

## CHAPTER 5

# Reshaping Remnants of the Recent Past in Transforming Swedish Mining Towns

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In northernmost Sweden, immense urban transformations are taking place in the mining towns of Malmberget and Kiruna, radically changing the urban landscape. The towns were built during the late nineteenth century adjacent to rich iron ore deposits in order to enable mining in the scarcely populated region. As it turned out, the iron ore deposits stretch beneath the built-up areas. The underground mining causes subsidence and, as mining continues, it affects the towns. As early as the 1950s, a huge open pit opened up in the centre of Malmberget, dividing it in two and initiating the transformation of the town. During the last decade, these transformations have continued and the town is changing rapidly. A few buildings have been relocated and vast areas have been demolished. In 2004, it was announced that the town of Kiruna was to be moved. Since then, a new town centre has been under construction, a few buildings have been moved and the first neighbourhoods have been demolished.

This causes a dilemma. The towns were established to support the mining industry, but to continue mining, the settlements that they had become during the twentieth century need to be destroyed. Indeed, the history of the towns is interlinked with the world market price of iron ore. When prices were high, the towns flourished, but when prices declined, the towns went into recession. The local authorities strive for a more diversified job

market, but the mining industry, directly and indirectly, is the dominant employer. However, while technological developments make it possible to mine larger quantities in shorter times, the mines also require fewer people for their operation. This in turn affects the towns, which have had decreasing populations since the mid-1970s. In addition, the sizes of the iron ore deposits are unclear and the cost of mining increases the deeper underground it goes. In 2018, the mining company announced that there is less iron ore than expected in the Kiruna mine, which means that mining may cease when the current level is worked out.

The ongoing urban transformations have led to discussions and disagreements regarding the conservation of the towns' built heritage, mainly between the main stakeholders: the local authorities of Gällivare and Kiruna, the mining company LKAB and the state in the form of the County Administrative Board of Norrbotten. Both towns are designated heritage sites of national interest (National Heritage Board 1990). In particular, the towns' older wooden buildings are valued by its inhabitants (Kiruna Council 2007; Martins Holmberg 2008; Sjöholm 2008). Various strategies to manage the built heritage have been suggested and some have started to be implemented. Ideas have ranged from moving almost all protected buildings to moving only a few, and from distributing buildings that are moved across newly developed areas to collecting them in 'old towns' as they are relocated. It has been suggested that memory areas of abandoned neighbourhoods are created and the buildings documented instead of moved. Overall, as the urban transformations have developed over the past fifteen years, management of the built heritage has proved a difficult issue in the urban planning, showing that heritage cannot easily be dismissed as a practical problem to solve by moving a few historic buildings or casually having them demolished. The built heritage seems to matter beyond the materiality of listed buildings.

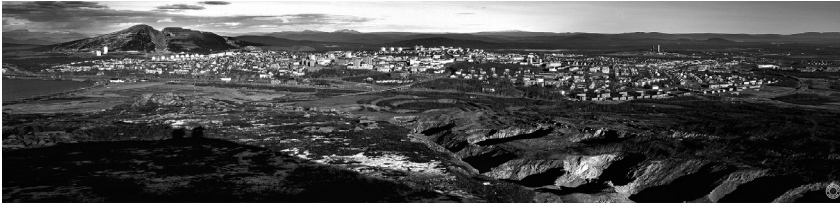
Waterton argued that heritage is affective and that 'our engagements with it occur through a range of embodied dispositions and interactions' (2014: 823). If built heritage and the historic urban landscape are conceptualized as a lived experience, a notion that goes beyond categorizations of historical, cultural or symbolic values, how is this being applied in the urban transformations? How is built heritage incorporated into the processes of meaning making when reshaping built environments and creating new places? And how is the historic urban landscape interlinked with processes of deindustrialization and reindustrialization?

