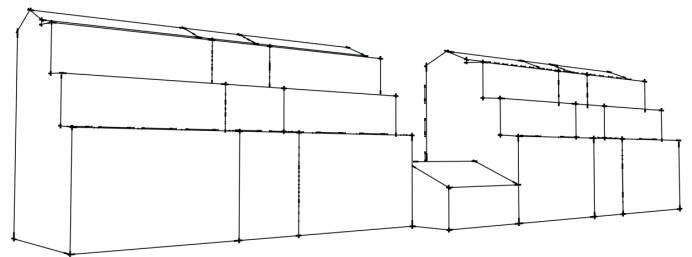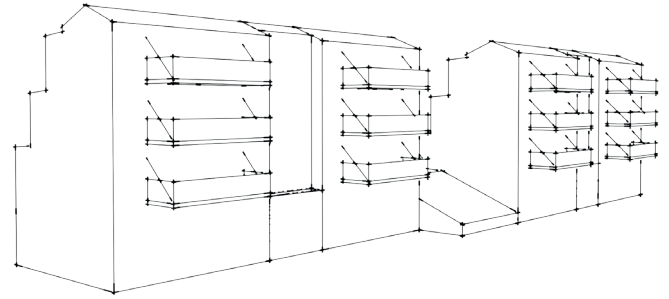
Village of working places

This was a test of a village where different companies and industries were gathered, gaining on shared functions and natural meeting points between people. The idea for this laboratory is based on the need of promoting other kinds of supply in Kiruna than the mine. Today many experience that Kiruna is nothing without the mine and that stresses the need of highlighting alternative ways of making a livelihood in the area. While gathering other working places and companies together, they can strengthen each other and contribute to a positive spirit about the future.

This laboratory was useful to understand that the identities of a place can not be expressed through one single facility. Nor in this example could I see the connections or attachment to the local network of functions clear enough. I understood it to be about something else than one proposal but I was not sure about what it was. Timely in the process, I had my trip to Kiruna booked at this point.
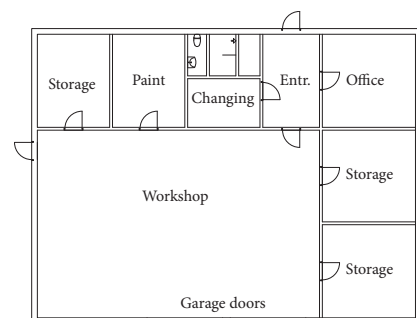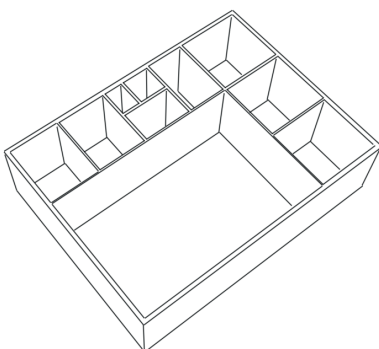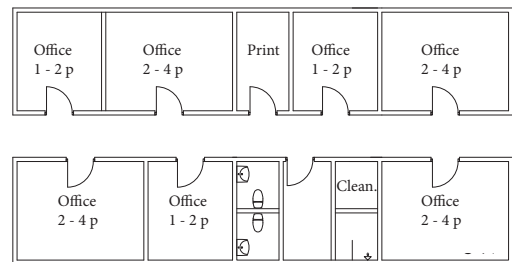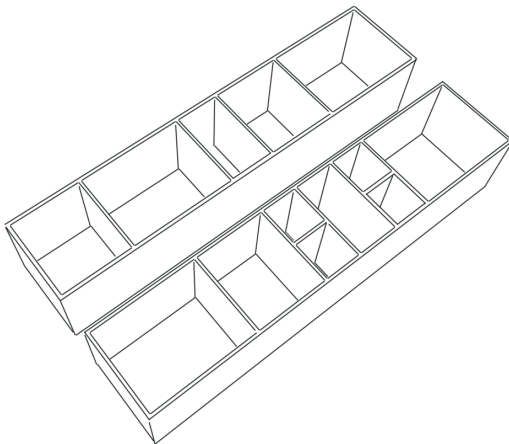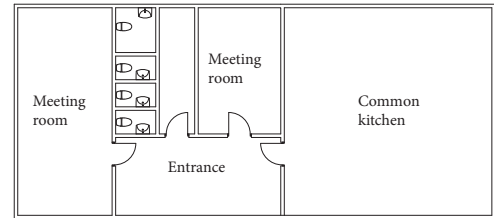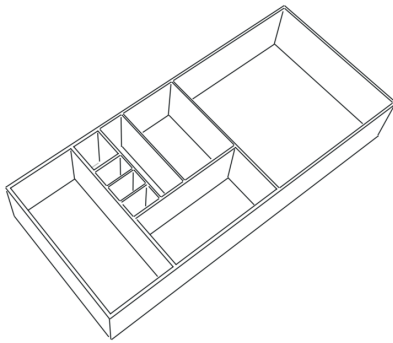
Sketchbook

Conclusion

To summarize this period of sketching before moving on to the site visit, it resulted in things I both wanted to bring and things I did not want to bring. Both kinds of learning are equally important. I brought all the learnings about this area south of the new city center, with its important flows and functions. I also brought the connections between architectural details and local micro climate, as an interesting and functional way of designing in the area. I did not want to go on with the idea of proposing one single facility, since I had understood this was limiting my possibilities to discuss the questions I want in my thesis.

Spoken words

This chapter summarizes and describes experiences from the site trip to Kiruna, that was taking place during a sunny week in the middle of March. The strategy of having an exploratory phase right before the trip was conscious to have an as open minded approach as possible when experiencing the city myself. The following phase used different methods of site analysis together with inspiration from Feras Hammamis' strategy (2012) of understanding and getting to know the sense of a place, presented in the Written words chapter earlier. During the trip, four principles of identifying and analyzing local identities settled, based on learnings from all the research made before. The learnings from the trip are sorted and communicated according to these principles, described below.

Sami traditional handles from the demolished town hall are reused on the new one.

The physical experienced space, specific locations and physical characteristics

This is a hands-on topic, dealing with questions about how things look and feel in a concrete manner. What characteristics are present, how spaces can be used and how they are arranged in relation to each other.

Rites, events and actions framing repeated stories

This topic covers the interaction between a physical space and the user. A space can encourage a certain kind of usage and behavior, which is in direct connection to the identity of the space.

Language, metaphors and expressions

This topic is about how people talk and communicate about their surroundings. The way people describe and connect places to memories, expectations and experiences.

Social power relations between recipients, actions and actors

This topic describes how power is distributed between different stakeholders in relation to the transformation. Does the perception of power relations differ between different stakeholders? Within this thesis, the inhabitants' perspective is the most important.

The physical experienced space, specific locations and physical characteristics

Kiruna has clear physical characteristics. What is mainly distinctive are colors, wooden building details and shapes. Kiruna's color palette is rich but still cohesive, there are a lot of different colors in a broad variety but mostly in the same color scale. The overall building material is wood, made in a robust but detailed manner. The expression is solid, artisanal and gives the expression of care, even if it is in a rough way. Shapes of buildings can be clearly linked to external conditions in the landscape and surroundings. Both the street system and individual buildings respond to the local climate, trying to break wind and create as pleasant microclimate as possible. It is common with beveled corners towards crossroads, tilted roofs in special ways to handle snow and protected balconies and entrances.

These factors create the main characteristics of the physical environment in Kiruna. When I walk down the streets I notice how well designed the city core is to protect from hard weather. The wind is almost always present in this region, but between the buildings it is often leeward. That depends on the street structure, where many streets are broken two times to avoid wind tunnels. In the end of many streets there is a building placed in the opposite direction, as a wind blockage but also as an end to the line of sight. The lines of sight are interesting in the city core, since there is a constant interplay between long and short ones. In between almost every block there is a long view towards nature, mountains or the mine, but there are also short ones within the city structure with the transversely located buildings as view points. The density of special viewpoints is high, in almost every block there is a building with some kind of special character. It can be the level of details, the shape of the building or some special physical elements. The cohesivity in color pallets and building material contributes to the coherent expression despite the variered buildings. The city core opens up and turns towards the sun, creating pleasant sun spots and sheltered paths in between buildings.

Rites, events and actions framing repeated stories

The church in Kiruna is well known and appreciated by many. It is located in close connection to the city core, on a small hill covered with mountain birches. The church is within the deformation zone but will be moved in one piece to the new city center together with some other cultural buildings in relation to it. Despite the fact that the building will remain exactly the same, people feel sad about the move. This is a real case scenario where people clearly experience how the interaction between a building and its surroundings creates a special identity. One man I was talking to, described the process of walking up the slope to reach the church as an important part of the experience. The process of walking helps him clear his mind and leave his daily life for a moment before entering the church. The process of arriving at the church is as important part of the visit as entering the building. Even if he will be able to visit the church in the new city center and the building will be the same, the identity of the church will be something else.

The identity of the church is as much of the hill, birches, views and relations to the city, as the building itself.

One can not be critical to the fact the church needs to be moved. It is what it is and it can be experienced as sad, but there is no need to discuss that it will be done. But old rites, events and repeated actions must be handled with caution and respect for the individual experiences. Even if the new city center will frame new actions, there needs to be a respect for the sadness about breaking up with old ones. According to me, I think it is best to be open and clearly communicate that things will be changed, instead of trying to claim that an experience or identity can be the same after a move. I believe a process like this can be made in a successful way, but I do not think that specific identities can be kept the same in relation to the physical environment.

