

GROWING SMALLER

RURBAN INTERVENTIONS FOR DEGROWTH

Oleg Sokolovskyi

Chalmers School of Architecture | MPDSD

Rurban Transformations | 2022

Examiner: Julia Fredriksson

Supervisor: Ida Röstlund



Growing smaller: Rurban interventions for degrowth

Oleg Sokolovskyi

Chalmers School of Architecture

Department of Architecture & Civil Engineering

Examiner: Julia Fredriksson

Supervisor: Ida Röstlund

Architecture and Planning Beyond Sustainability

2022

ABSTRACT

Many small towns in Swedish rural areas were developed around one dominating industry which they have been depended on. But high dependency on industries and economic growth often made them vulnerable to unexpected crises. Yet, the current consensus is that continuous economic growth is necessary for prosperity and freedom. Municipal plans and documents prioritize attracting businesses as a remedy for depopulation in rural areas. But as history has shown, there is a need for example of different forms of development there.

The thesis aims to explore how planning and design can bring positive change in rural areas that have been affected by shrinking population. The case of this thesis is a town Silverdalen in Hultsfred municipality. The design proposal takes into consideration the context of the place and its history. The thesis will further explore how small shrinking town with industrial heritage can be transformed with spatial interventions that add new uses to post-industrial places. This is done by researching practices of degrowth and how they can be applied to a specific context.

The thesis work is a combination between the methods research by design and research for design. The theories of rural shrinkage and degrowth have been studied to create an understanding on how a small town with industrial heritage can be revitalized. By exploring the context of the place, its history, and possible stakeholders, a proposal has been developed. It takes its cues from practices of degrowth – reuse of existing structures, create possibilities for sharing economies and generate social activities. The result is several design interventions that together strengthen the public space and revive previously abandoned places.

Keywords: degrowth, rural shrinkage, post-industrial places, adaptive reuse.

ABOUT THE AUTHOR

Oleg Sokolovskyi

Education

Chalmers University of Technology
2020-2022

Master's Program in Architecture and Planning Beyond Sustainability, 60 hp
*Planning and design for sustainable development in a local context;
Architectural heritage and transformation; Social-ecological urbanism.*

Blekinge University of Technology
2017-2020

Bachelor's Program in Spatial Planning, 180 hp

Work

Internship at the Planning Office, City of Gothenburg
Summer 2021

TABLE OF CONTENT

BACKGROUND	6
METHOD	9
THEORETICAL FRAMEWORK	11
REFERENCE CASES	19
CONTEXT AND SITE	24
CONCEPT	40
DESIGN PROPOSALS FOR INTERVENTIONS	44
DISCUSSION	64
REFERENCES	68

BACKGROUND

Bruksorter, or mill towns is a relatively usual phenomenon in Swedish countryside. Once thriving towns based around an industrial production, such as timber, glass, or paper, today they are often small settlements with declining population. Many of them may lack qualities that can attract new population or visitors in order to continue thriving. Rural municipalities in Sweden often point out the importance of economic growth for attracting new inhabitants or keeping the existing (Hultsfred municipality, 2010, p.14). In municipal planning documents or political visions it is described as being business-friendly or having a competitive economic life.

At the same time, this can be seen as history repeating itself. For 50 years ago mill towns being entirely depended on industries were vulnerable because of that. As factories and mines were shut down, most of the working population became unemployed which led to the town's decline. Due to the production processes becoming more automated in the modern world, towns that are depended on manufacturing are more sensitive to changes than before.

The idea of constant economic growth as a solution for everything has been dominating in the western world. Growth is associated with well-being, and it is assumed that it benefits the whole society. Ideas of degrowth oppose this view and conversion of services and products into commodities with monetary value. They propose a different society with a social-ecological transformation that leads not to “less” but “different” – different activities, forms of energy, relations with nature (Kallis et al., 2015, p. 4). Some scholars argue that concept of degrowth is especially suitable for the declining rural areas. This is because growth is founded on scarcity, while in shrinking areas there is a surplus (of buildings, services, infrastructure etc.). Growth principles require density and liveliness, which may be lacking in declining rural areas. In this situation it is important to bridge the distance between people and it can be done by joining activities and collaboration. (Hospers & Reverda, 2014, p. 24-27). There is need for ways of developing with focus on existing qualities and local context. Shrinking is not a cause for pessimism but an opportunity for localities to “grow smaller”.

Another critique towards ideas of endless growth is its effect the planet. Infinite growth cannot continue on the planet with limited resources. There is also a correlation between GDP and carbon emissions (Kallis et al., 2015, p. 5). Therefore there is a need for degrowth transition with a focus on sharing economy, recycling and use of local resources.



AIM

The thesis aims to explore how spatial planning can bring positive change in rural areas that have been affected by shrinking population. The design proposal takes into consideration the context of the place and its history. The thesis further explores how small shrinking town with industrial heritage is transformed with spatial interventions that add new uses to post-industrial places. This is done by researching practices of degrowth and how they can be applied to a specific context.

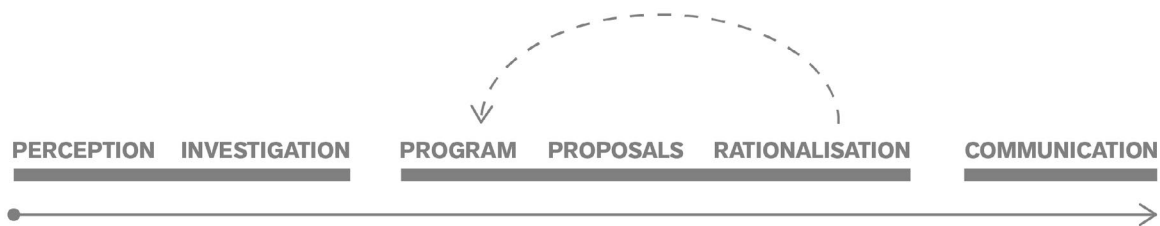
RESEARCH QUESTIONS

How can ideas of degrowth be applied in spatial planning of rural areas?

How can architecture of degrowth strengthen existing qualities of a mill town?

METHOD

In this thesis several methods are used. One method used here is *research by design*. It is characterized by development work such as design experiments that are communicated during the work. The method is relevant when design process is required to produce new knowledge about the world. For example, evaluating advantages or disadvantages of different sites or when spatial possibilities of developing a site are explored with designing (Roggema, 2016, p. 3-4). According to Roggema, research by design method should consist of six steps: basic perception, investigation, program, proposals, rationalisation, and communication. Basic perception and investigation are prerequisites for the research process and include theoretical research of the subject, analysis, and the problem formulation. The program defines partial assignments and goals that later are developed into a concrete proposal. Rationalisation is a theoretical explanation of the proposal and its relation to the program. The last step is communication which is a presentation of the final result (Roggema, 2016, 6-7).



Research for design is another method used here which is combined with research by design. It is described as gathering of reference materials, which is relevant for this thesis. The goal of this method is not communicable knowledge, but rather an investigation into previous research (Frayling, 1993, p. 5).

Literature reviews is used in this thesis for several reasons. First, is to define a theoretical framework for this study. The relevant concepts used here are touching on the topics of urban norm, rural shrinkage and degrowth. A historical overview of the site is also presented, in order to get a better understanding of the context. Second, is to study references consisting of documented design projects. For this method to be credible, a researched should carefully pick the material that comes from reliable sources (Martin & Hanington, 2012, p. 258). In this thesis the studied literature consists of published books and scientific articles accessible from Chalmers University of Technology's library. When using this method, the studied literature should be relevant for the project and stated how it informs the design investigation. Referencing should be clear and consistent (Martin & Hanington, 2012, p. 258).

The last method is *online survey*. A questionnaire was shared with the target audience with an aim to learn more about the site. An online survey is a good way to learn about the users of the place and what they are looking for. A detailed description of the survey can be found in the appendix.

DELIMITATIONS

Geographically this thesis and the design proposal is limited to the town of Silverdalen. The thesis does not consider the technical or legal regulations regarding its implementation, for example municipal plans, land ownership or construction details. It does relate to local businesses and organizations to get an understanding of who a possible stakeholder might be for the project. It also considers the economic conditions in the town, to response to them in the proposal. The thesis is not about applying urban qualities to Silverdalen or reversing the trend of its depopulation. It is about exploring possibilities of spatial planning in declining rural areas beyond norms of economic growth.

TERMS

Degrowth – shrinking of production and consumption with the aim of achieving social justice and ecological sustainability.

Mill town – a settlement that developed around a dominating factory that is also a main employer. Often producing timber, paper or glass.

Rural shrinkage – a process of negative demographical change in rural areas caused by declining population that leads to mismatch between supply and demand of services.

Adaptive reuse – finding new uses for buildings, structures or things.

Urban norm – a popular opinion where cities are seen as more attractive and associated with future, success and sustainability. Non-urban places are described as problematic and can be excluded.

THEORETICAL FRAMEWORK

In this chapter the theoretical framework is discussed. A brief description of establishment of urban norm is followed by discussion about role of degrowth in shrinking rural areas. Further, practical application of degrowth in architecture is described, finished by a short introduction to a concept of adaptive reuse.

Establishment of urban norm

Urbanisation has long been an ongoing trend in the world and since 2008 more people are living in the cities than in rural areas (UNFPA, 2007, p. 1). In Sweden this breaking point was reached in the 1930s when rural areas started losing population in favour of cities. Since then, the population gap has been steadily increasing. This was a result of ongoing industrialisation as well as large investments in cities, such as the 1960s Million Programme and subsidies paid to those who wished to move to cities (SCB 2015a). Due to better housing, economic growth, and increased welfare cities were seen as more attractive places to live. Other factor that strengthened the domination of urban areas were two municipal reforms in 1952 and 1971. The reforms meant mergers of smaller (often rural) municipalities and centralisation of politics, service, and development (SOU 2006:101, p. 44). This led to further establishment of cities as a dominating norm.

At the same time, in the beginning of the 1970s, the rural-urban migration turned around. A phenomenon known as counterurbanisation occurred in parts of the western world, including Sweden. The concept refers to population reconcentration, from areas with more concentration to less concentration. In Sweden this meant a population increase in rural areas, 120 years since the beginning of urbanisation. This population shift lasted only one decade, as the 1980s saw both increasing population in rural and urban areas. In the 1990s, large urban agglomerations saw largest increase in population and slight increase in rural areas (Westlund & Pichler, 2000, p. 3). Several reasons that explain counterurbanisation were named, such as lower cost of living in the countryside as opposed to high housing costs in cities; changed lifestyles that are traditionally rural such as equestrian sports (Westlund & Pichler, 2000, p. 18).

During the last two decades, Swedish cities kept on growing, mostly on account of immigration and birth rate. The population shifts from rural to urban areas are not as large as they used to be, but urban domination still persists. Transition to a knowledge-based economy led to a polarising labour market, as most jobs have been created in large urban agglomerations (Enflo, 2016, p. 11). In 2015, 85 percent of Swedish population lived in cities (SCB 2015b). The abovementioned reasons have led to today's situation when rural-urban inequalities in education, welfare and income have been increasing since 1980s. Kerstin Enflo argues that this has led to a new regional exclusion where many rural municipalities fall behind in development (2016, p. 13). Urbanisation processes should also be seen not only as population shifts, but as concentration of resources and expansion of urban areas (Björling & Fredriksson, 2018, p. 7).

The geographical distinction between rural and urban is one of the oldest, argues Michael Woods (2011, p. 3). Words "city" and "countryside" have clear meanings and associations, decades of intensive urbanisation and political and technological changes have led to contrasting images of rural and urban. While countryside was seen as peaceful and simple, cities were associated with

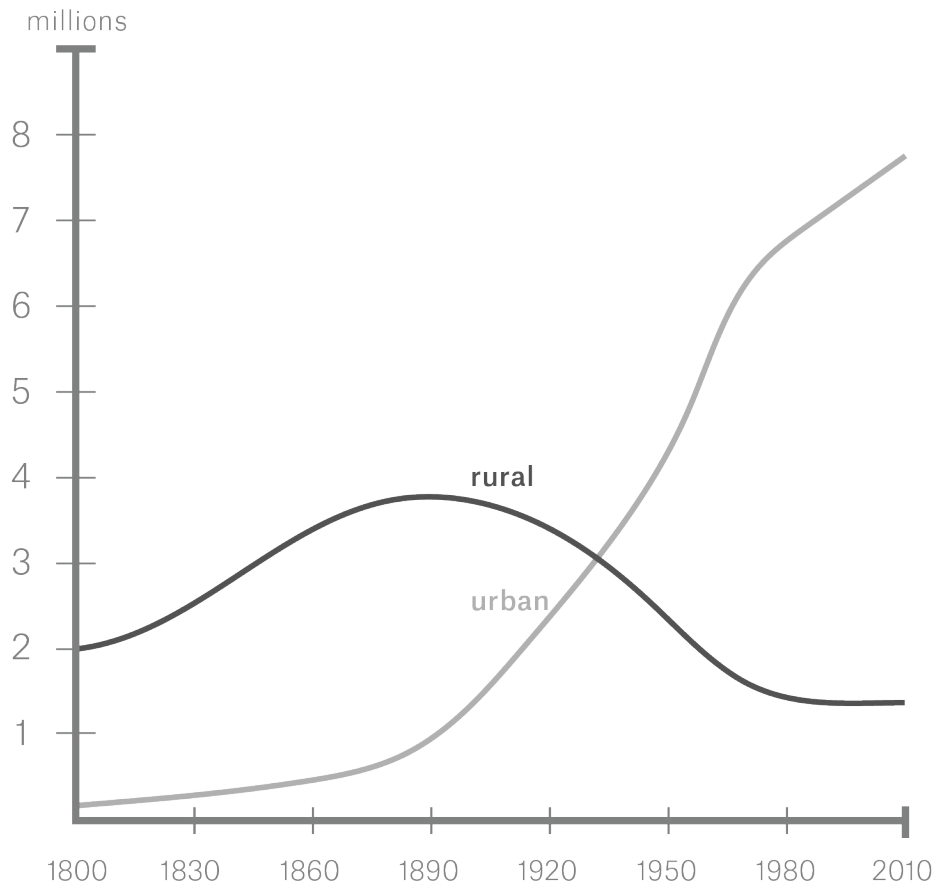


Diagram showing population shifts from rural to urban areas (SCB 2015a)

knowledge and light. The relation between the two has not been equal, as rural areas are often described as sources of food and natural resources in relation to urban centres (Woods, 2011, p. 6). Several Swedish government documents also strengthen the image of rural areas as deviation from the norm, which is a city. Rönnblom argues how countryside is described as being unique and requiring development. In contrast to this, the city is seen as normal and desirable (Rönnblom, 2014, p. 10).