This chapter draws on the concept of heritagization and heritage being more-than-representational. Heritagization is a process through which objects, places and practices are turned into cultural heritage (Harrison 2013). When heritage is contested and challenged, new heritagization processes

occur, in which new heritage can be added and already designated heritage can be either reaffirmed, reinterpreted or rejected (Sjöholm 2016). The concept of heritagization draws on the notion of heritage being socially constructed (Smith 2006; Harrison 2013) and shaped by contemporary needs and demands (Tunbridge and Ashworth 1996). This draws attention away from static sites or artefacts and focuses on the process of ‘making’ heritage (Harrison 2013; Waterton 2014). Heritage is assembled, for instance, by being categorized, listed and managed as a heritage site (Harrison 2013). This means ‘heritage should be considered to be the creation of a past in the present’ and is thus ‘a product of not only the human imagination, but the entanglement of humans and objects, pasts and presents’ (Harrison 2013: 37–38). This opens the way for a more-than-representational approach, where the world is understood as always being in the making, constituted of assemblages of both human and nonhuman actors (Müller 2015). In this way, people ‘construct meaning around their subjective lived experiences’ (Waterton 2019: 97).

Heritage can be official, recognized by the authorities and protected through legislation, or unofficial, when it is recognized by individuals or groups but not formally protected (Harrison 2013). Official heritage is often defined by heritage experts, focusing on the monumental and aesthetic appeal (Smith 2006). Storm (2014) stressed that even though heritage is often considered to be something positive, this is not always the case. She identified three approaches towards postindustrial heritage, differently aligned with an official heritage discourse (Storm 2014). These approaches are: re-used heritage, which are sites that are redefined and used for other purposes; ruined heritage sites, which are abandoned and decaying sites; and undefined heritage sites, which are not acknowledged as significant and are not included in the official heritage.

The current study is based on publicly available planning documents, literature, media reporting and observations. Planning documents include the National Heritage Board’s decisions about heritage sites of national interest and the County Administrative Board of Norrbotten’s investigations and decisions concerning listed buildings. The local authority’s urban planning documents include comprehensive plans, development plans, conservation plans and associated documents. In addition, agreements with the mining company and documentation produced by the county museum and other consultancies were examined. The media reporting, particularly articles about built heritage relating to Kiruna’s urban transformation, in Norrbotten’s two main regional newspapers have been scrutinized. In addition, Facebook groups such as ‘We Who Mourn That Kiruna Is Being Torn Down’ (‘Vi som sörjer att Kiruna rivs’), ‘Mine Town Park in Kiruna’ (‘Gruvstadsparken i Kiruna’) and ‘We Who Mourn That Malmberget Is Being



**Figure 5.1.** Kiruna, between the iron ore mountains, with the subsidence in the foreground. Photo: Daryoush Tahmasebi © Norrbotten's Museum

Torn Down' (Vi som sörjer att Malmberget rivs) have been a way to become acquainted with local discussions about built heritage. In addition, observations of what has been taking place in the settlements as the urban transformations have progressed are included.

## The Urban Transformations

Malmberget and Kiruna are located in the northernmost part of Sweden, above the Arctic Circle, in the scarcely populated inland region. A view over Kiruna is shown in Figure 5.1. Prior to the establishment of the towns to support mining operations, the region was used seasonally for hunting, fishing and reindeer herding by the Indigenous Sami populations. For centuries, a Finnish culture, the Tornedalians, also inhabited the region. The mining industry drastically reshaped the landscape, continuously transforming it and also significantly affecting the development of the towns there. It is the mining industry that manifests itself in the official built heritage.

The mining company LKAB operates the iron ore mines in both Malmberget and Kiruna. It was founded in 1890 by private investors, but has been owned by the state since the 1950s. The iron mineral deposits have been known since the seventeenth century and there were some attempts at mining in Malmberget historically. However, mining was not profitable until the late nineteenth century, when technical developments made it possible to refine the iron ore into steel efficiently. In addition, the building of a railway connecting the inland area with ports was essential in developing the mining industry (Hansson 1998). Both the mining industry and the railway were labour-intensive, the need for housing extensive and the establishment of the towns becoming a necessity. The mining in both Malmberget and Kiruna started as open-pit mines. Since the 1950s, all mining has been underground. In Malmberget, the main level is 1,250 metres below the surface and in Kiruna, 1,365 metres below the surface.