I am most worried about what will happen with the social interactions. The city life today is rich, open and for me it's my main source of social interactions on a daily basis.

I have heard many small shops and businesses thinking about changing to digital businesses instead of moving to the new city. What will the future look likes if everything will be online? I am great at many things but I can't handle these digital equipments.

I moved here a couple of years ago, so I think I can view it from a different perspective than natives. I am fascinated about what's going on and curious how it will be, but my main concern is that it is so difficult to understand what's going on and get the right information. I search and spend a lot of time reading from different sources but still I have trouble understanding and finding information about what's happening. I am young, technical and have no personal attachment to the process, but I suffer with older people who most likely have even more trouble finding information and at the same time have a great personal interest about what will happen.

Language, metaphors and expressions

The city's transformation is on top of the minds of many inhabitants and I get the impression that there is a great need to talk about it. During my days in Kiruna I had no trouble talking to people about what was going on; the inhabitants are open, social and want to reflect about it.

If I should summarize the voices from people I was talking to, there were two overall themes. The first one is understanding - inhabitants understand why the transformation needs to be done and do not question the aim of it. The second one is worries and uncertainties about what will happen and how it will be. The hopes for a successful transformation and great future in the area is experienced as low.

Inhabitants in Kiruna respect and have reconciled with the fact the city center must be demolished. Some can see the joy and feel noverty about the new center but for most there is a layer of worries and melancholy connected to the process. Some feel hopeless and resigned about it, with no trust something good will come. According to me, understanding is a sensitive and highly valuable emotion to prioritize in the process. Understanding comes with potential, potential of engaging and making people feel hope. From my perspective, this is one of the most critical points. Based on my investigations I state that the stakeholders; the municipality and LKAB, have not succeeded in spreading confidence to the inhabitants. That results in them feeling left alone to the uncertainties.

I think the people of Kiruna are special. This is a special and a bit extreme place to live, people who thrive here are also a bit special. We have established and grown at this place, as the city becomes demolished the connection will be lost.

For me, the physical characteristics of Kiruna are a lot about the clear layers of history. You see and experience how the city is developed and refined over time, how could that be catched in the new city center? Everything will be built at the same time, and there will be at least some decades before the refining process starts by itself. In a way I can feel the process is too quick, one should not build a city overnight.

The transformation comes with a lot of uncertainties. I am worried for my small business and by extension my livelihood, will it survive during this process? Who will join and invest and who will leave instead of chance? I think it can be great, but it requires everyone to join.

Original city center that will be demolished

New city center under construction

Demolition limit

LKAB and the municipality have challenged trust from inhabitants along the entire process. One example is the case with the limit differing affected buildings from not affected buildings, that was presented already in 2004. 16 years later, the limit got updated and as LKAB says: "no longer goes through facilities" (Tydligare Gräns För Samhällsomvandlingen i Kiruna, 2020). According to me, this is one example of really challenging trust from inhabitants, to let them wait for 16 year before they get clear information about how their facility will be affected. Of course it is complicated and I understand it requires a lot of investigation to guarantee exactly which parts need to be demolished, but I think the communication should have been made in another way. The first version of the demolition limit presented several facilities divided into two, of being within the demolishing zone or not. People understand that half-demolished buildings will not be the case, but the uncertainty that this brings to people living in the in-between zone is not acceptable. In the updated version from 2020, there are 40 buildings changing from being within the demolishing zone to becoming outside, or the opposite. Seen from the perspective of every individual, that is a lot.
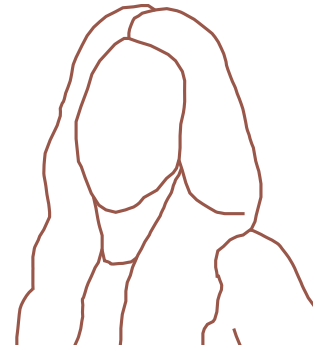
The map shows the structure of Kiruna city. The lighter parts to the left is the original city center that will be demolished and the lighter parts to the right is the new city center under development.
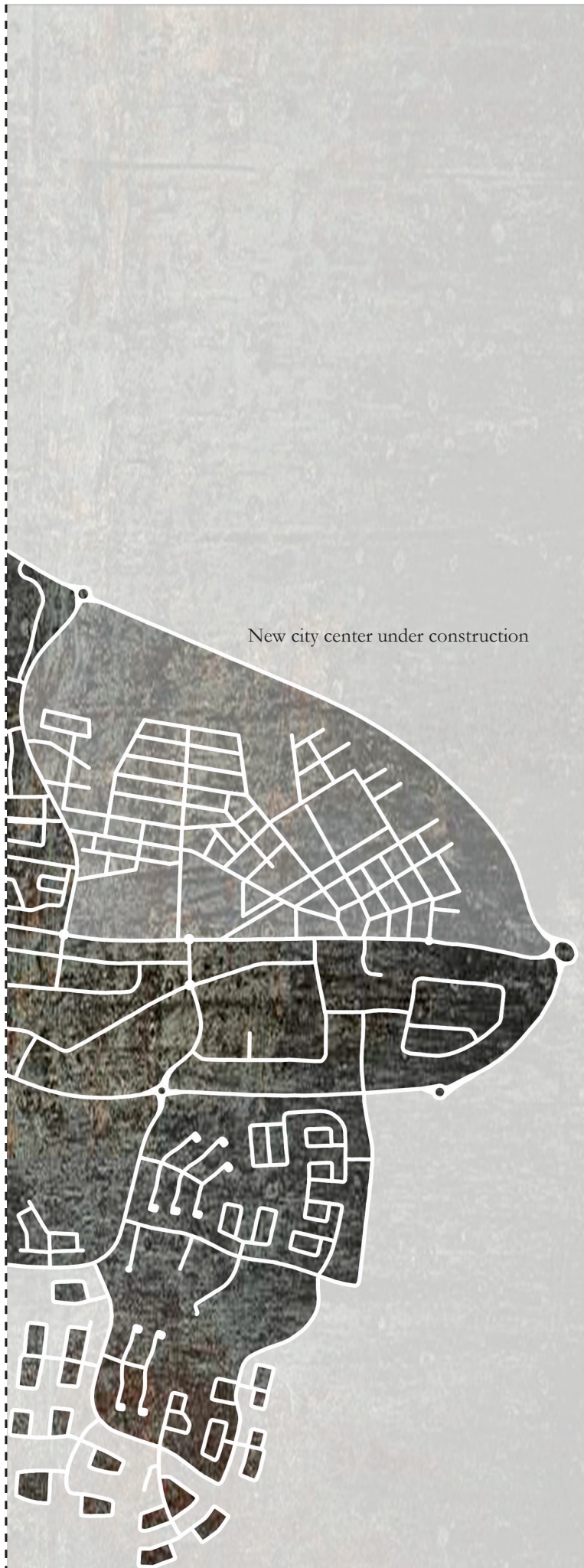
Social power relations between recipients, actions and actors

The lack of communication between stakeholders in charge and inhabitants is obvious when talking to people in the area, but also for me when I am searching for information within the frame of this thesis. I understand the perspective from both the municipality and LKAB, that this is an enormous process with a lot of complicated decisions, things depend on each other and so on. But I ask for a larger amount of transparency and also a more outreaching communication method. It is possible to find some information on websites for exemple, but that requires that people have the personal driving force and knowledge required to find information themselves. I was talking to an inhabitant about this and she described it:

"It is one thing with people directly affected by the transformation, they search for information or get help from friends and family to understand what is happening. But all the others… Kiruna is a large municipality and if you leave the central parts of it, the level of knowledge about the transformation reduces quickly. Most people with no personal relation to the process do not spend time to search for information themselves. But you should know, bad news spreads fast! The result is that most people know about failures, unexpected cracking buildings, ground demolitions or problematic processes, but very few know anything about the positive aspects, such as the great new swimming hall we will get."

I think she catches the core of the problem well. Bad news will always spread quickly which means the municipality needs to precede that with good information and interesting news. That could be done in many different ways; monthly information folders sended out in the mailboxes to all inhabitants, information spots visible in the city or regular gatherings for people preferring physical meetings. I believe the feeling of control and safety increases with information. To know what is going on will help people to prepare themselves and create a belief towards the future.

A padlock from LKAB locking the front door of a former residential house.

Spoken words

Conclusion

Theory research, design laborations together with impressions and learnings from the site trip has now created a collective base for how the research question of this thesis could be answered.

Theory presented in the chapter "Written words" strengthens in many ways the experiences I met when talking to inhabitants in Kiruna. Both according to what the identity of a place is in general and according to how it could be valued in the context of the new city center in Kiruna. The main issues today are the common feeling of identities becoming lost, no or low possibilities to influence the process and low transparency about what is happening and how it will be.

I concretize it to be about power; the power relationship between stakeholders and inhabitants is unbalanced today. Many inhabitants experience that they do not have the mandate to control things in relation to the transformation, although it concerns decisions strongly affecting them. Decisions made in this top-down structure creates the common feeling of hopelessness for the future. The new city center is also developed until the last detail, not giving space for personal adaptations or possibilities to colonization. I state that is a problematic way to plan a city, since a rich outcome must be preceded by a community process somehow.