Rural shrinkage and degrowth

Urbanisation has had great consequences for development in rural areas. It has led to uneven demographic change, where it is often young people who move to cities and the elderly stay (Hospers & Syssner, 2018, p. 9). This often results in other problems, such as shutdowns of schools and other social institutions. It is also implied that while some cities are growing, many municipalities are stagnating or shrinking in terms of demographic development. In Sweden, around half of all municipalities have been losing population (Syssner, 2014, p. 7). Areas affected by negative demographic change are almost always seen as problematic, by politicians, companies, or local population. As opposite of shrinkage, growth is associated with success and is desirable. Growth paradigm has long been and still is a leading principle in society, something that further complicates the discussion about rural shrinkage. Reverda, Hermans and Maurer (2018, p. 29) argue that looking at a struggling countryside not as “shrinking” but rather as “growing smaller” may change its image. The authors describe a distinction between growth and shrinkage (degrowth) which helps to understand new directions for rural development. Growing areas refer to presence of too many people in one place which leads to a greater supply of services, functions and structures that support them. In shrinking areas there are too few people in a too spacious setting, which leads to surplus as the infrastructure is left unused. The condition of surplus asks us new questions about relationship between humans and the environment. A more nuanced approach is needed when facing decline, in opposite to when facing growth. The spatial problem of decline is therefore dealing with the already cultivated environment (Hospers & Reverda, 2014, p. 24). The authors make a distinction between cultivated environment and space. Whilst the latter is about the environment’s physical qualities, such as housing or infrastructure, the former considers a symbolic reality of the place (Hospers & Reverda, 2014, p. 25). Its importance is often forgotten and policy makers in declining areas tend to demolish building where there is surplus. With demolishing there is a risk of losing historical and emotional values that belong to space.

“Growth principles do not aid in an area where a decline increases the physical and social distance between people and where facilities are put under pressure”

(Hospers & Reverda 2014, p. 27).

This allows us to create new ways of developing shrinking areas, not based on speculation of production and consumption, which allows for new relationship between citizens, market, and the government. The authors name several possibilities for degrowth economy: reuse, local exchange trading, and community farming (Reverda, Hermans & Maurer, 2018, p. 20). These actions are often named among others in research about degrowth which is discussed further.

Architecture of degrowth

The concept of degrowth is defined as “*democratically-led shrinking of production and consumption with the aim of achieving social justice and ecological sustainability*” (D’Alisa et al., 2015). It is based on the notion that current economic growth does not directly lead to well-being and prosperity, but it may contribute to environmental disasters and social inequalities. Growth is associated with well-being, and it is assumed that it benefits the whole society. Degrowth scholars critique this view and oppose the commodification which is a conversion of services and products into commodities with monetary value (Kallis et al., 2015, p. 4). As critique of growth, degrowth proposes a different society with a social-ecological transformation that leads not to “less” but “different” – different activities, forms of energy, relations with nature (Kallis et al., 2015, p. 4). This distinction is important since it describes an alternative without compromising in quality of life. This alternative calls for actions where focus lies on grassroot economic practices that shift from production for exchange to production for use. These include voluntary activity, community currencies and associations of care (Kallis et al., 2015, p. 11). Reducing individual consumption is seen as liberating and studies have shown disconnect between income increase and life satisfaction over time.

In practice, the concept of degrowth can be translated into small-scale local actions, such as reuse, co-housing, agro-ecology, cooperating in consumer goods and renewable energy (Demaria et al., 2013, p. 202). The local scale is emphasized throughout the research on degrowth, which makes it suitable for application in a small town such as Silverdalen.

In 2019 degrowth was a theme for Oslo's Architecture Triennale. Several ways of using ideas of degrowth in architectural practice have been named:

- **Source materials first, design second**
- **Use recycled materials for bespoke solutions**
- **Use alternative forms of fuel**
- **Use less concrete**
- **Develop zero-carbon infrastructure**
- **Generate social activity around sharing economies**
- **Design buildings that leave no trace**

(Frearson, 2019)

Adaptive reuse

To reuse old buildings or structures is often named as an important action in degrowth society. This is especially relevant in shrinking towns where there is an abundance of buildings and infrastructure. For example, in Silverdalen there are several abandoned houses and buildings, from private usage or industrial heritage. Reusing them could benefit environment and social cohesion. This is also relevant for other shrinking mill towns.

The definition of adaptive reuse consists of two concepts – adaptation and reuse. According to Cambridge Dictionary, adaptation means “the process of changing to suit different conditions”, or “something produced to adjust to different conditions or uses, or to meet different situations” (Cambridge Dictionary, n.d.). In the context of this master thesis and its delimitations, the adaptation means a new condition demands new needs. What once was a striving (economically and demographically) town, today is something that has other conditions that need adapting to. In architectural sense, adaptation is defined as “any work to a building over and above maintenance to change its capacity, function or performance” (Douglas, 2006).

According to Liliane Wong, practices of adaptive reuse are relevant within today’s sustainability discourse, when construction is one of the main sources of energy and resources (Wong, 2017, p. 30). But apart from the ecological side of adaptive reuse, it has other qualities, such as adding layers to the place and thus strengthening its identity. The layers reflect functions and styles specific for different times (Wong, 2017, p. 46).

When adapting a structure for another usage, the original structure is called host. Host structures are imperfect in their form and have different preconditions: placement in context, physical condition, history, and memory. There are different classifications of host structures that determine the type of design intervention required for its adapting for future reuse (Wong, 2017, p. 104).

Summary theory

- unequal relation between urban and rural
- rural shrinkage as a result of urbanisation
- negative public view on shrinking areas
- concept of economic growth should not be applied to shrinking areas
- growing smaller can be an alternative
- degrowth is about not less but different
- small scale local actions are essential for degrowth transition

REFERENCE CASES

In this chapter reference cases for this thesis are described. They are relevant for the thesis because of their connections to the concept of degrowth, post-industrial transformation and materials reuse.

R-Urban

By: atelier d'architecture autogérée. Location: Paris

R-Urban (Rurban, n.d.) is a bottom-up framework for resilient urban regeneration involving the city residents in transforming their neighborhoods. The project initiates short circuits between urban hubs and develops resilient practices at different levels (local, regional, international). The hubs supply tools and spaces for citizens to initiate resilient practices that address various issues, such as local material recycling, energy production, local skills and food production.

Recyclab – recycling and eco-construction unit for storing and reusing locally collected materials for future self-building and retrofitting.

Ecohub – cooperative eco-housing project that includes self-built ecological dwellings for students and researchers.

Agrocité – a hub consisting of micro-farm, community gardens and pedagogical spaces.

Main takes:

- bottom-up initiatives - an example of citizen engagement on a small scale
- locally sourced materials - to reuse can be both cost-friendly and reduce climate impact
- different social activities - enhancing social cohesion
- learning spaces - architects role in passing the degrowth ideas to citizens



Urbantactics, n.d.

Väveriet

By: Liv Sonntag, Kalle Magnusson. Location: Uddebo, Sweden

Väveriet is an old textile factory in Swedish countryside. The owners have transformed the building and its environment into different functions focused on activating the village. The project is an example of bottom-up initiative and transforming industrial places into spaces for different activities that encourage local population and promote tourism.

Main takes:

- transforming industrial places - connecting the past and present strengthens the identity
- local initiatives - an example of citizen engagement on a small scale
- many activities - flexibility in spatial design allows for different activities
- small physical intervention still gives good response



Väveriet, n.d.

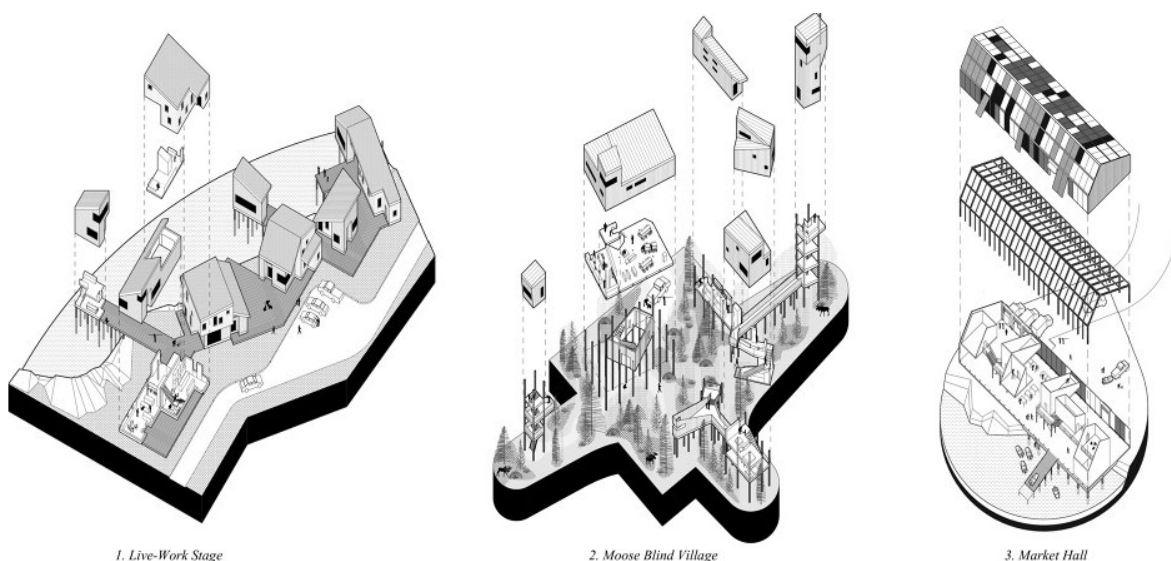
Boom/ Bust

By: Lateral Office. Location: Newfoundland, Canada

The project takes its title in different stages of economic growth “booms”, such as oil boom, fishing boom or mining boom. The island of Newfoundland is a rural area that during past 100 years has had several stages of economic growth followed by a “bust”. The architects propose an alternate approach to rural development, based on practices of degrowth. This includes building for change, adaptation and autonomy. The new development is envisioned as a collective shared act and is infused with material, cultural and environmental heritage. The project acknowledges rural economy and inevitability of degrowth.

Main takes:

- local context and heritage - the interventions are based on their context
- different typologies - the project takes locals needs in consideration
- new purposes in post-industrial landscapes - learning from past mistakes and taking better care of local resources
- adapting to new challenges, not striving for economical growth



Lateral Office, 2019

Copenhagen Playground

By: Ilya Rastvorov. Location: Copenhagen

The project is a reused railway depot where a sports recreational zone is created. The site consists of 9 parallel tracks and 21 old railway freight cars. Each car is renovated and assigned a unique function. The functions include sports ground, food court, art installations and performance arts.