### *Malmberget*

The towns Malmberget and Koskullskulle are located near Gällivare. Gällivare municipality has roughly 18,000 inhabitants, of whom 10,500 are in Gällivare, 1,600 in Malmberget and 800 in Koskullskulle. Small-scale iron ore mining has been carried out on the site since the eighteenth century. When the railway opened in 1888, mining became profitable and mining activities quickly developed, which meant that the mining company needed to employ a large number of workers. The ownership of the Malmberget mine shifted a number of times and little effort was made to organize either housing or other public amenities. The market and church town of Gällivare, which was founded 1742, was too far away due to the limited transportation options at the time, and consequently a shantytown rapidly developed in Malmberget. There was no overall planning of the settlement and the workers built houses from whatever building materials they could find. The first town plan was not adopted until 1899. By then, the mining company had started to develop housing in a company area. This resulted in three, separately administered areas: a company area, an adjacent service and supply town, and a railway area.

During the 1950s, mining of the iron ore deposit beneath the town centre began. This resulted in a huge open pit, dividing the town. The centre was relocated to the old railway area, which had become redundant in the 1960s when LKAB reorganized and moved the processing and transport of the iron ore to an industrial site outside Malmberget. A new school, public baths and stores were built. The only building to be relocated was the church, which was partially dismantled and was rebuilt and partially reconstructed (Johansson 2007).

As mining continues, more areas are affected by subsidence. In 2009, parts of the company area were cordoned off and eventually demolished. An example of a historic building behind the enclosure is shown in Figure 5.2. The local authority plans, together with LKAB, to gradually transform almost the entire town to an industrial area (Gällivare Council 2014). This will be implemented in four phases over the next fifteen years. Gällivare is being developed with new housing areas and schools, sport facilities, etc. to replace those in Malmberget. Initially, LKAB intended to move many of the buildings affected by subsidence, not only those in the company area. A few detached houses from the 1960s were moved until a brick building was destroyed during the moving process. At this point, the decision was reversed. However, about thirty historic buildings have since been moved from the company area in Malmberget to Koskullskulle. It is planned that about five historic buildings will be relocated to newly developed areas in Gällivare.



**Figure 5.2.** One of the historic buildings in Malmberget, behind the enclosure. Photo: Daryoush Tahmasebi © Norrbotten's Museum

### *Kiruna*

Kiruna, in the municipality of Kiruna, is located 120 kilometres north of Malmberget. The municipality has roughly 23,000 inhabitants, of whom 17,000 live in the town of Kiruna. The poor housing situation and the social problems in Malmberget were a national concern at the turn of the nineteenth century. Because of this, there was resistance towards opening additional mines in the region. In order to obtain permission from the state to do so in Kiruna, the mining company LKAB had to guarantee it would provide housing and public amenities for the workers (Brunnström 1981). This contributed to Kiruna being designed as a model company town, with an adjacent service and supply town and a railway area (Brunnström 1981, 2008). The town was built between the iron ore mountains Luossavaara and Kiirunavaara, meaning it was between the workplaces and had a favourable climate. A town plan was approved in 1900 and building regulations were strictly implemented. LKAB invested in modern housing in the company area, provided schools, a hospital and a fire station, and built a tram system connecting the residential areas with the workplaces.

Kiruna was granted town rights in 1948, after which the company area, the service and supply town, and the railway area merged. During the 1950s and 1960s, Kiruna expanded and new neighbourhoods were created. The town centre was renewed, during which many of the old, small-scale buildings were replaced with new, larger buildings. During the 1970s, a neigh-

bourhood, close to the mining area, was affected by subsidence and was demolished.