What is needed is to give power to the people. Inhabitants have ideas, opinions and will to participate, but the opportunities are missing. Since identity is stated to be both about the construction of the physical environment itself and the social attachment to it, people must be brought. Meaning in emotional terms; the sense of belonging in an area, personal relation to a place and desire to establish in a new context. The proposal I will present in the following chapters give physical space for bottom-up development processes. The area, that shortly will be explained in detail, can be a starting point for similar processes and in the longer run rearrange the power relations in relation to the main city development as well.
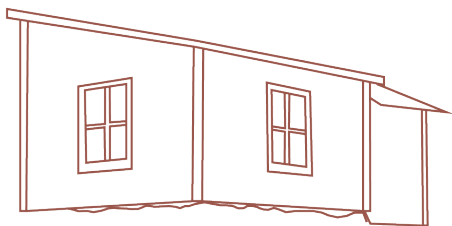
Design exploration

Identity making architectural inventions

Within this chapter; a framework for the area is presented, to ensure it becomes what is aimed for. Within that frame, inhabitants should have the mandate and freedom to explore and create things they would like to see and use. There can be different kinds of gathering points, association places and spaces for activities. The most important part is that the process is driven by the people, with no overall control or direction.

The area should strive to gain a heterotopian function, in terms of applying an alternative way of power distribution and development methods. It should contain different kinds of narratives and functions, allowing parallel stories to take place. These stories should be told by inhabitants, associations and companies. All people are encouraged to come up with ideas of different kinds and are also allowed to realize them within the area. There can be either by presenting an idea of a larger project to an investor, or by realizing ideas by designing and constructing them themselves.

Inhabitants should have the mandate and freedom to explore and create things they would like to see and use. The only requirement is that the places created should gain a larger target group. Either there are places completely open or places partly open for the public to use. This means it is not allowed to construct private places in the area but otherwise there can be any kind of place for recreation, gatherings or activities.

Spaces and places

The area can be divided to include three different kinds of functions. Below, these functions are defined a bit further.

Communication

Paths should enable people to move around by foot, bike, kick or snowmobile. A main structure of the transportation in the area is planned from the beginning, to create a structure but also facilitate for investments to easily take place in connection to it. Besides that, more paths can be added to reach different places in the area.

Specifications:

 - Facilitates communication between places
 - Take water flows and snow removal into consideration
 - Take future potential development into account while not dividing attractive places in a thoughtless way

Nature

Today the area contains mainly low mountain birches which means it will be experienced as green already from the beginning. This greeney can overtime be transformed to a more organized one at some places, such as parks or cultivation areas of different kinds.

Specifications:

 - Promotes species richness
 - Creating pleasant environments for humans and animals
 - Holistic plan about use and maintenance

Built structures

In the building category everything from temporary small structures to ordinary buildings can be included, also both already existing buildings in the outskirts of the area. If a building requires a building permission it needs to be applied for, but otherwise it is allowed to create anything as long it fulfills the requirements stated below.

Specifications

 - At least partly for public use
 - Aim/use that benefits inhabitants of a larger group
 - Architectural language with local connection to Kiruna
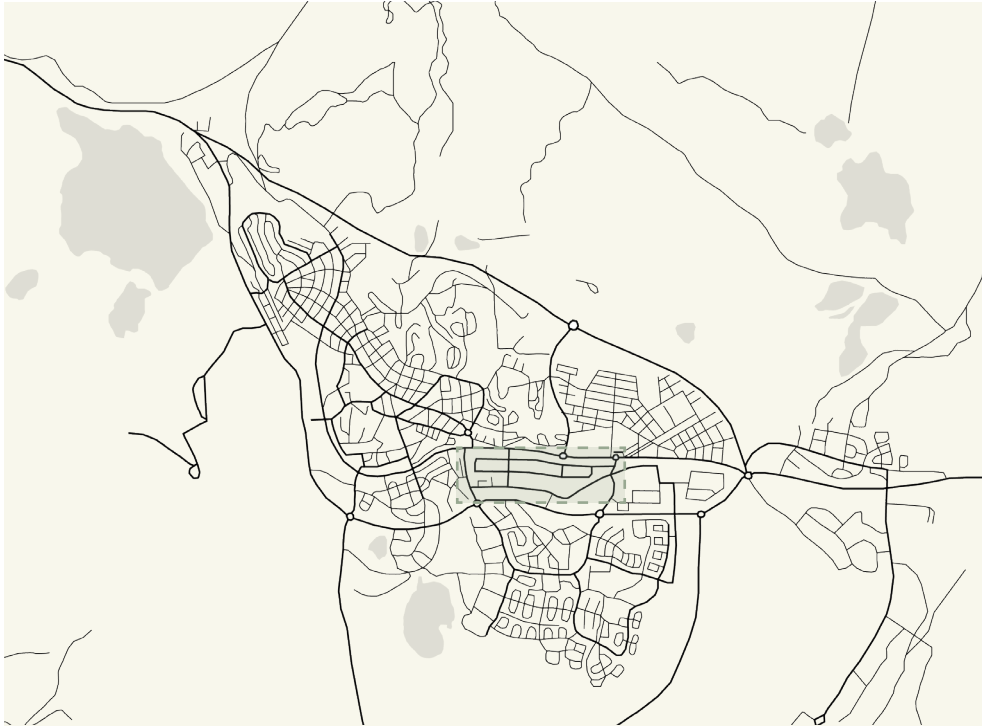
Primary data © Kiruna kommun

Contextualization of site

The decision of the area chosen is made based on the previous labourations on different sites around Kiruna, presented in the Sketchbook chapter. There are several reasons the explored area between LON1 and the new center is not chosen. That area will be planned by the municipality if the station gets located there, which risks overrunning the bottom-up processes taking place according to my proposal. There is also a lot of technical infrastructure in the area, meaning large rearrangements need to be done in order to colonize the area properly. Moving a bit to the west, the area chosen is located. This area is more continuous and integrates naturally in the current industry area.

Before the city transformation the area was located in the outskirts of the city but the location will be more central in relation to the new city center. The industry area is not yet included in any development plans, but will in the future be transformed into a more city-like use (Kiruna kommun, 2019).

The industry buildings themselves are in various characters, many are different kinds of temporary structures but some buildings have higher architectural value. While open up and give opportunities to establish structures and events here, the area will start to get a meaning within the surrounding network. The area I present can over time colonize and stretch out in between the industry facilities, including some of them for different functions. Today the area is unused, owned by the municipality and it contains small trees and greenery.