Main takes:

- materials reuse - to reuse can be both cost-friendly and reduce climate impact
- industrial heritage - strengthening the local identity by connecting to the past
- area revitalizing - creating exiting spaces with low-cost initiatives
- mixed social spaces with focus on children and youth



Stouhi, 2019

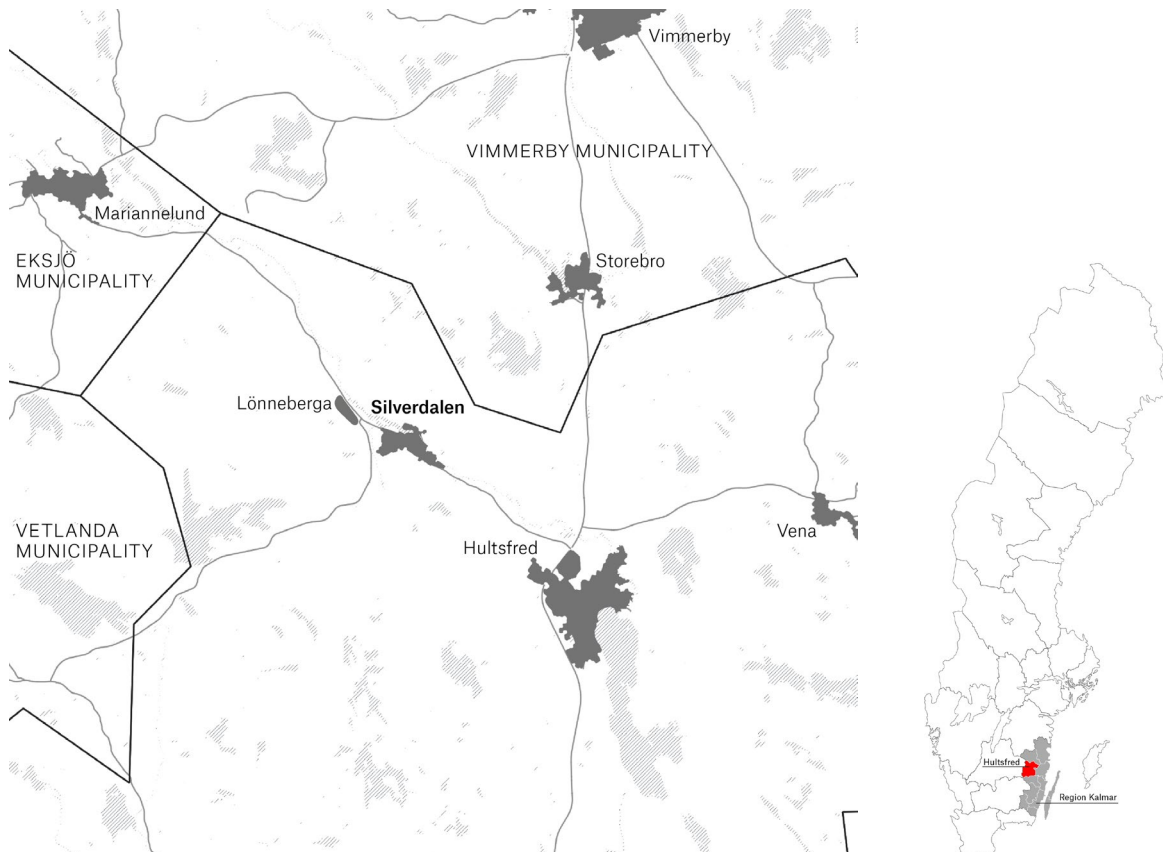
CONTEXT AND SITE



Site – Silverdalen

Silverdalen is a small town in Hultsfred municipality, located in the region of Kalmar, in the east of Sweden. About 670 people live in Silverdalen and 14000 in the municipality (SCB, 2020a). Very close to Silverdalen to the west lies a small community Lönneberga and to the east lies the main town of the municipality – Hultsfred. Silverdalen is crossed by a regional road 129 that has been a historical connection between east and west. Today it allows for easier commute to larger towns in the proximity, such as Hultsfred, Vimmerby or Mariannelund.

Silverdalen and its context. Scale 1: 120000

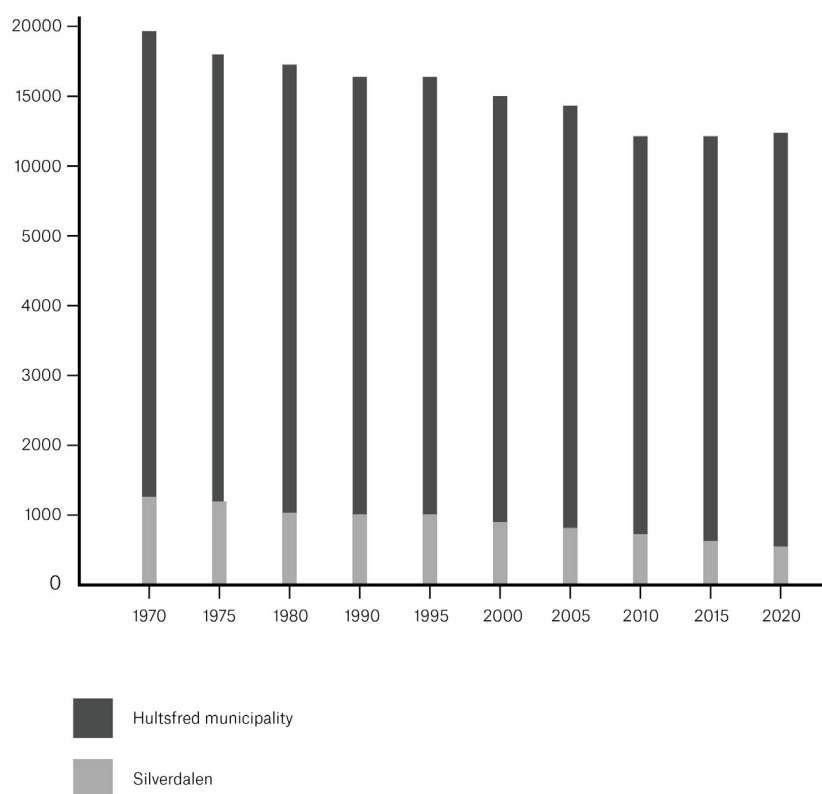


Demographics

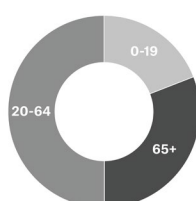
The population in Silverdalen peaked during the 1960-1970s and has been declining since then. The population of the municipality has also been declining but saw a slight rise during the last 10 years, mostly due to large immigration to Sweden.

The largest age group in Silverdalen is between 20-64 which is positive in terms of local economy. The gender difference is balanced, 49% women and 51% men. (SCB, 2020b)

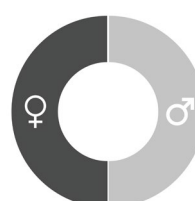
Demographic development in Silverdalen and Hultsfred municipality, (SCB, 2021)



Age groups



Gender



History of Silverdalen

The foundation and location of Silverdalen can be traced back to the 1600s when on the site there was a mill. The geographical condition of the area is favourable as there is a small waterfall by the Silverdalen's stream. The locality started growing from 1874, the year when a paper mill was established there. During that time a train stopped in the locality, the station was called Råsa. The paper mill was called Hällefors which gave name to the locality, until 1931 when it was renamed Silverdalen. The development of the town went parallel with modernisation of the paper mill, which was electrified in the 1900s and during 1930s it was expanded with buildings for technical solutions. At the same time a school was built, with support from the paper mill owners. The industry played an important role in the development of Silverdalen, not only as a main employer but also as a stakeholder and provider of services. During the 1940s, the mill owners helped the employers to acquire land in the town, to build private houses. Other functions that were built in Silverdalen with help from the paper mill were the People's House and the athletics field. The paper mill thus played a major role in spatial shaping of the town, which is quite usual for similar mill towns.

During the 1960s, the service in the town reached its peak, as many of the shops in Silverdalen and nearby Lönneberga started to shut down. The main shop in Silverdalen – *brukshandeln* (mill store) shut down in 1980. Train station was closed in 1990 after it was moved from its initial place. The paper mill itself changed owner in 2000 and was shut down in 2002. Today the paper mill has another owner who has ambitions to rent the spaces for warehouses or small industries.

(Lönneberga Hembygdsgille, n.d.)

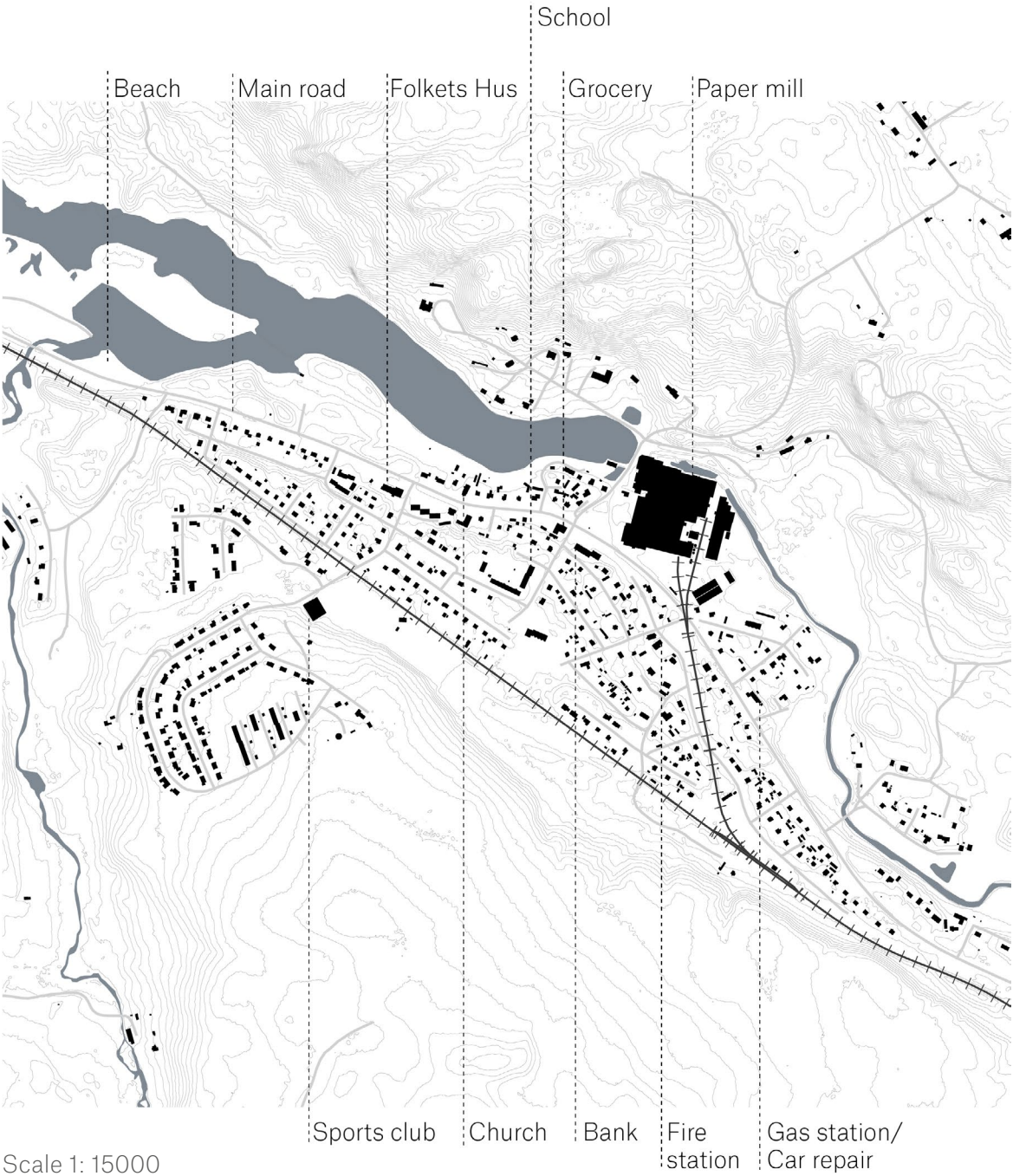


Silverdalen train station, ca 1950. Järnvägmuseet (2021).

Historical timeline



Important functions



Site analysis

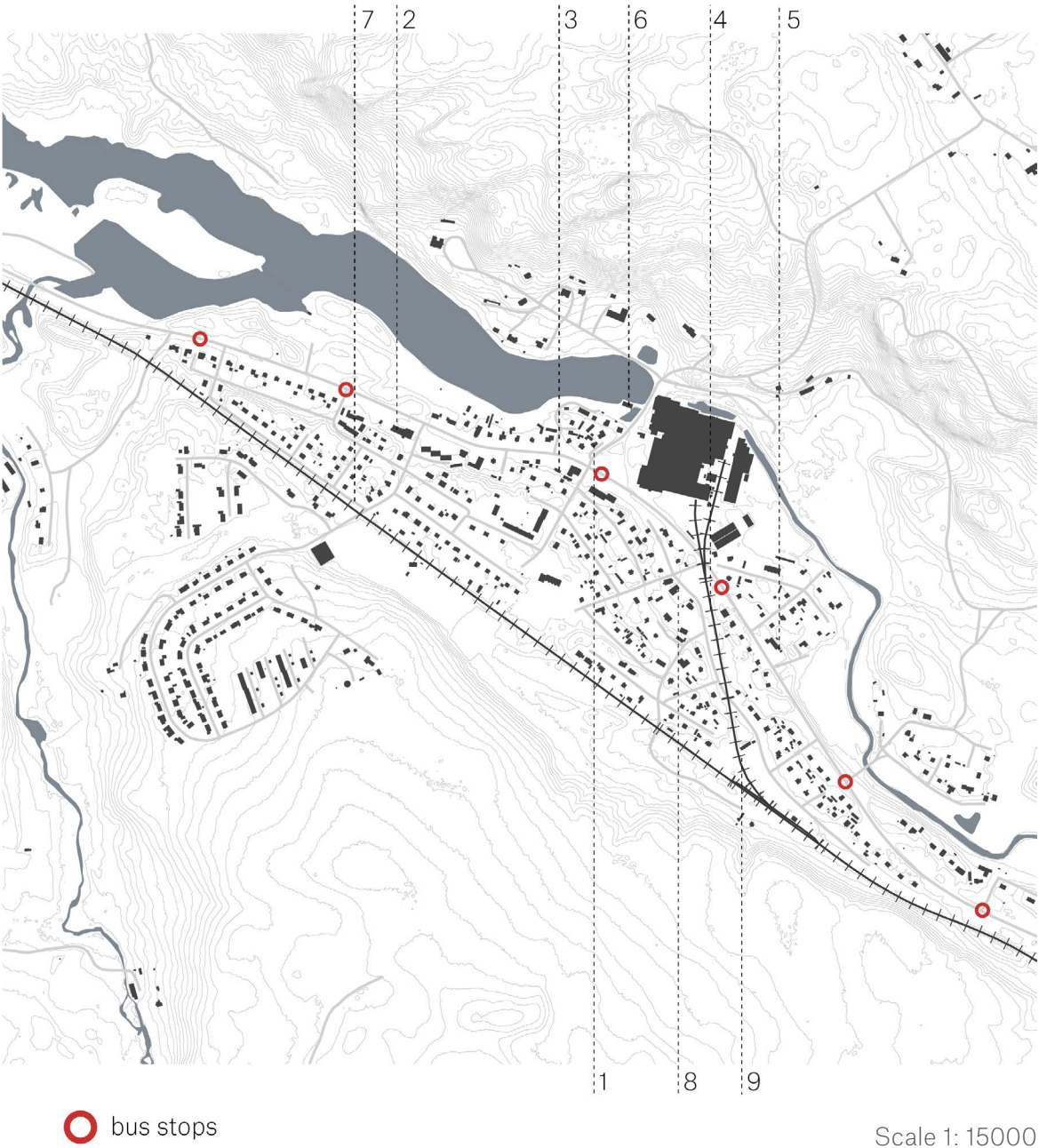
The town has been growing around the paper mill and along the regional road 129. Most of the buildings are situated south of the road with the oldest ones are closest to the paper mill. Throughout the years new residential areas has been built and the town expanded to the south-west. At the highpoint of Silverdalen, the main functions has been situated along the main road, such as stores, bank, church, a People's House and a gas station. A few of them has disappeared but the street remains most trafficked and active in terms of pedestrian movement. The lack of public square is a distinctive feature of the town, as functions that could support such public place are too weak – for example a train station has shut down and People's House is rarely used. Places that serve as meeting points are the public beach, football field, a gas station and a grocery store with nearby parking lot.