In 2004, Kiruna Council announced it would move the town in order to allow continued mining. There is no other town nearby, as is the case with Malmberget, so a new town centre is needed. The idea is gradually to abandon the areas next to the mine and extend the town in the other direction. This will happen phase by phase over the next fifteen years. A green area will act as a buffer zone between the industrial area and the built environments. As in Malmberget, areas are gradually enclosed and the first buildings were demolished 2015. In 2013, a competition was held to design the new town centre. This area is located northeast of today's settlement and will be developed over the next few years. A new town hall was the first building to be constructed in the new centre and was inaugurated in 2018. LKAB is also establishing a new company area northwest of the current settlement. Here, it is building new housing. A few historic buildings have also been moved to this location. In addition, a new main sewage line and a new electricity supply system began to function in 2009, a new route for the railway to pass Kiruna was opened in 2012 and a new route for the public road E10 was opened in 2020.

## **Stakeholders**

A few major stakeholders influence the agenda of the urban transformations and the management of the built heritage during the processes. The main actors are Gällivare Council and Kiruna Council in each respective municipality. The local authorities have a monopoly on planning policy and guidance with respect to the use of land and water resources, and they must promote public interests when drafting plans. This is formalized through the creation of comprehensive plans and detailed development plans, which generally require environmental impact assessments. Often sector investigations and analyses, such as conservation plans and cultural heritage analyses, are drafted as supplementing planning documents. Another key actor is the mining company LKAB, which is responsible for compensating for losses due to the mining activities. This is achieved through negotiations with the local authorities and private homeowners. The company is also the owner of the housing in the company areas. The state is mainly represented through the County Administrative Board, which has the responsibility of ensuring the national interests and that the local authorities comply with legislation. It also has a formal role in making decisions about buildings protected through the Heritage Conservation Act. The County Administrative Board has had tenured conservation officers throughout the urban transformation processes,

but has hired consultants for some investigations. The local authorities' and LKAB's investigations and analyses have mainly been undertaken by consultants commissioned to do the work. Other actors involved in the urban planning processes are the National Heritage Board and the National Board of Housing, Building and Planning. Their main responsibility is to follow and support the urban transformations on behalf of the government. They have functioned as advisors and have arranged various conferences and seminars. Other stakeholders include local interest groups and individuals in the communities. They do not have the same opportunities to affect the outcome of the urban planning, but can participate in the formal planning processes through consultations. Informally, reactions to the urban transformations are voiced through debate articles, artistic expression, documentation and so on.

## Protected Heritage

### *Heritage Sites of National Interest*

Both Malmberget, Koskullskulle and Kiruna are designated heritage sites of national interest for the purpose of conserving the cultural environment (National Heritage Board 1990). Malmberget and Koskullskulle was highlighted as being well preserved, with the company areas and the service and supply towns having buildings representative of its time. Kiruna was highlighted as an urban environment and industrial landscape, developed as a model town, with a town plan and architecture of high quality. In 2010, the County Administrative Board produced a more detailed description and conducted a value assessment of the Kiruna site as a baseline study for decisions on how to manage the built heritage in the urban transformation. It concluded that a large number of buildings must be relocated in order to maintain the significance of the heritage site as Kiruna transforms (County Administrative Board of Norrbotten 2010).

### *Built Heritage in Kiruna*

In Kiruna, three buildings listed according to the Heritage Conservation Act have been affected by the urban transformation. Hjalmar Lundbohmgården, the residence of LKAB's first manager, was listed in 2001 (County Administrative Board of Norrbotten 2001a). It was owned by the local authority and was one of the first buildings affected by the urban transformation. LKAB and the Kiruna Council agreed to move the building, for which they obtained permission (County Administrative Board of Norrbotten 2011b). After this decision, the new location was discussed and investigated. In 2014, it was decided that the building was to be handed over to LKAB, with the promise that it would remain open to the public (Kiruna Council and LKAB



2014). The building has since been moved to LKAB's new company area northwest of the old town centre.