North of the area, the important Malmvägen reaches between the new and the original city center. This road is important in the city today and has opportunities to become even more important in the future, because of its integration in the new city center. My area will create connections from Malmvägen to the residential area and another major road, Lombolovägen, in the south. The area presented also reaches west to the commercial area in the crosspoint between Malmvägen and Österleden, which already is an important gathering point. In the north east, my area connects to the planned green park in the new city center, creating a pleasant walk from the center to the residential area of Lombolo and the commercial area.
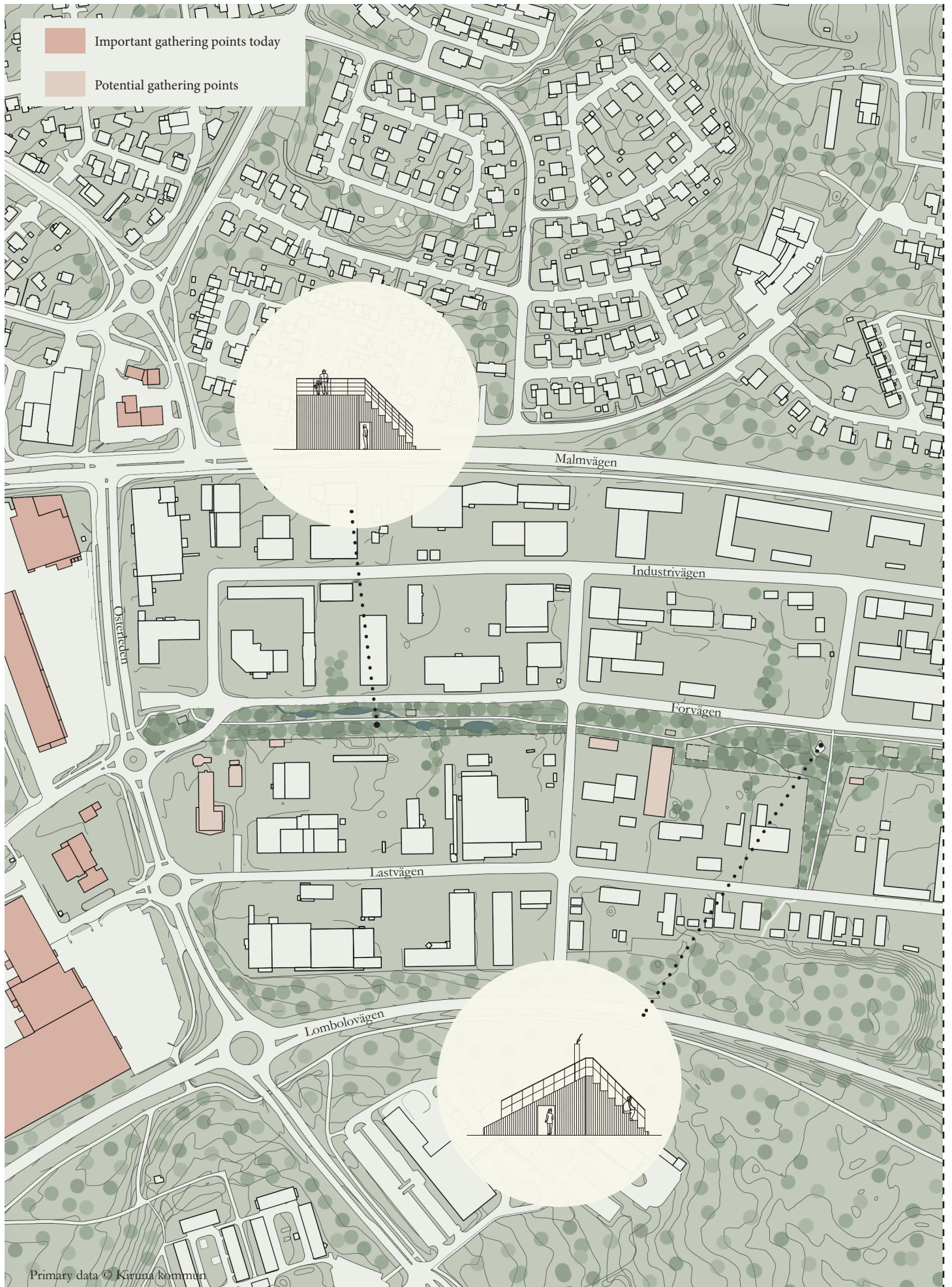
Over time, the area will be a central path to transform the industry area around. While implementing bottom-up processes and a different kind of power structure in the area itself, these methods can influence the city development around it as well. Methods invented in heterotopian areas usually influence other rurban and urban areas, which make this area a catalizator to a new kind of development in Kiruna.
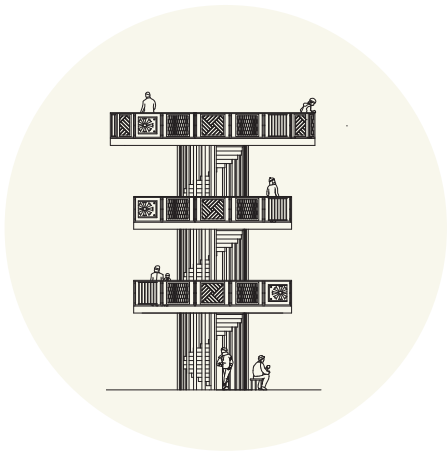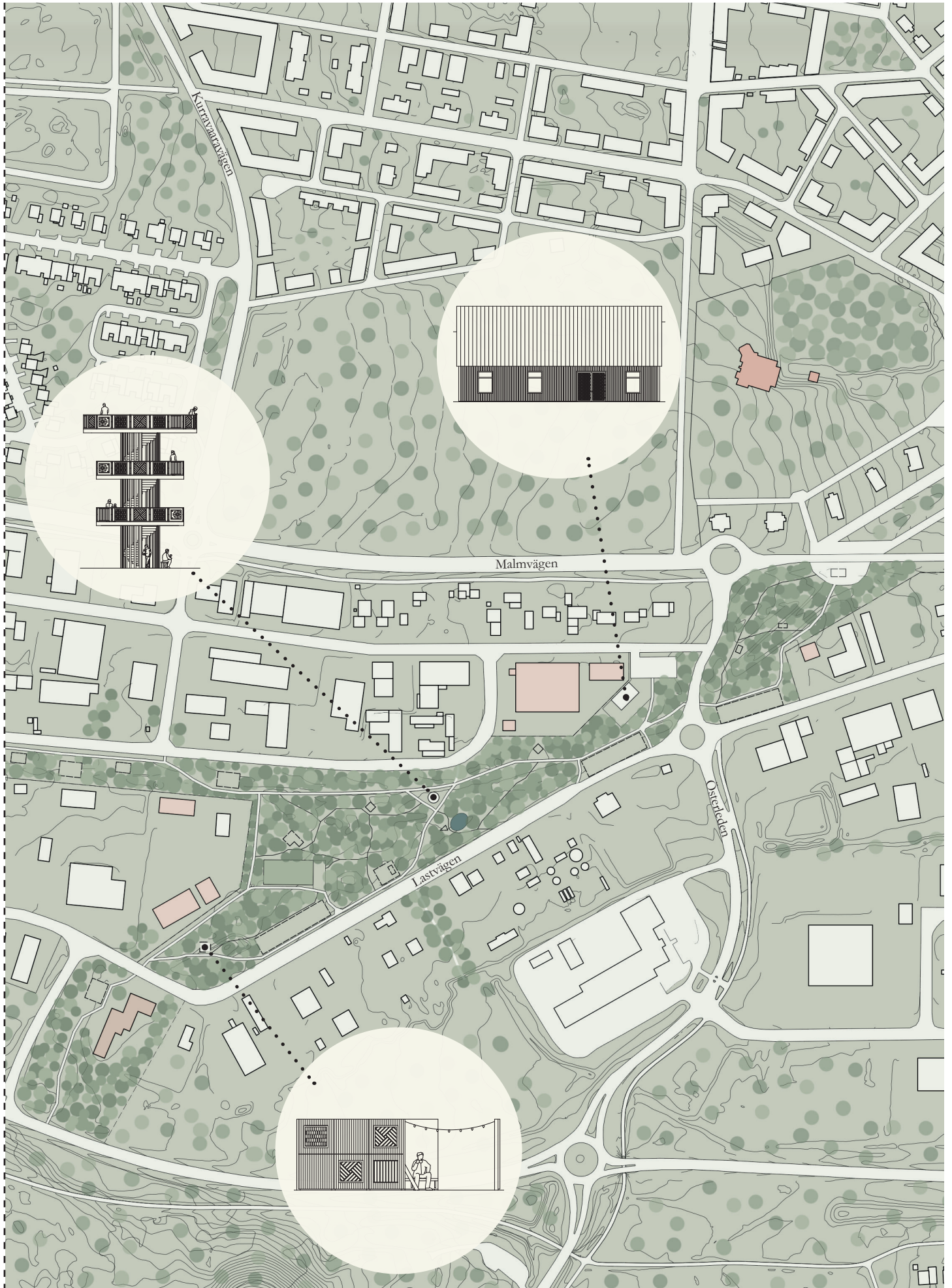
How to read the proposal

In the thesis, I present five different proposals to showcase what a built structure in this area could look like. These places can catalyze the process and make the area attractive from the beginning. Since the aim is to let this area be under more or less constant change and development, my five suggested places can act as stable objects in the changing environment. The proposals should be seen as design proposals and not fixed structures, meaning the important part of the thesis is not the design itself but rather the function and meaning of it. Still, the proposals are developed from the stated criterias with a close connection to the identified identities both according to architectural approach and use.

In the map, dotted lines mark suggested spots for other projects to take place. It is both spread in the forest and located close to surrounding roads, useful for different kinds of functions. It is also illustrated how the area can start to colonize the surrounding area as well, while including buildings and spaces later on. This should also be seen as a proposal or guideline for further development but the important aspect is not that structures become located at exactly these spots.

Important gathering points today

Potential gathering points

Malmvägen

Industrivägen

Österleden

Förvägen

Lastvägen

Lombolovägen

Kurravaaravägen

Malmvägen

Lastvägen

Österleden

1:4000

Recycling center

One of the projects that is suggested to be implemented from the beginning is a recycling center where building components from dismantled houses can be stored for further use. Physical objects from the original center can be one piece contributing to the identity network created. The recycling center should have an available organization where people can both hand in and pick up building components for new projects. Kiruna has a strong tradition of wood craftsmanship and many of the buildings that will be demolished have beautiful details of high quality. While creating an easy way of taking care of them they can be used for new purposes, even if the owner of the house they were mounted on from the beginning does not have the possibilities to do it.

I imagen structures in the area containing pieces from many different buildings from the old Kiruna center, which people can visit and recognize from the past. It also contextualizes a pattern of identities and the relations created between them, as a physical expression of the theory.

To the left, some details from existing buildings are shown, as examples of components that can be kept and reused.