One of the positive qualities of Silverdalen is the surrounding nature. The lake Hällefors damm is accessible for the public only at the public beach, as private houses surround it everywhere else. The forest to the south is accessible with a network of trails, some of them are also lit. The topography of the area also creates the feeling of a closed space, as the town is surrounded by the mountains. The name Silverdalen can be translated as "Silver Valley".

The architecture of the town consists of several layers, the oldest buildings are more than a hundred years old, for example several villas close to the paper mill, a church and an old mill store. The few apartment buildings in Silverdalen were built in the 1960s. Another legacy from this period is a large amount of parking lots, somewhat oversized for today's situation. Many of the parking lots are in proximity of the paper mill that was a large employer in the region.

Lönneberga is a small settlement in close proximity to Silverdalen. Several functions that are missing in Silverdalen are balanced by their existence in Lönneberga, such as a restaurant and a hostel. On the other side, children from Lönneberga go to school in Silverdalen, the connection between the two settlements is strong.

Points of interest





1. Old mill store (*brukshandeln*) – shut down in 1981 and is today in a bad condition.



2. People's House (Folkets Hus) – previously a cultural hub.



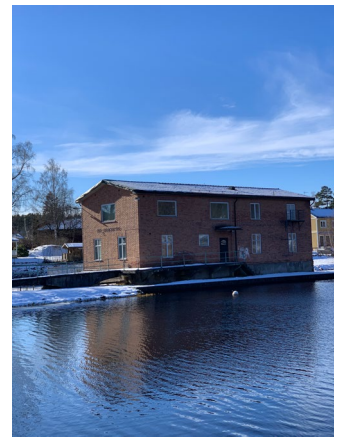
3. An abandoned storage building in the centre of Silverdalen.



4. Abandoned railway track connecting the paper mill.



5. A gas station and car repair.



6. Administrative building of the paper mill, today out of use.

7. Train stop Silverdalen, in use until 2014.



8. Firestation in Silverdalen, still in use.



9. Abandoned train freight cars, previously used by paper mill.



Areal image of Silverdalen in 1960s



Scale 1: 15000

Until the 1960s the town was growing around the paper mill as well as along the main road.



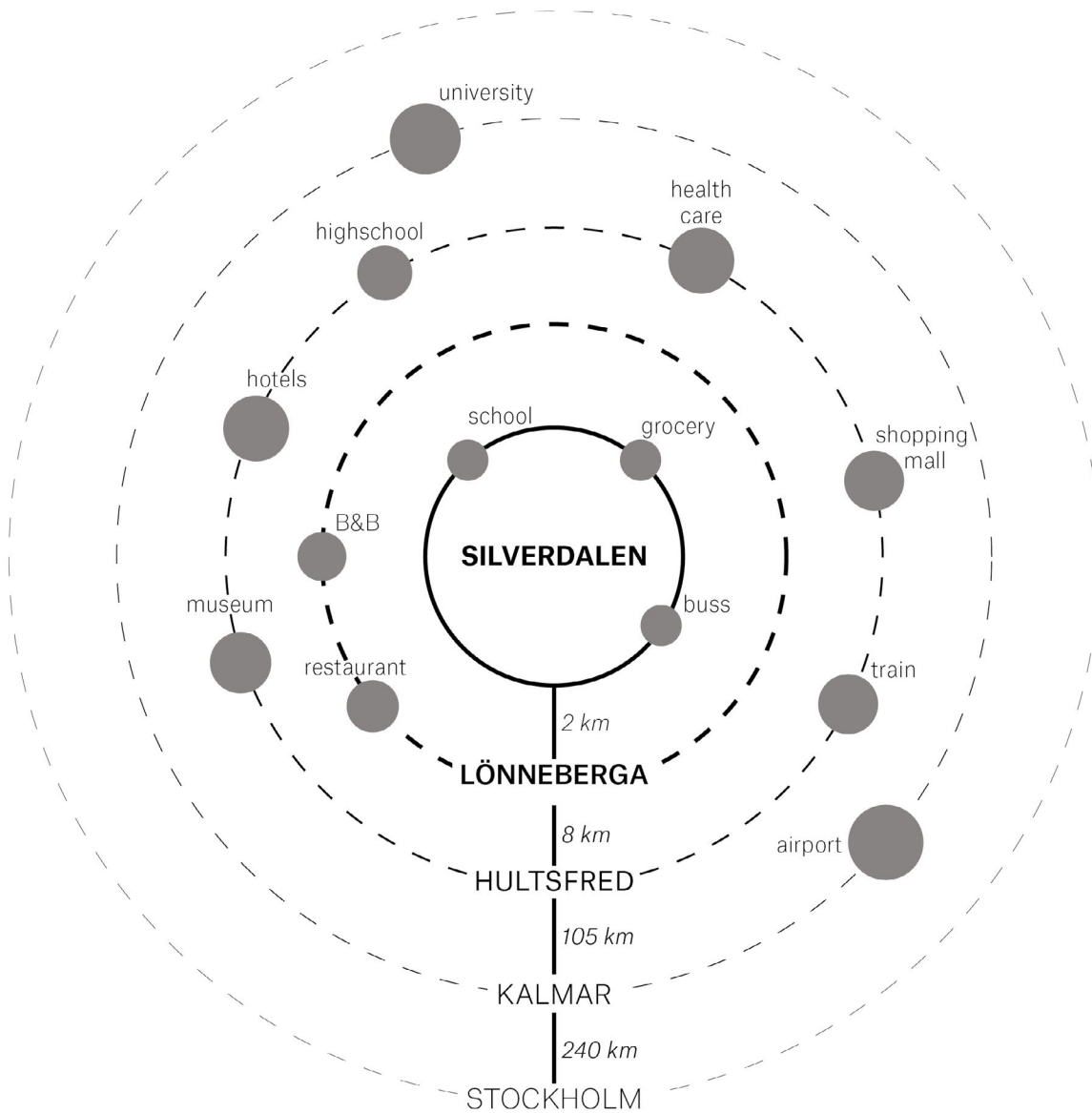
Areal image in 2022



Scale 1: 15000

Since the 1960s up until now, new residential areas have been built in Silverdalen. The areas in south-west were built in the 1970s and consist of single-family housing.

Thematic connections



The thematic connections show Silverdalens dependance on nearby communities and towns in terms of functions and service. The periferal position of Silverdalen is reflected in its lack of service, apart from the most basic.

VOICES OF SILVERDALEN

Extractions from online survey

The online survey was created in Google Forms and sent out to a group on Facebook where people from Silverdalen connect with each other. Total of 21 people have answered the survey.

The full survey with questions and answers can be found in the appendix on the page ...

These are the most common answers that give an understanding to the inhabitants view of the town.

What do you like about Silverdalen?

- nature
- closeness to people, community
- calmness

What do you think is missing in Silverdalen?

- activities, shops, cafés
- job opportunities
- leisure centre for youth
- bicycle lane between towns

What does Silverdalens history mean for you?

- paper mill
- sport activities

What communal activities would you like to see in Silverdalen?

- reparations
- activities for children and youth
- different gatherings (music, dancing)

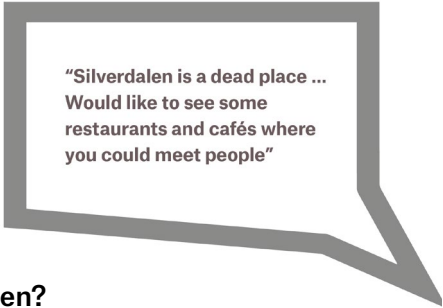
What material do you associate with Silverdalen?

- paper
- brick

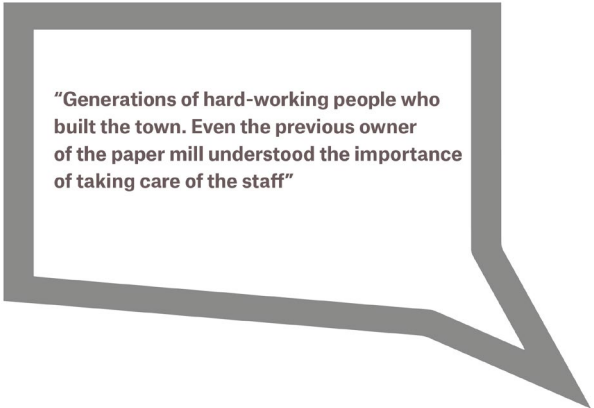
Quotes from the survey



"A small and quiet locality
with nature just around the corner"

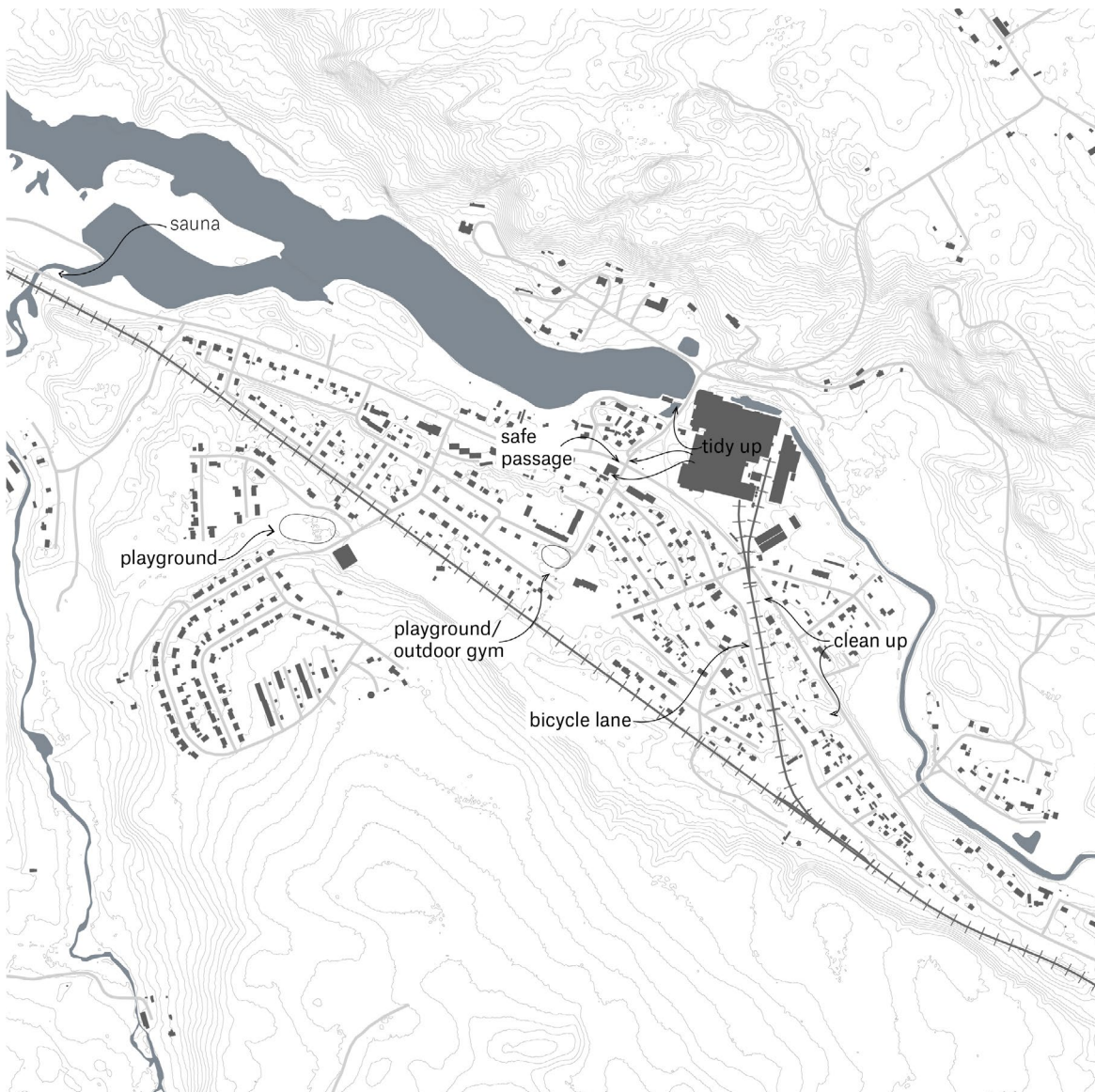


"Silverdalen is a dead place ...
Would like to see some
restaurants and cafés where
you could meet people"



"Generations of hard-working people who
built the town. Even the previous owner
of the paper mill understood the importance
of taking care of the staff"

Town mapping by the municipality



Scale 1: 15000

The map shows what improvements the residents would like to see in Silverdalen. The mapping was done by Hultsfred municipality during a promenade with the locals. The map was adjusted for clarity and translated by the author.