The mining company and the local authority agreed to demolish the railway station and the town hall, and requested that their protection be revoked (Kiruna Council and LKAB 2010). The railway station was listed in 2003 (County Administrative Board of Norrbotten 2003) and the town hall in 2001 at the request of Kiruna Council (County Administrative Board of Norrbotten 2001b). After investigation, the County Administrative Board revoked the protection of the railway station (County Administrative Board of Norrbotten 2011a). The decision was driven by the projected risk of moving the entire building, and because dismantling and rebuilding would be unreasonably costly compared to the building's heritage values. The railway station has now been demolished and a temporary station has opened along the new railway route.

The town hall was a more complicated issue. It was built in 1963, when Kiruna was granted town rights, and it was considered to have significant heritage value. Its value was both architectural, being a monumental and imposing brick-and-concrete building, with artistic aspects, and because of its social function as the town's 'living room', open to the citizens. The local authority intended to reuse some of the artistic detail, such as the bell tower and the doorknobs, but had come to an agreement with LKAB that the mining company would finance the construction of a new town hall. However, the County Administrative Board investigated the possibility of moving the building. The specialist it consulted concluded that it would be possible to dismantle and rebuild a large part of the existing building, as well as rebuild the concrete construction based on the original drawings (Gezelius 2011). The investigation also showed how the building could be modernized, for example, by upgrading technical specifications, increasing energy efficiency and improving accessibility. There was also an estimate of the costs. Based on this investigation, the County Administrative Board decided to reject the application to revoke the protection of the building. Instead, the regulation was amended to allow the building to be dismantled, rebuilt and partially reconstructed at a new location (County Administrative Board of Norrbotten 2012). The local authority went to the Administrative Court in Luleå to appeal this decision. However, the court approved the decision to dismantle and rebuild parts of the building (Administrative Court in Luleå 2013). This decision was also appealed by the local authority and was taken to the Administrative Court of Appeal. This time, the verdict was in favour of Kiruna Council (Administrative Court of Appeal in Sundsvall 2014). Thus, the building lost its protection. The town hall has since been thoroughly documented and was demolished in 2019. A new town hall has been built in the new town centre and was inaugurated in 2018.

In Kiruna, the local authority adopted a conservation plan in 1984. In this, significant buildings, areas and parks were highlighted (Kiruna Council 1984). The local authority has gradually implemented the conservation plan by protecting buildings in detailed development plans (Sjöholm 2008). However, a controversy arose around 2009, when the local authority was creating a new detailed development plan for the area into which the mine would first expand. The area was part of the company area, with a number of protected buildings. In the draft consultation version of the detailed development plan, the local authority proposed the relocation of all protected buildings within the planning area (Kiruna Council 2009). This was supported by the local authority's value assessment of the buildings, which was part of the environmental impact assessment associated with the detailed development plan (Kiruna Council 2010b). However, this proposal was later withdrawn and in the adopted version, only five of the twenty-three originally protected buildings within the area would be relocated (Kiruna Council 2010a). During the amending of the detailed development plan, the local authority and the mining company drew up an agreement under civil law. This document outlined which buildings would be kept and relocated, within the whole town and during the entire urban transformation process. According to this agreement, up to twenty-one buildings would be moved, including the church and a few wooden houses (Kiruna Council and LKAB 2011). The media reported the results of an internal investigation undertaken by LKAB, in which the mining company concluded that it would be too expensive to move the historic buildings (Bergmark 2009; Poromaa 2009; Sternlund 2009). However, the County Administrative Board was reluctant to approve the detailed development plan and argued that more buildings needed to be relocated. The discussions continued between the authorities and the mining company. LKAB threatened to close the mine if the detailed development plan was not approved (Forsberg 2011b). Eventually, the controversy over the detailed development ended when it was agreed that two additional buildings would be relocated and the local authority would undertake a cultural heritage analysis of the town. The cultural heritage analysis was conducted in 2014 (Kiruna Council 2014). However, the long-term management of the historic buildings and environments has not yet been resolved.