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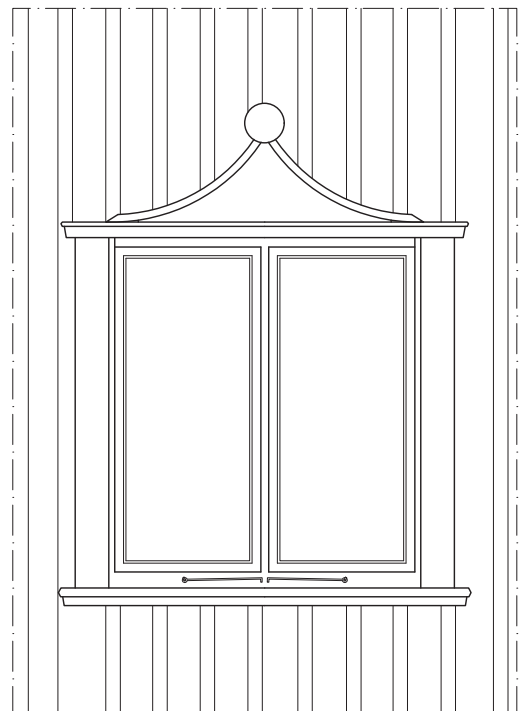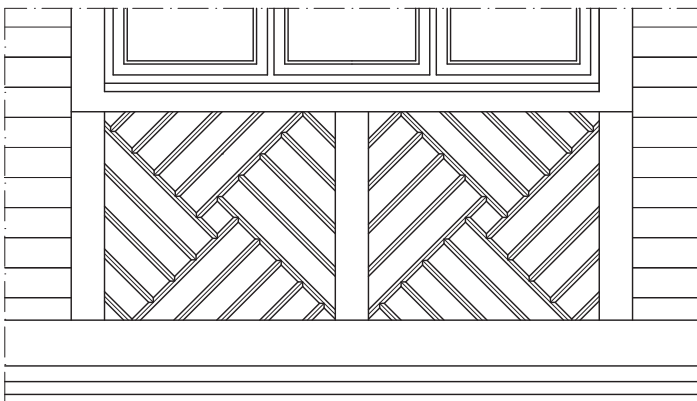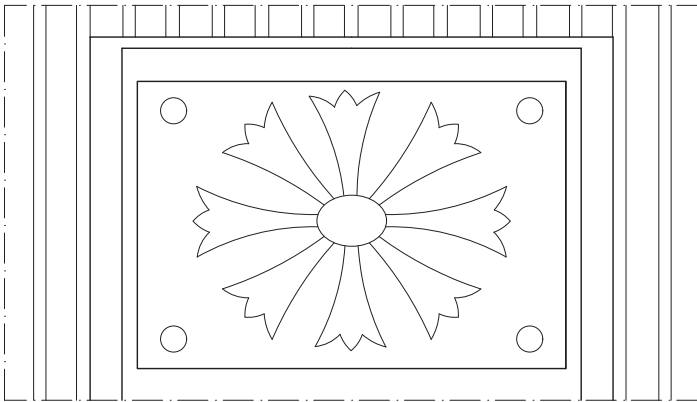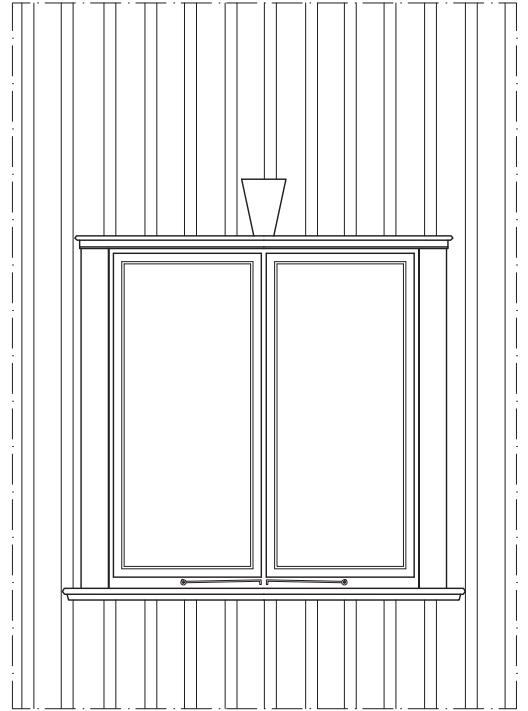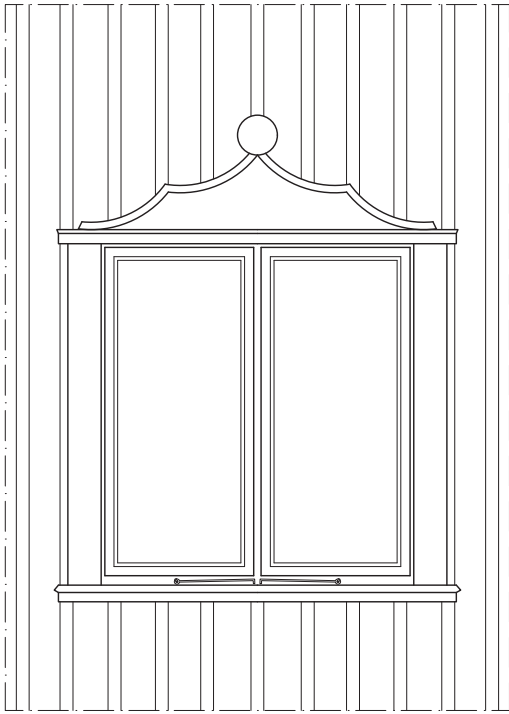
View tower

The view tower is a centrally located gathering point. With its eleven meters height it allows visitors to come up above the trees, since the small mountain birches growing in the area will not grow high enough to obscure the view. The tower will be visible from a distance and can be seen as a landmark in the area. It is constructed in wood with reused parts from demolished buildings for railings.

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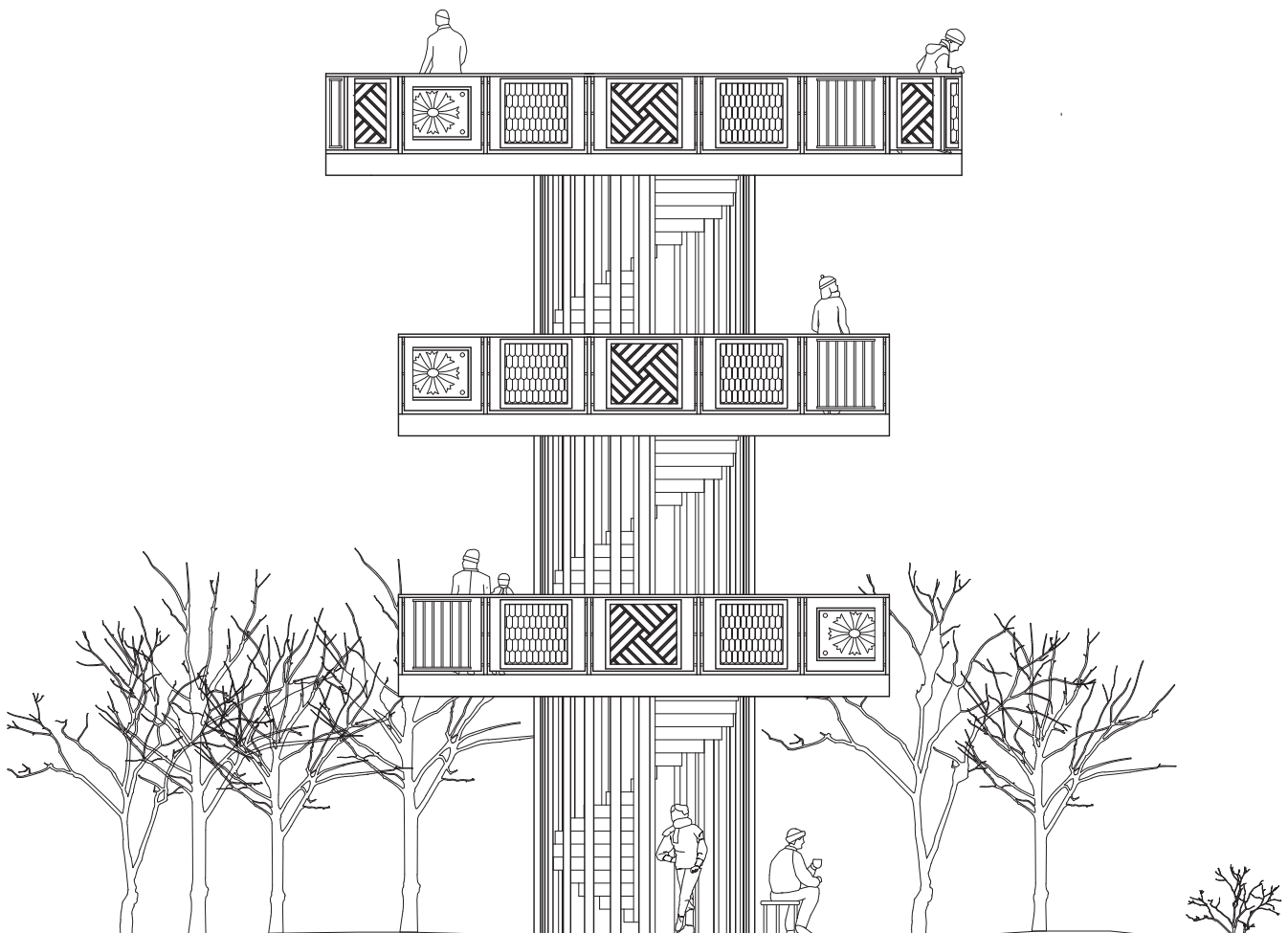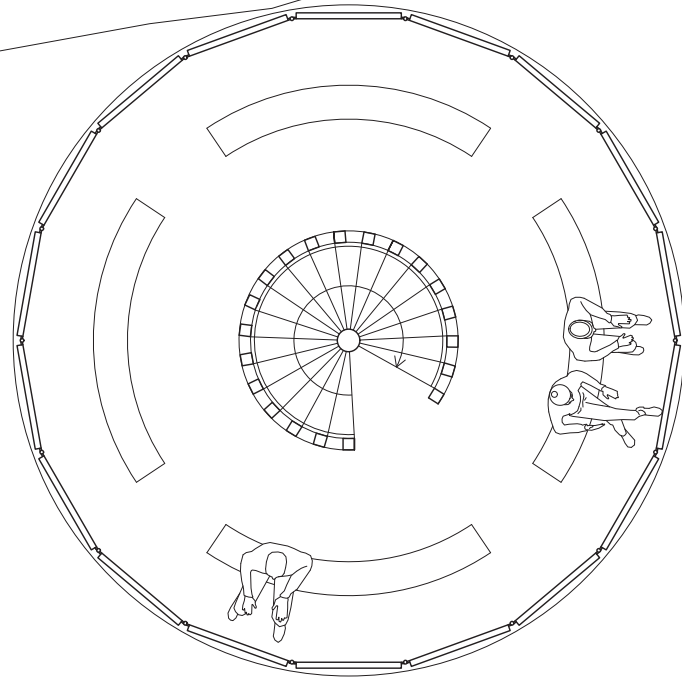
Resting point

This is a light structure made of three walls, creating a protected space for a coffee break or barbecue. The walls are placed to protect from the usual northern or southern winds and do also create pleasant places to sit.