SUMMARY ANALYSIS

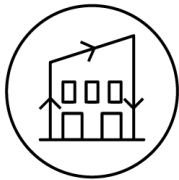
- the traces of the industrial legacy are prominent and have good potential for transformation
- connections to the water are weak, especially in the central part
- central part is lacking meeting places and is not defined spatially
- the paper mill is spatially and mentally detached from the town
- the surrounding forest is a source of timber which can be used in local construction
- the decreasing population makes growth strategies not applicable, making degrowth transition a more plausible alternative
- good social cohesion is possible due to the small size of the town

CONCEPT AND PROPOSAL



CONCEPT

Guiding principles



Adaptive reuse reprogram the buildings

Reprogramming unused buildings and structures will connect the built environment to the new needs of the inhabitants. It will also strengthen the cultural identity of the mill town and deepen symbolic meanings of the space.



Local economy small-scale production

A transition from big monostructure to a diversity of small industries will create a flexibility in economy and increase its resilience.



Community-building spaces for activities

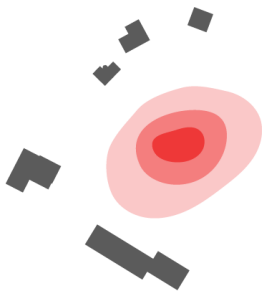
More spaces where the residents can meet each other will increase the social cohesion in the community.



Local resources reuse repair recycle

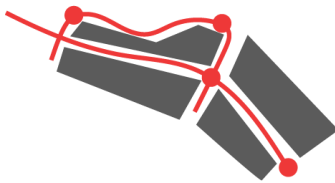
New facilities for a circular use of resources will introduce the degrowth ideas and encourage people to repair and share things.

Spatial strategies



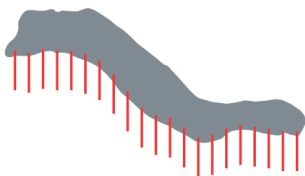
Strengthen the centre

An abundance of outside meeting places is clear when visiting Silverdalen. A more defined town centre will attract inhabitants and increase activity in the streets.



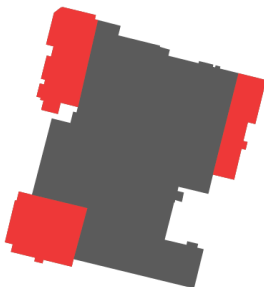
Support the flows

By adding new nodes in the town, new pedestrian flows can be created and old ones strengthened. This will lift up the existing qualities in Silverdalen.



Connect to water

The lake is an important asset in the town which is today disconnected from the centre. This is changed by defining and adding new connections to water.

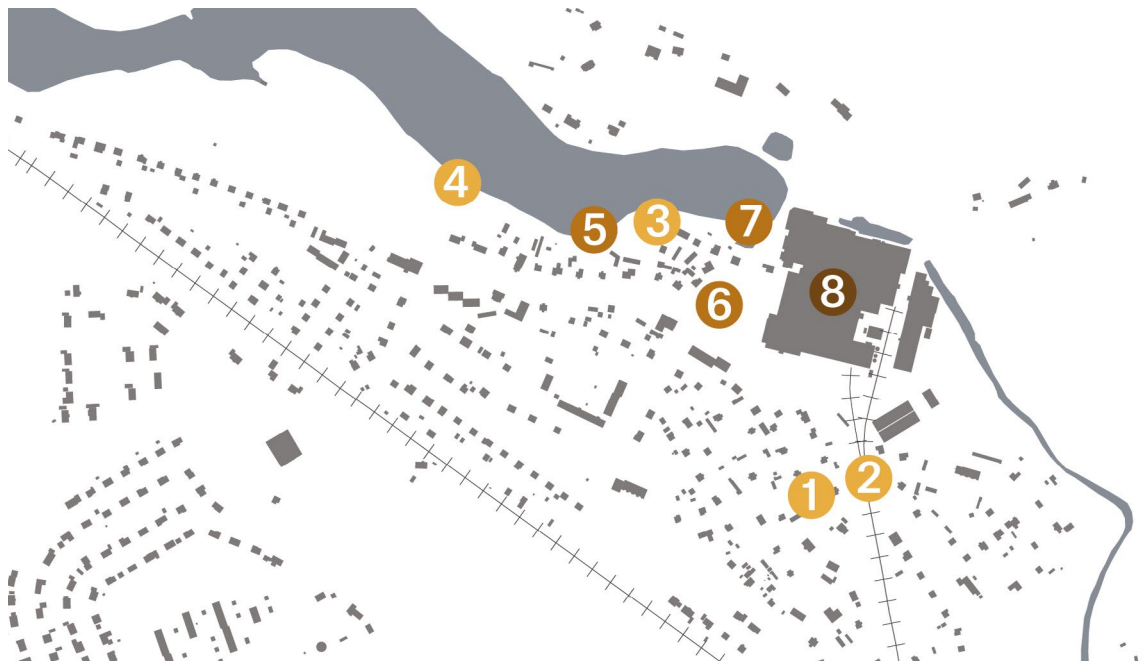


Relate to past

The industrial past is an important part of Silverdalen's identity. The design interventions connect to the town's heritage, places and structures and strengthen them.

PROGRAMME

Interventions for degrowth



■ First stage of transition – short-term, cost effective

1. Old church – a youth centre
2. Freight train's cars – adaptive reuse for playground, placemaking process
3. Define the path along the lake
4. Sauna – participatory built

■ Second stage – mid-term

5. Boardwalk – participatory built
6. Greenhouse and community garden; old mill store – food production hub
7. Paper mill's administrative building – upcycling hub, restaurant

■ Third stage – long-term investments

8. Paper mill and its facilities become a hub for food production, reuse, ateljérs, museum

Design brief

The interventions in this project are divided in three stages that are to be implemented incrementally, one after another. This is because some of the proposals require bigger investments that may be lacking at first in Silverdalen. Thus, the first stage of transition to degrowth is thought to be more cost-effective. For example, reprogramming a church building into a youth centre or clearing out the pathway along the lake. These first interventions will introduce the residents to the ideas of adaptive reuse and placemaking and hopefully wake an interest for further transitioning work.

The projects of the second stage will be implemented later on and are based on the foundation of the previous work, for example the boardwalk. In this stage other ideas of degrowth are introduced for the inhabitants, such as local food production, use of local resources and supporting local economy. During this stage, the focus is on reprogramming the existing buildings and strengthening the functions in the centre of Silverdalen.

The third stage of transitioning is rather long term. The projects in this stage are requiring more investments than previously and are built upon the already realized projects. The old paper mill is in focus during this stage as the large property of the mill is suitable for the interventions. The projects make use of the buildings and propose their reprogramming to fit the concept of degrowth. The large scale of the buildings is more suitable for this late stage of transitioning as it can be used for expanding the existing operations.

DESIGN PROPOSALS FOR INTERVENTIONS

1 YOUTH CENTRE

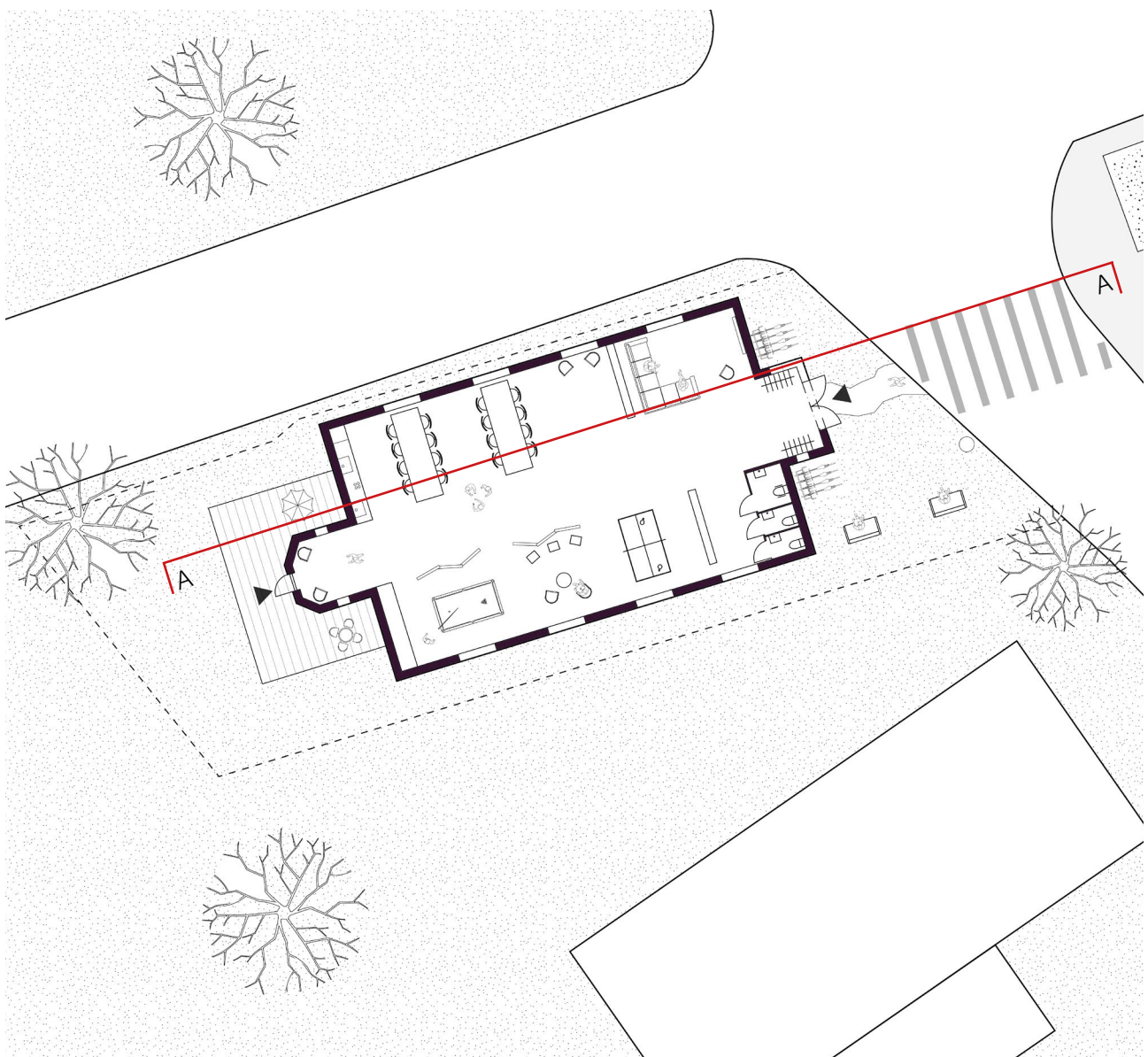
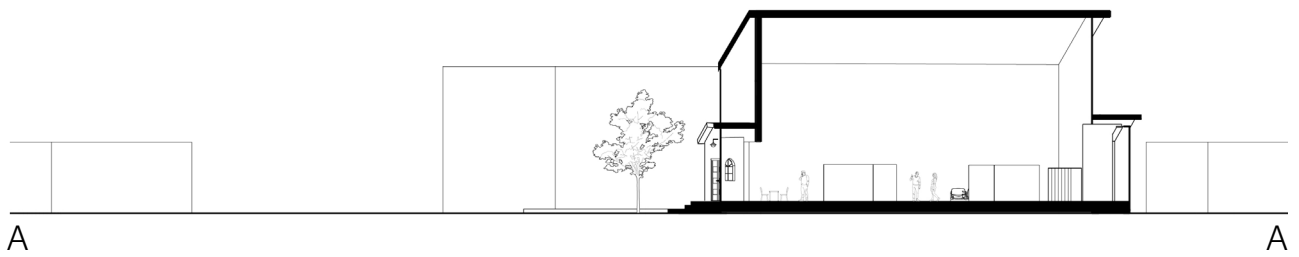


The first intervention is converting an old church building into a youth centre (fritidsgård). The converting can be done with simple means as the building is in a good shape and previously was housing a second hand store. More activities for youth is something that has been requested by the locals in the online survey and the location is suitable as it is near to the school and the other intervention, which is a outdoor playground.

The church building is a one storey building of an open layout with an entrance facing old parking lot. The conversion is done by adding necessary functions for the building to become more liveable, such as kitchen and a toilet. The open layout is divided in different zones, such as eating and/or studying area, playing area, and a tv area. The zoning is supported by room dividers and furniture, such as book shelves, thus creating several smaller rooms in one.