#### *Built Heritage in Malmberget*

In Malmberget, the historic buildings have not been protected to the same extent as in Kiruna. The local authority adopted a conservation plan in 1984 (Gällivare Council 1984), but never implemented it in its detailed development plans. In Malmberget, this is partly because the company area was never included in the town plan and was thus not under the local author-

ity's regulations and lacked detailed development plans (Sjöholm and Nilsson 2011). Representatives of Gällivare Council also considered the protection of the company area to be the state's responsibility. The reason for this was partly because LKAB is state-owned and partly because designating the area a heritage site of national interest was a state decision (Storm 2014).

There have been proposals to list buildings based on the Heritage Conservation Act. The County Administrative Board has investigated buildings such as the company hotel and some of the industrial remnants in the company area, and found that protection would have been desirable. However, LKAB did not agree to have the buildings listed, so the County Administrative Board decided not to proceed (County Administrative Board of Norrbotten 2002).

## Documentation

Documentation of the historic buildings and environments is also used as a means of conservation. The documentation is extensive. Protected buildings are documented before relocation or demolition, but unprotected and not previously valued parts of the built environment are also included. Much of the documentation is produced either by consultants commissioned by LKAB or with financial support from LKAB.

In Malmberget, buildings in the company area were documented by the county museum commissioned by LKAB (Norrbotten's Museum 2009). A year later, LKAB and the local authority undertook a pilot study, investigating means of documentation and conservation (Gällivare Council and LKAB 2010). Malmberget has also been documented by the local authority through interviews, photographs, film and model making (Gällivare Council 2015). This documentation focused on the period of 1960 onwards, because the history of the town until then had already been recorded.

In Kiruna, documentation of protected buildings such as Hjalmar Lundbohmgården (Norrbotten's Museum 2014a), the railway station (Norrbotten's Museum 2014b), the town hall (Norrbotten's Museum 2017) and workers' housing (Historiska Hus AB 2017) was commissioned by LKAB. In addition, housing from the 1950s and 1960s, which had never been considered built heritage, was documented – for example, the block called Ullspiran, which was the first to be demolished (Historiska Hus AB 2014). An author who grew up in the Ullspiran neighbourhood interviewed people who had also lived there and published a book, partly based on the question 'how does it feel to move a town?' (Laestadius 2014). In another initiative, aiming to capture the essence of daily life in the town, a photographer has continuously documented Kiruna, its inhabitants and built environments

over a number of years, resulting in four books so far (Törmä 2010, 2012, 2015, 2018).

## **Significance of the Built Heritage**

Studies suggest that there is a consensus between authorities and the local communities about which parts of the built environment are valued as built heritage, both in Malmberget (Martins Holmberg 2008) and Kiruna (Sjöholm 2008). The company areas in the towns and some additional, preferably older, wooden houses, as well as the church and the (now demolished) town hall in Kiruna, are among the highlighted buildings. A survey undertaken in Kiruna (Kiruna Council 2007) also supports the notion of buildings that are liked by the locals corresponding to those included in the conservation plan.

The mining industry, its facilities and remnants are more contested. The industrial landscape is partly the motive for designating Kiruna a heritage site of national interest (National Heritage Board 1990). However, this is not reflected in the discussions about the future developments of the town. The open pit in Malmberget is neither officially recognized as heritage nor described as such by the local community, but it is a place that most inhabitants relate to (Olshammar 2008). Studies also suggest that it is used as a way to communicate collective memories (Storm and Olsson 2012; Storm 2014).