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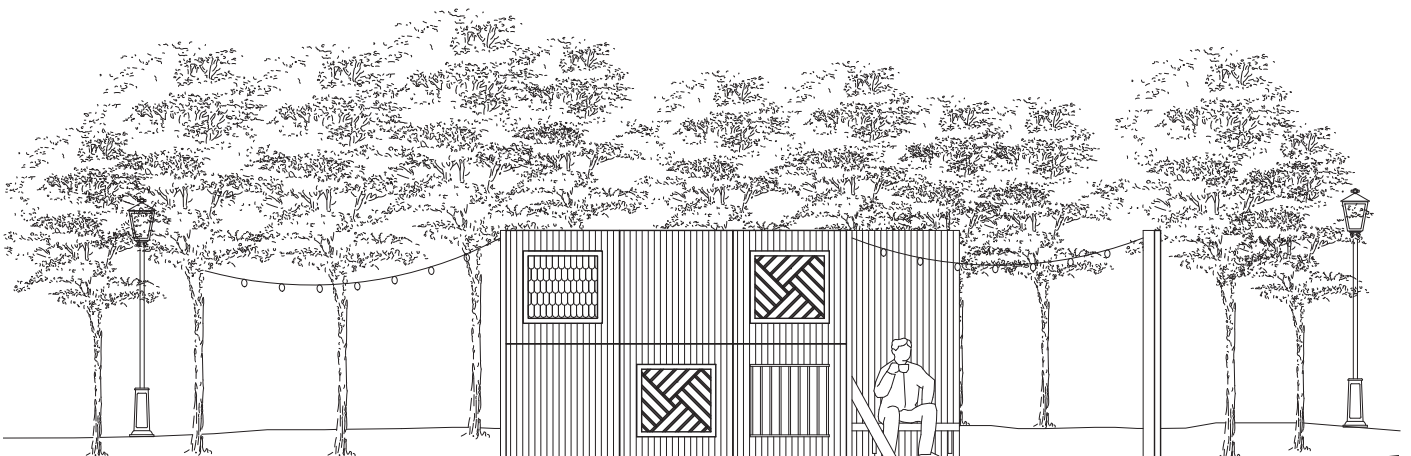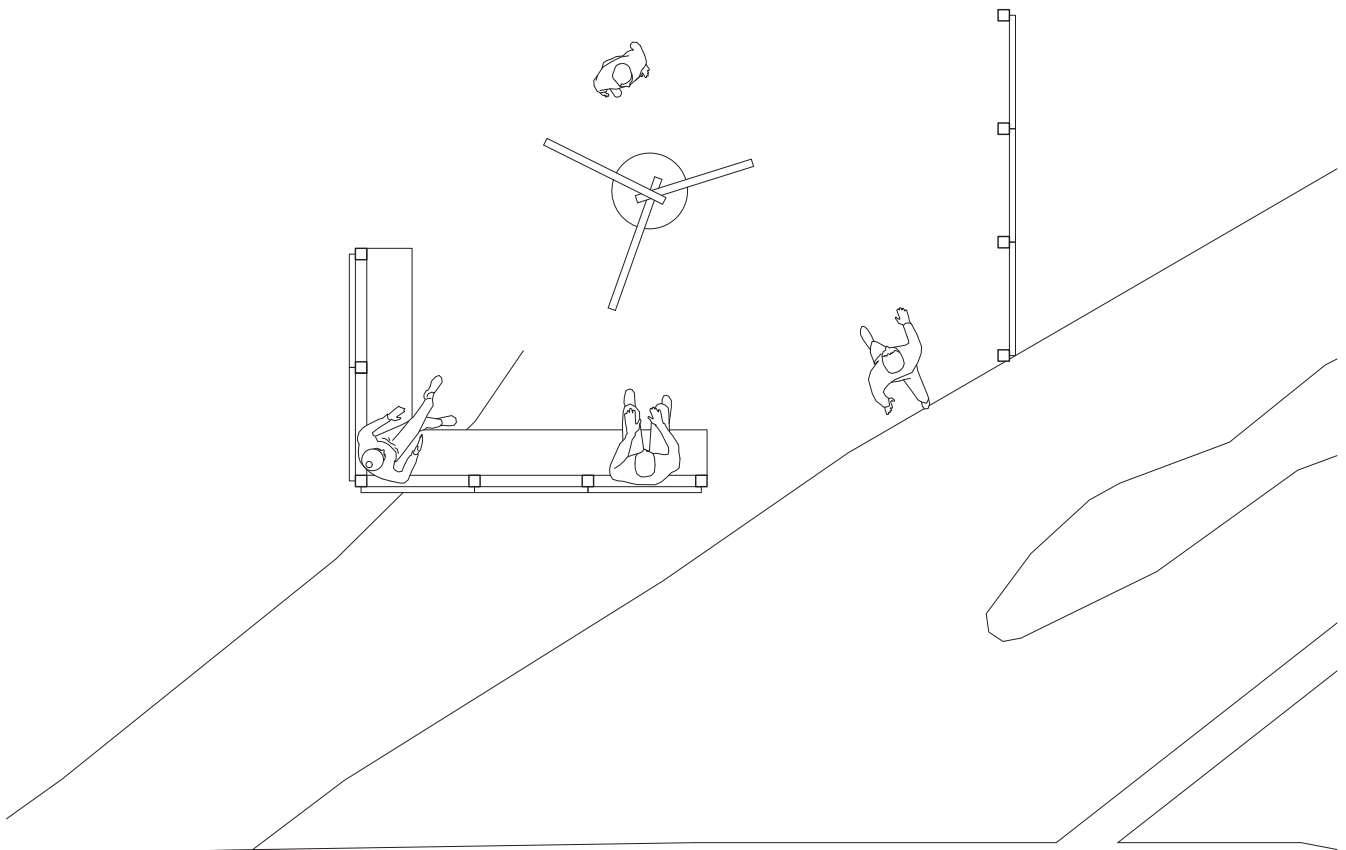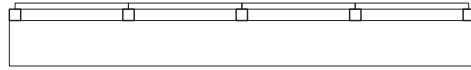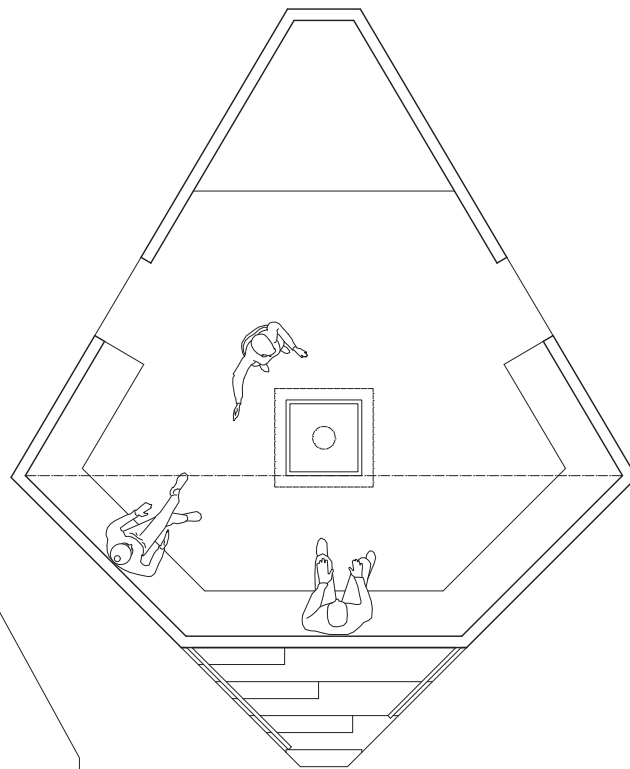
Fire cottage

The fire cottage is a small building with a protected fireplace inside and an exposed stair to sit in during sunny days. The roof is sloping all the way to the ground and has protective railings, which enable it to be used as a slope for sledding during winter time.