Old church building as seen today



0 5 10 20m

The internal layout of the building is based on my estimations since there was no access to the building plans

2 FREIGHT TRAIN CARS



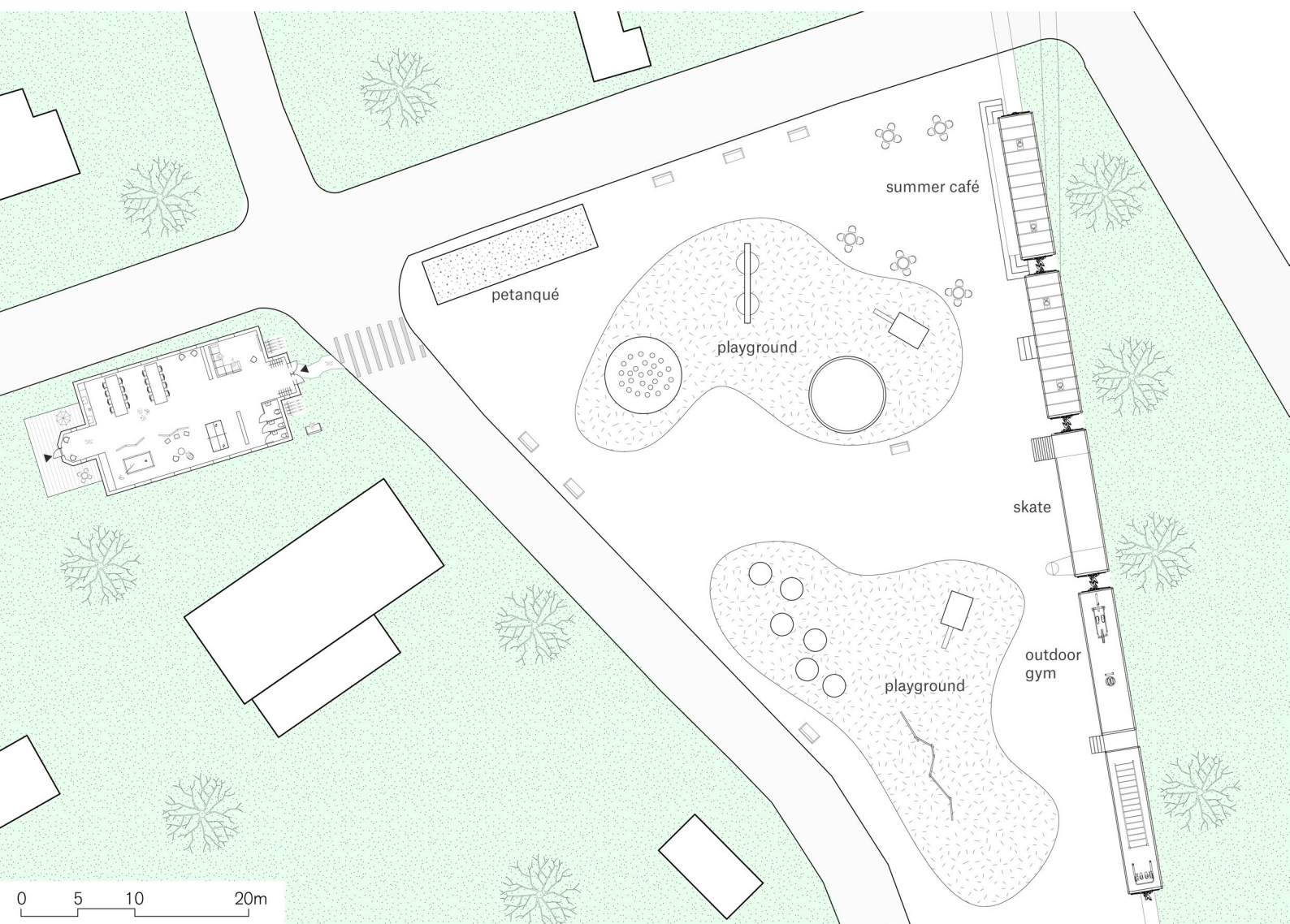
Freight train cars are moved to a central location and are adapted to the needs of the locals. The location is a parking lot previously assigned for the paper mill employers but now is empty. It is also in direct connection to the youth centre, which will promote the outdoor activity. A new playground and a playing area for pétanque will attract different groups.

The functions proposed in the cars are - café, skating and an outdoor gym. One train car is left empty, where the youth from the centre can create their own space.

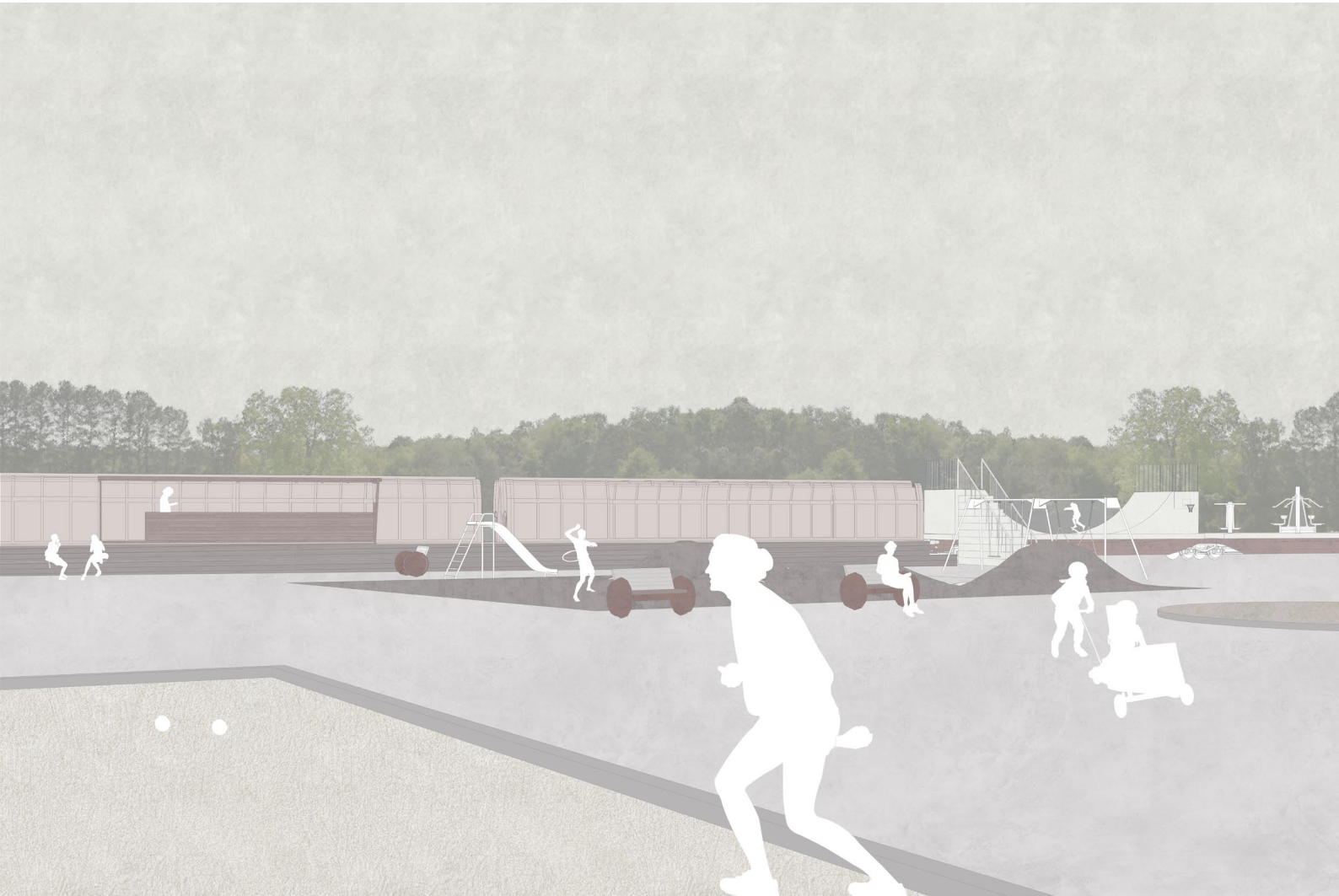
Abandoned train cars



The youth centre is in the direct connection to the freight carriages, thus promoting more social activity on site



The transformed site promotes activities for different age groups. The benches are made with reused train wheels. More seating is available along the train cars.



3 PATH ALONG LAKE



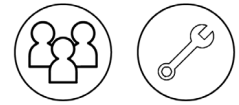
Clearing out the path along the lake will make the lake more available for the community and strengthen the connections between different nodes. Today the lakeshore is not easily accessible as may appear to be a part of the private plots. By clearing out and defining the path, the inhabitants will claim this part of the shore and make it a truly common place. This is a first step before the construction of a boardwalk and the intervention does not require a large budget.



The map is showing location of the path along the shore



4 SAUNA



A sauna will create a new meeting place for the locals and strengthen the connections to the lake. The location of the sauna is chosen based on the proximity to the centre and possibilities to connect it with pedestrian paths in Silverdalen. Constructed from local timber, the sauna will connect the boardwalk and the main road in the town.

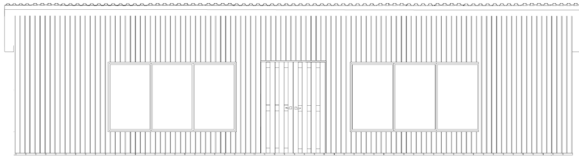


Location of the sauna

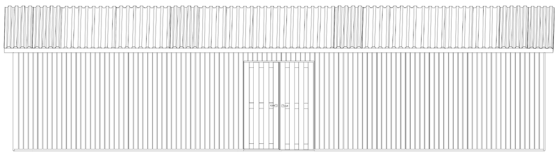


View of the sauna and the connecting boardwalk

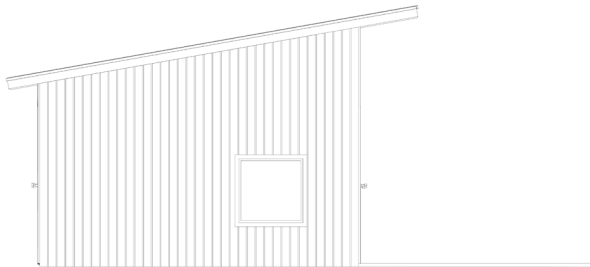




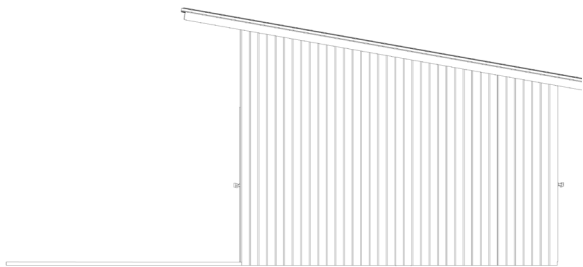
Facade south



Facade north

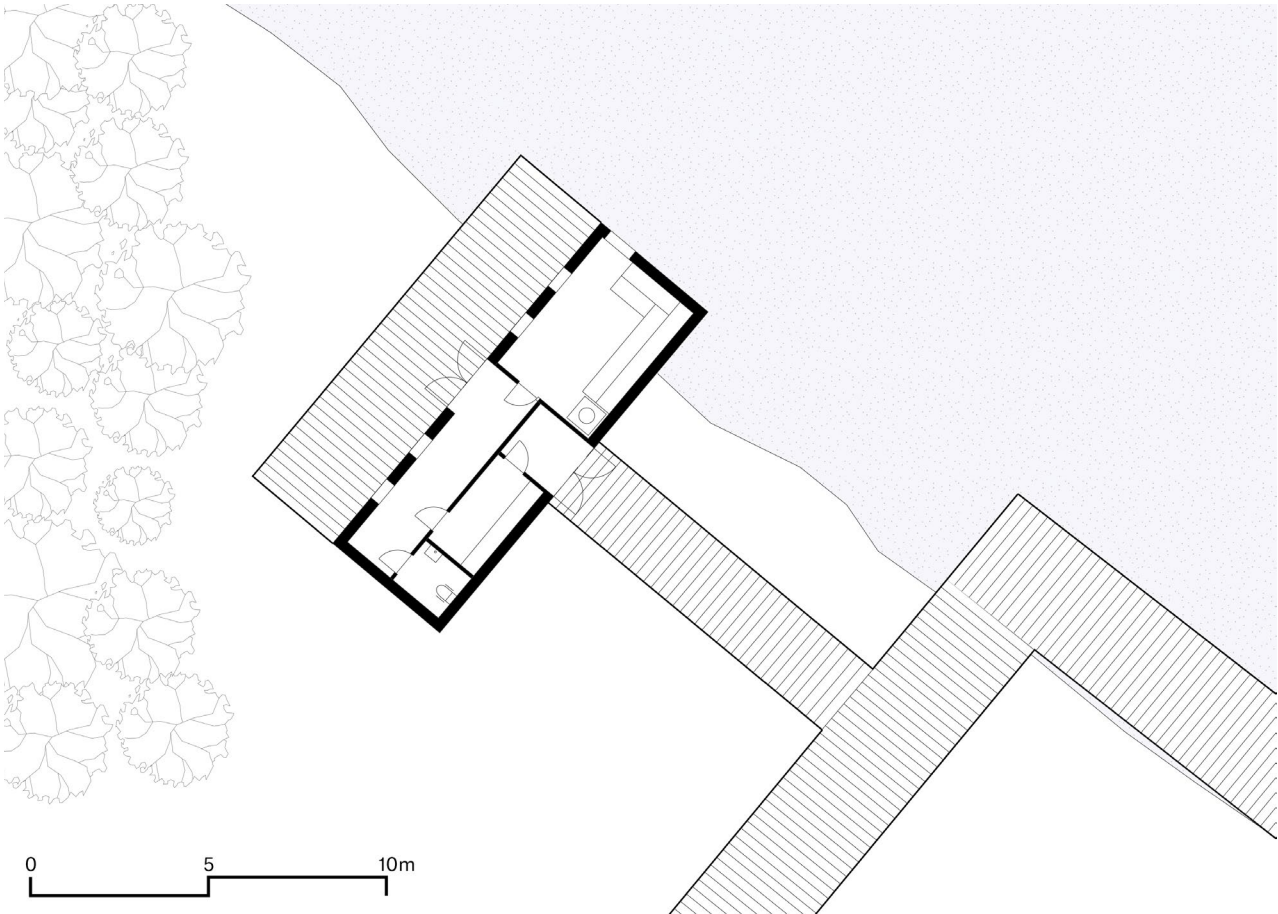


Facade east



Facade west

Plan



5 BOARDWALK



After the path has been cleared out and more people walk along the lake, new investments can be found for the boardwalk. It will strengthen the connection to the sauna and the lake.