The heritage values often referred to in planning documents and decisions are based on historical, cultural and social values. Value assessment guidelines, developed by the National Heritage Board and influential within conservation practice, distinguish between historical values and aesthetic and socially engaging values (Unnerbäck 2002). Historical values refer to historical knowledge of buildings, architecture or society, whereas aesthetic and socially engaging values include architectonic or artistic appreciation, symbolic value, or the importance of continuity in the built environment. Aspects such as authenticity, uniqueness and representativeness are considered to be motives that strengthen the case for conservation.

The media reporting following the controversies regarding the detailed development planning in Kiruna and the delisting of the town hall reveal arguments for conservation or demolition of the built heritage. The historical significance was evident. The General Director of the National Heritage Board argued in a debate article that the outcome would determine 'which history we will be able to tell about Kiruna in the future and thereby about the modern Sweden of the 20th century' (Liliequist 2011: 29). Early on in the process, the mayor argued for conservation of the historic buildings, claiming that 'they have a cultural history worth the name and represent a part of Hjalmar Lundbohm's vision of Kiruna as a model town where the

workers should live in a planned area and not in shanty towns' (Bergmark 2009). Later, the succeeding mayor reversed the argument, claiming that many would appreciate the opportunity to have new buildings instead of the old (Naess 2011). She also argued that many of the historic buildings were in poor condition and would be difficult to integrate into the new townscape (Forsberg 2011a). It is unclear whether the shift in attitude was caused by the personal opinions of the mayors or was dependent on the outcome of negotiations with LKAB. However, local interest groups disagreed with the statement that many people wanted new housing, and referred to surveys and dialogues they themselves had organized with the inhabitants, in which a significant portion of people supported the conservation of the town's historic buildings (Ericson and Sammelin 2011). The political opposition leader criticized the argument that translocated buildings would not fit into the new townscape because, at that point, no plans had been drawn up for the new town centre area (Unga 2011).

If it is unclear which buildings to move and where to locate them, it is less controversial how to manage the areas that are vacated. The Mine Town Park in Kiruna, that is, the green area that functions as a moving buffer zone between the industrial area and the built environment, is intentionally designed to be reminiscent of the vanished houses and of the settlers who first occupied the town in 1900. Swedish artists were invited to submit proposals about how to develop the transforming green area, and the artistic design selected is intended to convey the memory of the demolished built environment (Forsberg 2012, 2015). Building materials from the demolished buildings were used to create patterns reflecting the shapes of the original building foundations, of which one of the artists said 'we think the material itself has a value and carries memories and history' (Dahlström 2015).

Mourning is also a theme expressed in Facebook groups. The group 'We Who Mourn That Kiruna Is Being Torn Down' started in 2010. They state that 'you don't need to oppose development or the future to be sad about a very special town being torn down and moved. It is simply sad. We believe it is a strength to remember and to be sad. We also believe we will build the new in a better way if we remember and are allowed to mourn the old'. This was followed by the group 'We Who Mourn That Malmerget Is Being Torn Down' in 2011. They simply state that 'it is not about having the mine or not, but about it being sad that a community's buildings are torn down and the inhabitants obliged to move'.

The question of which parts of the built environment were considered significant and worth conserving (and why) was asked in a survey of pupils at the upper secondary school in Kiruna (Sjöholm 2008). The most important motives for conservation were that the buildings were considered beautiful or were appreciated for their design. Historic values were also widely recognized

as an important aspect. Some buildings were highlighted as being significant for the town's identity; Kiruna would not be Kiruna without its signature buildings. Personal memories or connections to a place also added value.

## **Conclusion**

The mining industry and the development and reorganization of the industry over time is constantly reshaping the landscape in and around Malmberget and Kiruna. The sparsely populated area, the harsh climate and the surrounding natural environment blend with the humanmade cultural landscape, shaped by mining activities and urban development. The towns are acknowledged heritage sites, but the significance of their built heritage is in flux and is being used in various ways. In the short term, as a consequence of the contemporary urban transformations dictated by mining, the urban landscape is shifting and the built heritage is being redefined. As the tangible objects and physical features of the towns are inevitably changed, so does the inhabitants' interaction with them.