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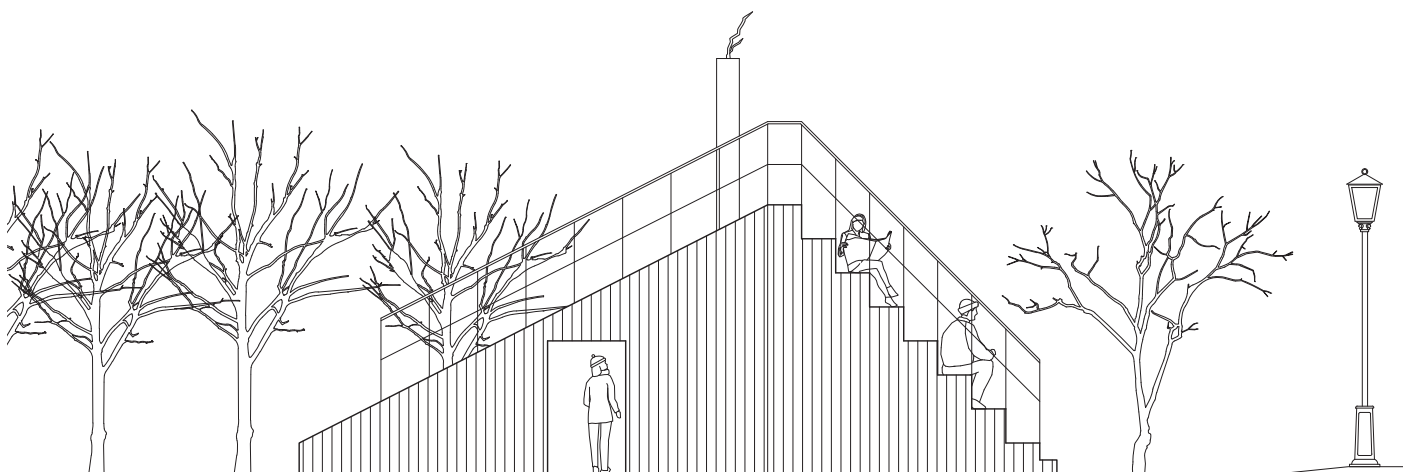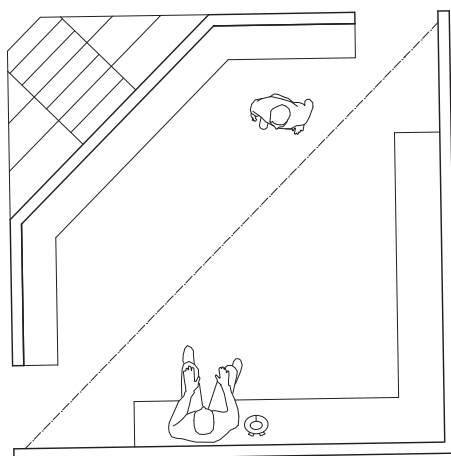
Shelter

This small shelter protects from tough weather and offers a gathering point for meetings. The large stair leads to the roof terrace and functions at the same time as a sitting place itself. The location is in close connection to the stormwater ponds with a good view towards the path a few meters away.
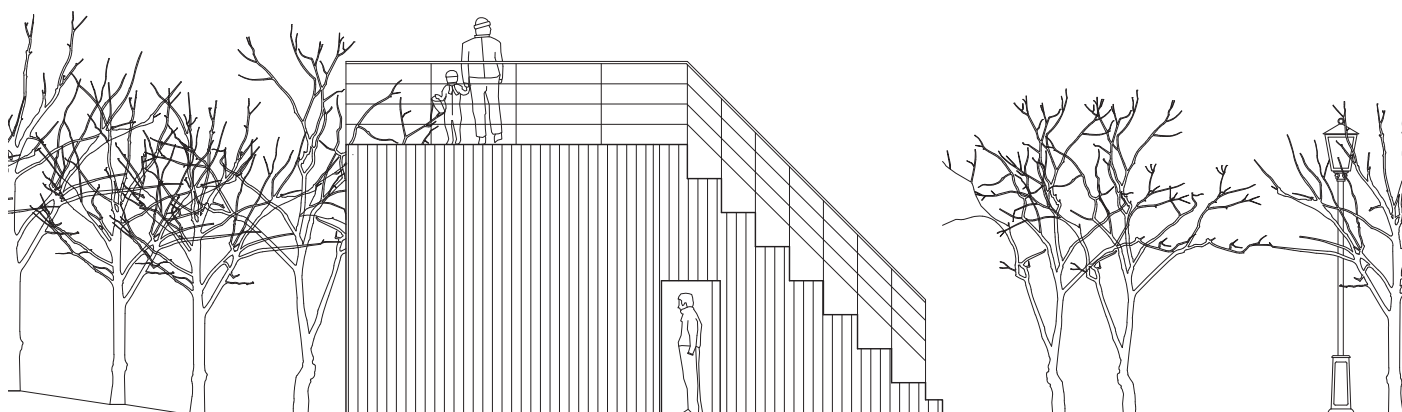
1:100

Use and aim

The purpose of presenting an area like this, is to in a clear way enable inhabitants to take ownership and colonize the area of the new city center. Identities of a place are stated to be about relations and interactions, between places themselves or between people and places. To bring the identity network of Kiruna to the new center, the inhabitants - who are in charge and have ownership of it - need to be brought as well. This is a space that will bridge the old with the new, history with future, and give the mandate of the narrative to the inhabitants.

This can be a place for social interactions but it can also be a place for memories. A place for pride and participation at the same time as it is a place to express opinions. A place for someone's first business or a place to gather with people with the same interests. The use and aim of the area is not decided to a greater extent than being about people who create places they want. No one but the user can tell with the same certainty that a place works according to their expectations and needs. All potential ideas are a part of the narrative and they need to be realized to be able to participate in the common identity network.

The factor of time

The area developed is imagined as a combination of small and large projects. A possible issue about this kind of a network project is that the area feels too temporary and ends up abandoned and useless. That would have had the opposite effect in the area then aimed for. To avoid that, it is important to let processes take time and make sure the area is a pleasant place to visit also without a lot of add-ons. The first step of making it to a nice forest park with walking paths and gathering points will create connections and utilize a target group for the area. To that, more functions and events can be added, making the development process as important as the place itself. According to both research and conversations with inhabitants, time is an important aspect according to a place's identity. To allow the area to develop step by step, adding layers of history, it can remain lively and interesting for a long time to come.

Johan, 45, has always dreamt about starting his own business to sell sourdough bread. Rents in the city are too expensive and he wants to start on a small scale to see if his business will run properly. He finds a spot close to Lastvägen and builds a small cottage where he can sell breakfast sandwiches to workers in the area.

Maj-Lis, 76, wants to meet new friends and organizes a walking club, where people gather and stroll around in the area together. Many of the participants are older and need to rest regularly, which gives them the idea to build benches and place them around the trail.

Lilly, 7, and her mother Anna, 33, enjoy orienteering but miss a place to gather, change and store things. Anna applies for building permission and the orienteering association builds a new club house in the area. The building is also used for birthday parties and celebrations, when it is not used by the orienteering club.

Martin, 24, is passionate about restoration and building maintenance. He enjoys spending time in the recycle center, organizing building components and helping people to find the right things. He also helps house owners to value and find out which details to keep from their demolished houses to make sure no characteristic components go to waste.

Discussion

I state the identities of a place is the combination and interplay of all physical and social aspects within a certain space. This I define as an identity network. The physical environment plays an important role as the frame that creates spaces for people to act within, but without the action of people no identities will appear. Aesthetics, physical conditions and available functions in a space are decided and created by humans and in turn, these aspects influence people and their actions back.

All cities have their own unique identities, since all cities have a unique composition of physical environments, social interactions, values, rites and expressions. Due to its conditions, Kiruna's identity network is distinct from many other cities in Sweden, which contributes to the common feeling of Kiruna being a bit separated from the rest of the country.

The geographical location of the city results in a more extreme and a lot more present weather and climate than in many other places. In Kiruna people live together with the climate and its shifts in a clear way, accepting both the beauty and roughness of it . My experience from talking to inhabitants is that the climate and weather also is one of the important aspects why they choose to live here. People appreciate the cold, the snow, the darkness but also the endless summer days, the sun and the northern lights. Living in Kiruna has so much more to do with unpredictable circumstances than in many other places in Sweden, which I state has an impact on how people from this area behave and expect their daily life to be. They naturally become a bit more resilient to changes.

Kiruna is also one of Sweden's youngest cities, founded only four generations ago. Four generations means within the timeframe of people alive today have personal connections to the first inhabitants of the city. I am convinced it adds some extra layers of heritage and memories

to the spaces, and the emotional connection to a place through affiliation and inheritance should not be underestimated. This can also contribute to a stronger personal imagenation about how things should be, since many people remember histories and pictures from relatives.

The relation between one single powerful company and a city can be found in many mill towns across Sweden. The glory days of the mill towns have passed today, but the industry in Kiruna succeeded to expand to an international market. Since the city was built because of the valuable resources in the ground, Kiruna has already from the beginning had an interesting power relation to the mine and industry around it. LKAB had a powerful role in the founding of the city and still today many inhabitants - and the municipality as such - are dependent on them.

The uniqueness of Kiruna makes this place what it is, but I also believe this is the reason for the common feeling of a division between Kiruna and the rest of Sweden. There are so many special characteristics at this place, that it can become difficult relating and connecting to it without further engagement. This states the importance of prioritizing local driving forces, initiatives and investments in relation to the transformation, to be able to protect and develop identities of this place. To be able to consider the transformation successful, inhabitants of Kiruna must take collective ownership of the new settlement, meaning they feel this place is made for them. I also believe they must feel included and that decisions are made from the perspective of their best, not from an outside perspective satisfying someone else.