Location of the boardwalk



Benches and the boardwalk will let more residents enjoy the town's proximity to water



6 GREENHOUSE AND COMMUNITY GARDEN



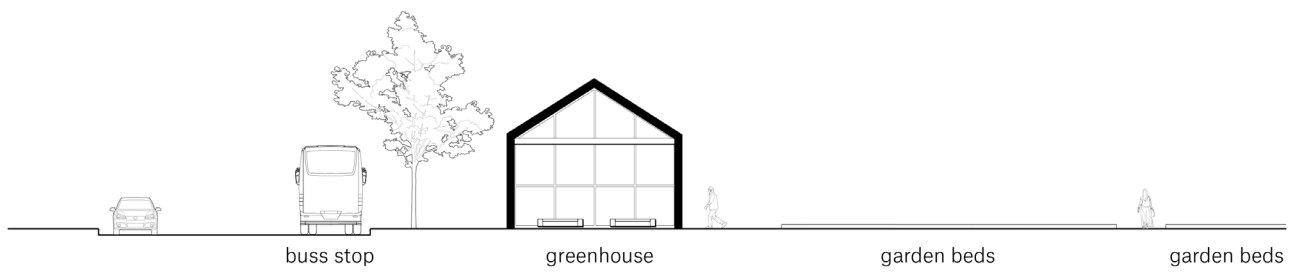
During second stage of the transition, the residents have more interest in the ideas of de-growth and are coming together for a greenhouse construction and food production. The location is a parking lot for paper mill employees, now out of use. It is also a central site in Silverdalen, by the main street and a buss stop. The greenhouse will define the place and become a prominent public building in the town. The community garden is divided in several plots with possibilities to sit down and enjoy the view.



Location of the greenhouse



Section A-A



Perspective of the community garden and the greenhouse. The building blocks the noise from the main road but not the sight lines.





Food production hub – the old mill store is reprogrammed to a building that serves the greenhouse and the community garden.
New functions possible are: the food storage, food resale, small café.

7 PAPER MILL OFFICE



The old office previously serving the paper mill is reprogrammed into an upcycling hub and a restaurant.

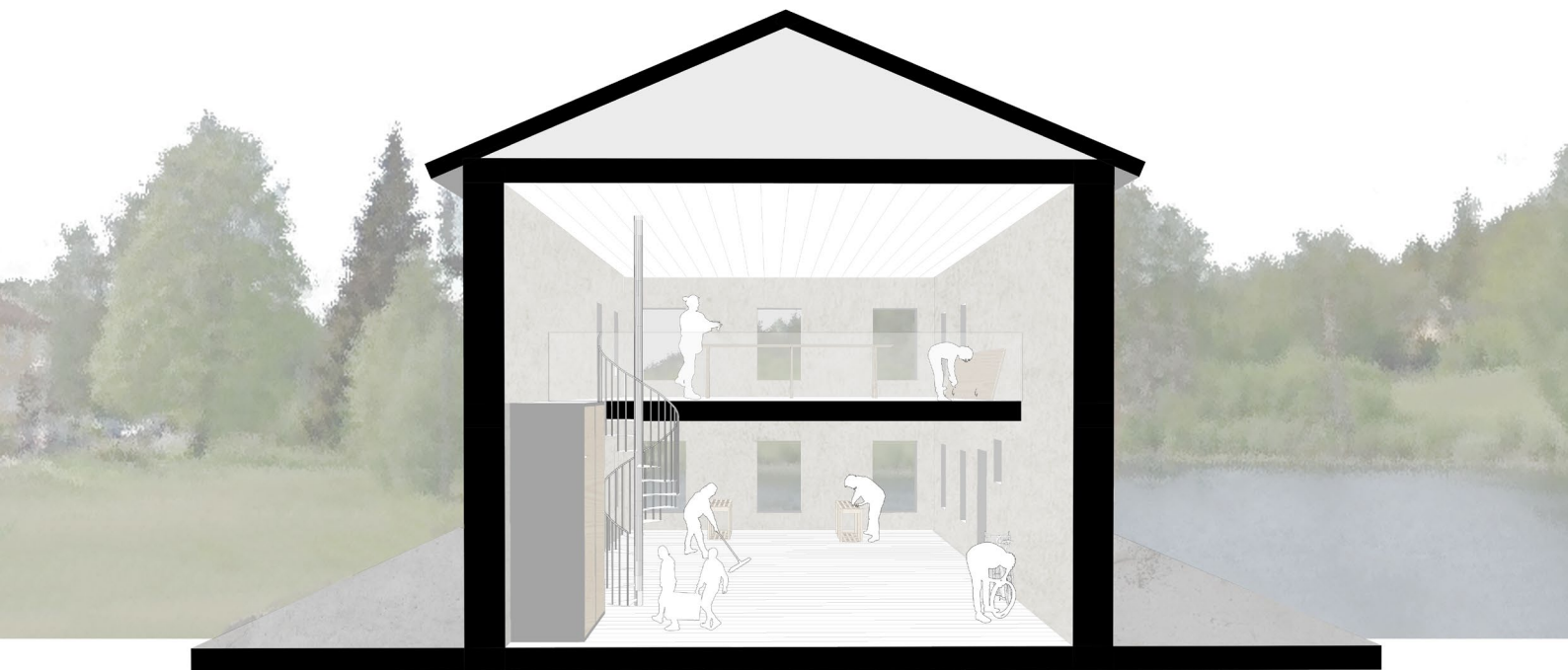
The location is central and near the water.

It will also strengthen the loop between sauna, People's House and greenhouse.

The building today



Perspective section of the upcycle hub shows different repair activities that take place in the reprogrammed building



8 LOCAL PRODUCTION, ATELJÉS, REPAIR AND REUSE

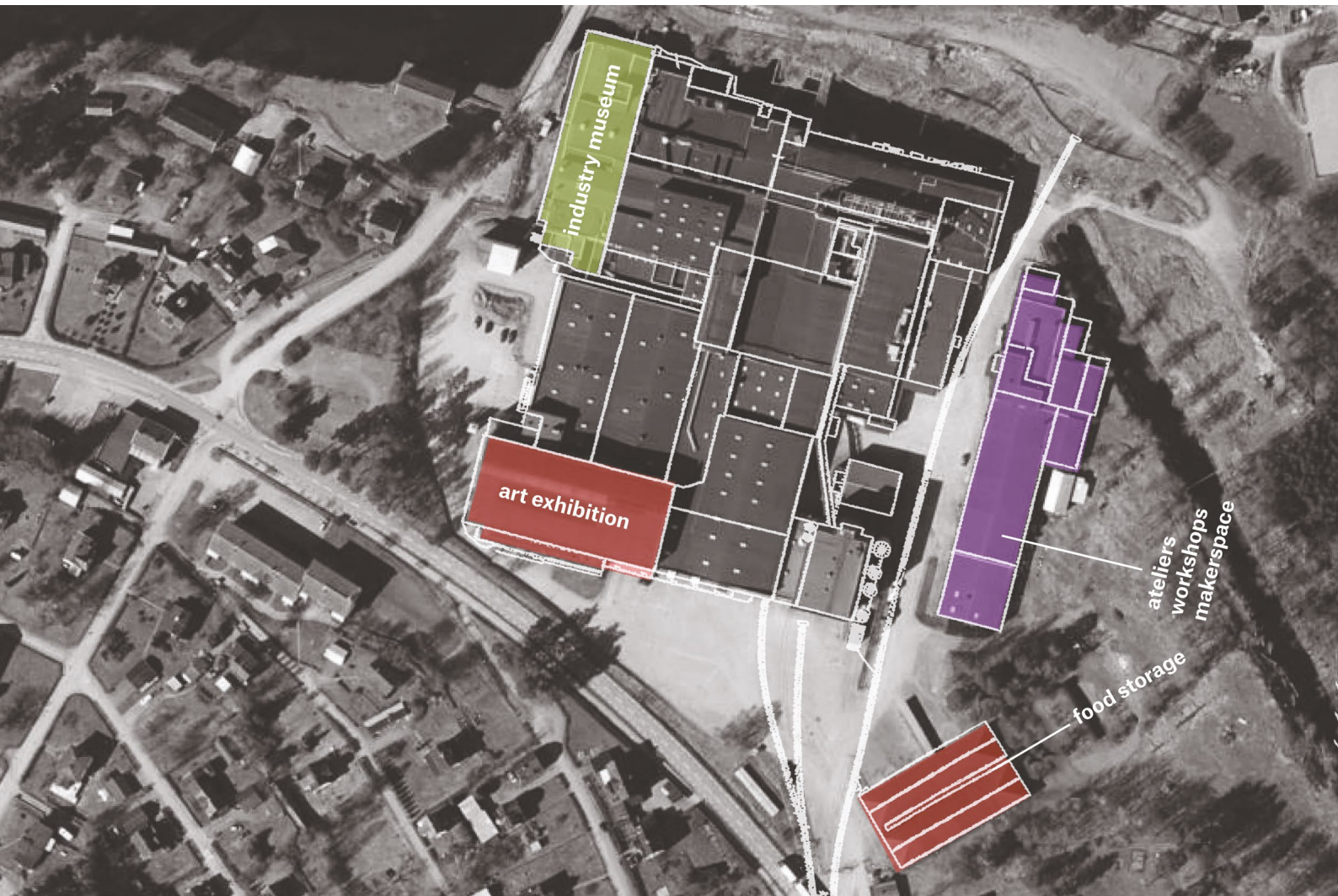


Paper mill and its facilities are transformed into a degrowth hub. As the town has gone through two stages of transition, new initiatives are being implemented. The transformation of the paper mill will allow for new actors to move in and a diversity of new functions that will strengthen the community. Several buildings are identified that have a potential for transformation. An old warehouse is reprogrammed into a locally-grown food storage. The old offices become ateljés for local artists, workshops for repair and recycle and makerspace. Parts of the main building are transformed into industrial museum. The empty spaces can be rented out in the future.

Paper mill building today

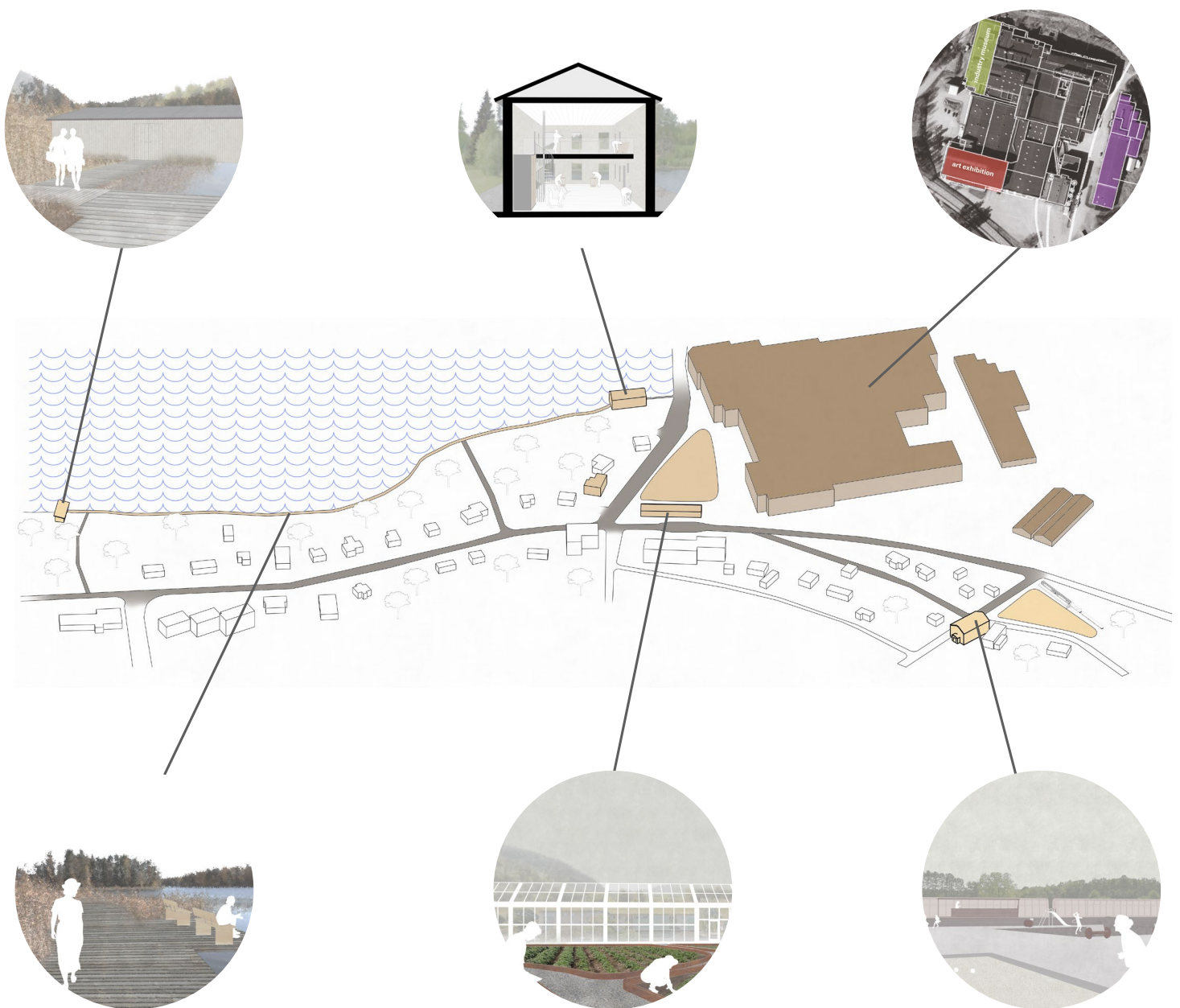


Diagram of the interventions at the paper mill



SYNERGIES

The diagram shows how Silverdalen is transformed after the interventions are completed. What is achieved spatially is several attraction spots that strengthen the pedestrian flows (shown in grey). The lakeside is now more attractive and accessible instead of being a back-side to the private plots. The central intersection is added a greenhouse which becomes a meeting place and is a visible landmark. After the last stage is completed, the paper mill becomes integrated in the town's fabric as it opens up for a variety of activities and production.