Parts of the built heritage are being reused during the urban transformations. Some of the historic buildings and historic environments have been reaffirmed as significant built heritage. The expressed motives are historic values, but they are also well liked and aesthetically appealing. From a pragmatic point of view, the historic buildings selected for relocation are few, comparatively small, easy to move and easy to reuse. Most houses contain residential apartments for rent and will provide relatively inexpensive rental apartments after the relocation. This makes it practically and economically feasible to agree on their conservation, and is possibly a means of balancing new developments with conservation of the historic environment. The only building that is likely to have a different use is Hjalmar Lundbohmsgården in Kiruna. It will not be converted into apartments, but is likely to be transformed to a meeting place primarily for the mining company.

Part of the built heritage is being transformed into ruins. There is a tendency for maintenance to be neglected before areas are vacated, but, more notably, there are the designed ruins of the Mine Town Park in Kiruna. However, historic buildings that are, or will be, demolished may be just as significant. Interactions that precede demolition show there is a sense of loss, which – at least to some extent – is diminished through documentation. There are also narratives highlighting conflicting views on what is considered old and outdated on the one hand, or new and modern on the other. Modern housing standards give prominence to the proposed new developments. In Kiruna, building new and modern is framed as the essence of the concept of the model town; the original town was renowned for its modern features.

There is also undefined heritage, which gains attention in, or maybe because of, the urban transformations. Prior to the contemporary urban planning processes, it was predominantly the original parts of the settlements and the oldest buildings that were acknowledged as built heritage. The everyday, more mundane buildings, neighbourhoods from the 1950s and onwards gain attention as they are about to be demolished and incorporated into the Mine Town Parks. They are not emblematic of the towns in the same way as the more architecturally distinctive buildings. However, they do represent another era, when the mining company and the settlements were flourishing. They are also an integral part of many lives; to people who have lived there and called it home, they have significance. The need to mourn that is expressed and the documentation that is produced as part of the transformation signal the importance of the built environment to its inhabitants.

From a longer-term perspective, it is possible to outline more distinct changes in the landscape related to industrialization and changing conditions within the mining industry. The towns and the urban landscapes we see today are themselves a result of the mining industry and the change of land use that took place in the late nineteenth century, replacing the land use of the Sami and Tornedalians populations. However, the heritagization is closely related to the mining industry and helps legitimize the industrial use of the region.

The relationship between the mining areas and the urban landscape is also dynamic. The towns were built to facilitate mining. In times of recession and when mines have been closed, populations have diminished and the capacity to develop the communities has been limited. For industry as for heritage, there is ambiguity. The interaction between the mines and the towns is evident, but the industry is constantly changing, forward-looking, in search of new technologies and more refined iron production processes. Remnants of outdated industrial sites are not only in the way, but also represent old-fashioned and poor working and living conditions. The 'old' mining towns are, from this perspective, also a thing of the past.

The built heritage in urban transformation is part of meaning making, as it reinforces the towns' identity and reason to exist as closely linked to the mining industry. Buildings that are reaffirmed as significant heritage, ultimately by being moved, are simultaneously connected to the towns' past and to the future of the communities. The former residential areas that are transformed into Mine Town Parks are a way to embody the urban transformations and the gradual changes evident to all locals. Heritage is part of the process, but is always subordinate to the prospect of continued mining.

Understanding how the heritagization processes unfold and interact with more-than-representational ways of perceiving the historic urban landscape opens up new interpretations of what the significance of official heritage

may be. If a prerequisite is that heritage is shaped by contemporary needs and demands, it seems as if, in Malmberget and Kiruna, the built heritage is being defined between the two. On the one hand, there is a need by (at least some) of the inhabitants to keep familiar structures and memories of the past. On the other hand, there is a demand both from the authorities to preserve at least protected heritage, but also from the mining industry to minimize the amount of built heritage – thus, the urban landscape is being reshaped.

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