I argue identities can not be kept the same in relation to specific objects or environments in the transformation of Kiruna but I think that a well done process could keep the core of the identity network the same. I state that all identity networks are in a slow, constant change, with

new layers added and others left behind. That is a natural process, but what happens in Kiruna right now can rather be seen as a forced process clearly driven from one perspective.

To create a dynamic and as natural changing process as possible, I believe there is a need for several different stakeholders driving processes forward, striving towards individual goals not related to each other. In the natural development of a city, there is an interplay between forces driving processes in different directions, in a more or less equivalent available city structure. But if the power is distributed in a clear top-down system as in Kiruna, the dynamic and spontaneous development gets lost. That results in a process where places are created based on the same prerequisites, viewed through the same type of lens. I believe such a process lacks nuanced perspectives and the valuable but unpredicted interplay between places developed by different stakeholders.

As Björling explains (2014), the narrative of a place depends on which aspects are given precedence. In Kiruna, the narrative is mainly driven by LKAB together with the municipality. This thesis raises other voices and is a starting point to an alternative narrative, driven by the people.

Today there is an experienced distance between the inhabitants and the transformation process in Kiruna. Grey and O'Toole (2018) state that place identity can not be seen without the social interactions in relation to it and that identity is

central for commitment and loyalty to a place.
I argue this is one of the reasons why the common feeling is that Kiruna's identity has got lost in the transformation process. Kiruna municipality should have valued and embraced engagement from inhabitants more to enable the important social interactions and commitment to the new city center.

Within this thesis, I argue the heterotopian concept is important to be able to discuss and value the process of the city transformation in a nuanced way, and the process should have gained from bringing that perspective from the beginning. Heterotopia deals with questions about how the same place can carry many identities and functions at once, depending on time and use. Smaranda Spanu (2020) also explains how a heterotopia is about the relation between different places in a system of functions. This can be equated with the function of an identity network.

The three aspects of place, social connection and time which are highlighted as crucial in relation to a heterotopian function, are aspects crucial in the critique about the development of Kiruna as well. Places are created in the new center, but as I claim, they are not taking responsibility for the local identities to the needed extent. The social connections to the new center are missing in many cases today, because of difficulties for inhabitants to feel attachment and ownership of the new places created. Time has allowed layers of history to be added to each other in the original center, a process which has contributed to the unique identities of Kiruna today. This is a process happening over years and could therefore not be expected in the new city center yet, but the construction itself can either encourage or hinder such adaptations to take place.

My design proposal is an answer to the common issue about the problematic processes about the city transformation, taking place at this particular location in this particular time. The area will start

as a space with several perceptions attached to it, since people are allowed to use and take ownership over places for diverse purposes. Over time it will also prove its capacity to perform different functions, since it will go through several changes, add-on and rebuildments over the years. Within a clearly defined area, multiple places will appear side by side, and one single place can also be valued differently depending on who the user is. Structures added within the area will refer back to history, but also be a part of creating new history itself. While using old methods, building details, social constellations and memories from the past, the area can be a mentally bridge between the old and the new. This space will also challenge the power dynamics and express the will of the people, instead of a top-down decision process with a fixed imagination of how a space should be created. This is why the area can be stated to have a heterotopic function.
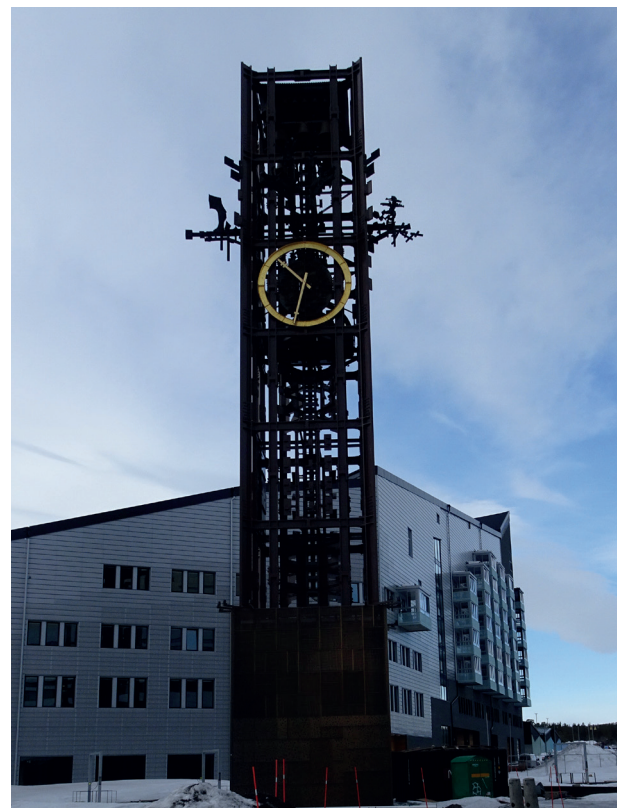
The heterotopic profile of an object becomes stronger as new layers of meaning are attached to it and it also describes how a built object or place can be colonized through events. The correlation between social, political and economic contexts should allow contradicting narratives and let them all be a part of the common narrative. I argue the goal of reaching a heterotopic function of a space is needed in this case to push development further and thereby be able to create valuable identity networks.

As I do in this thesis, I believe architects should work as a catalyst to enable processes like this to take place. We should bridge top-down and bottom-up processes and also find methods in between. It is important to clarify that top-down development is necessary to some extent, since such a complex transformation includes aspects of economics, politics, cultural and social

questions too extensive for any other kind of process. It is not black or white, city development processes should rather include many nyanses of gray to make sure the narrative includes all voices.

To sum up, I believe architects can express and revive identities and heritage of a place by catalyzing bottom-up processes and integrating them with top-down development. The role of the architect is to create a frame for the identity network to take place and ensure that different groups and interests have the same possibilities to reach out and create the places they want and need. According to Smaranda Spanu (2020) all narratives need to be seen as equally valuable to enable them to be a part of the collective identity and to reach that I believe the power relations needs to be reconsidered and in some cases turned upside down.
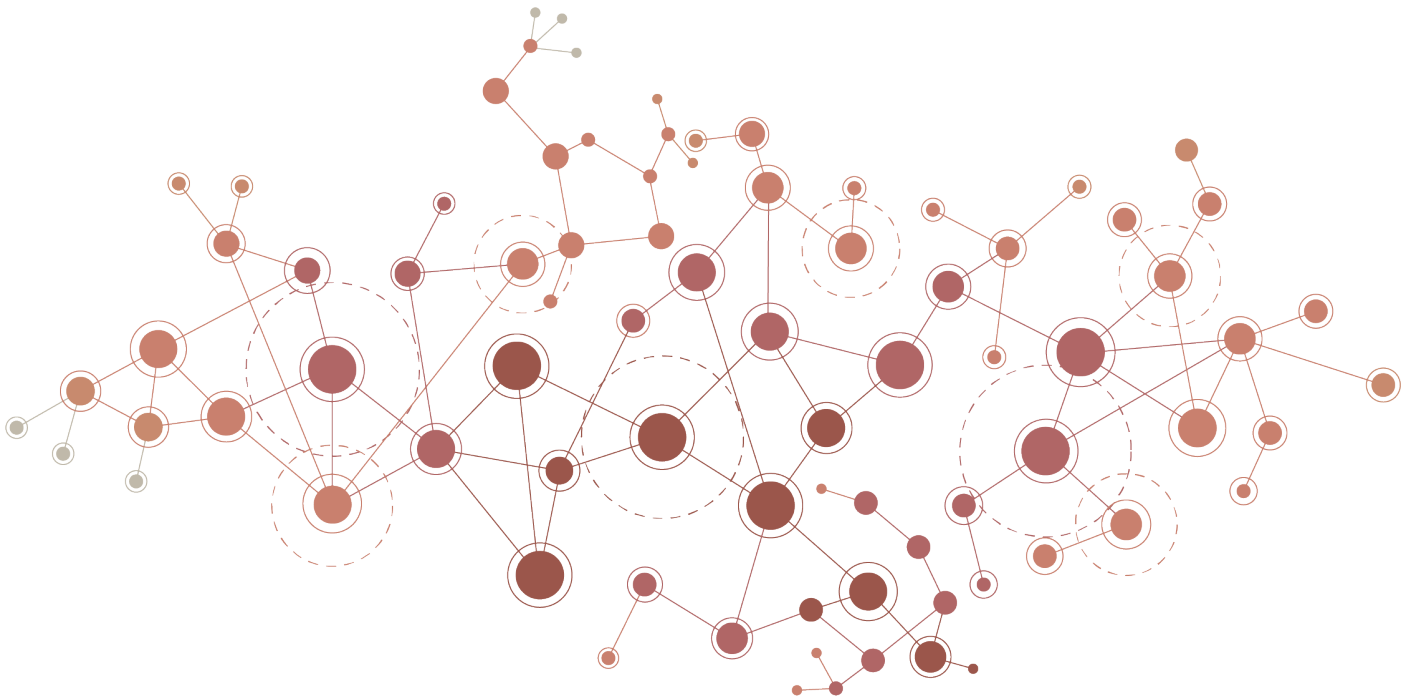
The identity of a city, seen as a network of places with wide and local connections in between.

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