DISCUSSION



DISCUSSION

The aim of this thesis has been to explore how spatial planning, based on the ideas of degrowth, can bring positive change in rural areas affected by shrinking population. The thesis has developed four guiding principles for working with the site that were translated into design proposals. The proposals are an example of how incremental changes can strengthen the existing qualities of Silverdalen.

The urban norm paradigm has long been prominent in Swedish planning practice. It is based on the assumption that urban is valued higher than rural. This is a result of hundreds of years of industrialisation and urbanisation that shifted the people's perception of the rural and urban. Cities became more attractive places to live in, with better service and housing standard. A big part of that was due to governmental subsidies that encouraged people to move to the cities. Other factors such as centralisation and transition from industrial to knowledge-based economy led to population shifts from rural to urban areas. The inequality between the two is seen in education, welfare, and income as well as in the concentration of resources. One obvious consequence of urbanisation is the population decline in rural areas. It often has negative image among the public and politicians want to reverse the decline. To achieve this the decision-makers see economic growth as the only solution. But what if rural shrinkage could instead be an opportunity to improve the living environment?

The case of Silverdalen is an example of how high dependency on industry and economic growth can make the town and its population vulnerable to unexpected crises. The paper mill's closure has negatively affected the demographic situation as well as how the residents perceive the town today. This is because the mill played a big part in the community's identity which has been shattered. Some scholars argue that in rural areas affected by depopulation, a traditional way of development, based on the principles of growth, is not working (Hospers & Reverda, 2014). Therefore, a theory of degrowth has been a main theoretical foundation for the thesis. It supported the aim which is to explore what is needed to improve the qualities of a mill town outside the growth consensus. Degrowth has several meanings, and one of them is a shift from production for exchange to production for use. This requires grassroot economic practices as well as reducing individual consumption. In this thesis it has been translated into design interventions that allow for processes of citizen participations and consider their needs. The implemented online survey has given an indication of possible functions missing today in Silverdalen. Several respondents answered that they would take part in voluntary activities. This is an important part of degrowth transition, which in practice implicates small scale local actions where the residents are involved in activities such as agro-ecology or repair and reuse.

The rapid development and a quite rapid decline of mill towns provide for an interesting case to study. The remains of the industrial past are an illustration of the preceding growth but also the unused infrastructure, buildings, and structures. For example, the large parking lots in Silverdalen, previously assigned for the mill employees, today are empty. This is an example of something that Hospers and Reverda (2014) call a surplus – too much of everything. The same may apply to the old stores, railway, churches and of course the paper mill itself. But finding new uses for these traces can start a transition to a different kind of economy and society. This is a transition from “bruksmentalitet” – an overdependence on the employer usual in mill towns to volunteering, grassroot initiatives and participation in community building.

How can ideas of degrowth be applied in spatial planning of rural areas?

The small scale of towns and villages in rural areas gives good conditions for residents to gather around common needs and find solutions. What planners and decision-makers can do is to support local initiatives by letting the citizens claim their place in the town or village. It is also important not to get “stuck” in the idea that only by creating jobs or increasing population a rural town can be successful. The alternative instead should be to take advantage of the local conditions and engagement. Citizens are co-owners and co-producers of the public space. The large distances between housing, work and recreation are also typical for shrinking towns, thus it is important to bring these functions closer in order to revitalize the public space.

How can architecture of degrowth strengthen existing qualities of a mill town?

There are of course differences and similarities between mill towns. So, like when working with any site, one must consider the site-specific conditions first. But thinking of the similarities like industrial heritage and transitioning from industrial to post-industrial economy, several principles can still be named. First, adapting abandoned or unused structures into places where people can meet each other. This can be combined with learning spaces where alternative ways of handling resources are introduced. Second, using local materials will increase awareness of sustainable ways of living but also is often more cost-efficient. Third, with low-cost physical interventions, previously unused places can be revived. An architect's competence here is to map and point out the sites with potential. Furthermore, an architect/ planner can be a mediator between a municipality, property/ business owners and the residents. For example, see where there are possibilities for different actors to cooperate. Municipalities often own land and local businesses can provide their materials or expertise. This, combined with local engagement can create good possibilities for strengthening living qualities in rural areas beyond ideas of economic growth.

To achieve the best results, the strategies for degrowth transition must consider the context of the place and its preconditions. The design proposals in this project were divided in three stages to allow for incremental transition as it would be difficult for the community to realize the interventions all at once. With help from the survey and information from municipality, most necessary changes were identified to be the first stage of the transition. The adaptive reuse of the old church and the train cars are the initial steps and will introduce the town to the degrowth concept. These proposals are thought to require small initial investments but will be rewarding in terms of strengthening the spatial qualities of the town as well as adding new functions that were asked for. They will also start a discussion about a symbolic reality of the space in form of often abandoned structures that are important for the place's identity. Adapting old buildings is also more ecologically sustainable than new construction.

The design proposals of the second stage require more investments but are thought to give bigger reward in terms of improving the town. The community garden together with a greenhouse will first and foremost strengthen the town centre spatially that is not very defined today. But it will also further develop degrowth transitioning by allowing the citizens to become involved in food production together. This intervention might be seen as somewhat unnecessary as many in Silverdalen have their own villa with a backyard. But social movements are an important part of the transitioning and community gardening will strengthen the social ties between the residents. Furthermore, establishing the food production hub will allow for bigger inclusion of participants in this process. This will also strengthen the local economy and allow people sell their own produced food. Together with the food hub, the recycling hub will mark the shift to a more sustainable use of resources.

The third stage of the transition is a more speculative one and is thought to be implemented longer in time. But it is nevertheless an important one as it defines the connection between the town's future with its industrial past. During the site analysis it was clear how the paper mill is separated from the town, both spatially and mentally. Not many locals are employed today at the mill, unlike before. To reverse this process a mill transformation is required, with degrowth principles in mind. A transition from one large industry to many small ones will allow for a better flexibility and resilience in face of crises. This will result in a more open and inviting facilities. The residents will also be more open to the bigger changes after stages one and two are implemented.

REFERENCES

Björling, N., & Fredriksson, J., (2018). *Relationer mellan stad och land i det regionala stadslandskapet*. Mistra Urban Futures. https://www.mistraurbanfutures.org/sites/mistraurbanfutures.org/files/bjorling-fredriksson-report-2018-1-rev_0.pdf

Cambridge Dictionary, (n.d.). *Reuse*. <https://dictionary.cambridge.org/dictionary/english/reuse>

D'Alisa, G., Demaria, F., & Kallis, G. (2015). *Degrowth: A vocabulary for a new era*. Routledge.

Demaria, F., Schneider, F., Sekulova, F., & Martinez-Alier J. (2013). *What is Degrowth? From an Activist Slogan to a Social Movement*. *Environmental Values* 22 (2013). DOI: 10.3197/096327113X13581561725194

Douglas, J., (2006). *Building adaptation*. Routledge.

Enflo, K., (2016). *Regional ojämlikhet i Sverige. En historisk analys*. https://snsse.cdn.triggerfish.cloud/uploads/2020/02/sns_analys_nr_33.pdf

Frayling, C., (1993). *Research in Art and Design*. Royal College of Art Research Papers 1(1).

Frearson, A., (2019). *Ten ways architecture could support a degrowth economy*. <https://www.dezeen.com/2019/11/19/degrowth-architecture-oslo-architecture-triennale-2019/>

Hospers, G-J., & Reverda, N. (2014). *Managing Population Decline in Europe's Urban and Rural Areas*. Springer International Publishing AG.

Hospers, G-J., & Syssner, J. (2018). *Dealing with Urban and Rural Shrinkage: Formal and Informal Strategies*. LIT Verlag.

Hultsfred municipality. (2010). *Översiktsplan 2009*. <https://www.hultsfred.se/files/2012/10/%C3%96P2009.pdf>

Järnvägmuseet. (2021). *Silverdalen station hette tidigare Råsta och öppnades som hållplats 1910*. <https://digitaltmuseum.se/021018057012/silverdalen-station-hette-tidigare-rasta-och-oppnades-som-hallplats-1910>

Kallis, G., Demaria, F., & D'Alisa, G. (2015). *Introduction*. In D'Alisa, G., Demaria, F., & Kallis, G. (Eds.), *Degrowth: A vocabulary for a new era* (pp. 1-19). Routledge.

Lateral Office. (2019). *Boom/Bust*. <http://lateraloffice.com/BOOM-BUST-2019>

Lönneberga Hembygdsgille. (n.d.). *Hembygdshistoria*. <http://lonnebergahembygdsgille.se/hembygdshistoria>

Martin, B., & Hanington, B. (2012). *Universal methods of design: 100 ways to research complex problems, develop innovative ideas, and design effective solutions*. Rockport Publishers.

Reverda, N., Hermans, M., & Mauer, N., (2018). *Towards a culture of degrowth*. In Hospers, G-J., & Reverda, N. (Eds.), *Dealing with Urban and Rural Shrinkage: Formal and Informal Strategies* (pp. 17-30). LIT Verlag.

Roggema, R. (2016). *Research by Design: Proposition for a Methodological Approach*. Urban Science 1(1):2. DOI:10.3390/urbansci1010002

Rurban. (n.d.). *About*. <http://r-urban.net/en/sample-page/>

Rönblom, M., (2014). *Ett urbant tolkningsföretag? En studie av hur landsbygd skapas i nationell policy*. Jordbruksverket. <https://reglab.se/wp-content/uploads/2019/01/Ett-urbant-tolkningsf%C3%B6retag-Malin-R%C3%B6nblom.pdf>

SCB. (2015a). *Urbanisering – från land till stad*. <https://www.scb.se/hitta-statistik/artiklar/2015/Urbanisering--fran-land-till-stad/>

SCB. (2015b). *Dagens urbanisering – inte på landsbygdens bekostnad*. <https://www.scb.se/hitta-statistik/artiklar/2015/Dagens-urbanisering--inte-pa-landsbygdens-bekostnad/#:~:text=Mellan%20%20och%202010,av%20minskad%20befolkning%20p%C3%A5%20landsbygden.>

SCB. (2020a). *Folkmängd och landareal i tätorter, per tätort. Vart femte år 1960 – 2020*. https://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START_MI_MI0810_MI0810A/LandarealTatortN/

SCB. (2020b). *Befolkning i tätorter efter kön, ålder och tätort. Vart femte år 2005 – 2020*. https://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START_MI_MI0810_MI0810A/TatortAlderNN/

SCB. (2021). *Folkmängden efter region, civilstånd, ålder och kön. År 1968 – 2021*. https://www.statistikdatabasen.scb.se/pxweb/sv/ssd/START_BE_BE0101_BE0101A/BefolkningNy/

SOU 2006:101. *Se landsbygden! Myter, sanningar och framtidsstrategier*. <https://www.regeringen.se/49bbad/contentassets/2371c3728ba3459995b027a156f95bf3/se-landsbygden-myter-sanningar-och-framtidsstrategier-sou-2006101>

Stouhi, D. (2019). *Architect Transforms a Copenhagen Railway Depot into a Colorful Playground*. <https://www.archdaily.com/918357/illya-rastvorov-transforms-a-copenhagen-railway-depot-into-a-colorful-playground>

UNFPA. (2007). *State of world population 2007*. https://www.unfpa.org/sites/default/files/pub-pdf/695_filename_sowp2007_eng.pdf

Urbantactics. (n.d.). *Eco-Urban Network*. <http://www.urbantactics.org/projects/ecobox/ecobox.html>

Väveriet. (n.d.). *Uddebo*. <http://vaeveriet.se/UDDEBO>

Westlund, H. & Pichler, W. (2000). *En ny grön våg?: glesbygdstillväxt under storstadsexpansionens 90-tal*. Östersund: Institutet för regionalforskning (SIR).

Wong, L., (2017). *Adaptive Reuse. Extending the Lives of Buildings*. Birkhäuser.

Woods, M., (2011). *Rural*. Routledge.

APPENDIX

The online survey was answered by 21 people: 9 men and 12 women. 15 of them are currently living in Silverdalen. Age of the respondents varies from 24 to 75. Some of the questions that were in the survey are presented below:

What do you like to do in Silverdalen?

What do you think is missing in Silverdalen?

What do you think is good about Silverdalen?

What do you think is Silverdalen associated with?

What does Silverdalen's history mean for you?

Would you be interested in sharing things (for example tools, furniture)?

What would you be interested in learning about?

Would you be interested in community gardening?

What communal activities would you like to see in Silverdalen?

Would you be interested to contribute to development of Silverdalen?



CHALMERS
UNIVERSITY OF TECHNOLOGY