

# ATTRACTIVE RURAL LIVING a future vision for Hjalteyri village in North Iceland

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## Attractive rural living

a future vision for Hjalteyri village in North Iceland

## Anna Kristín Guðmundsdóttir

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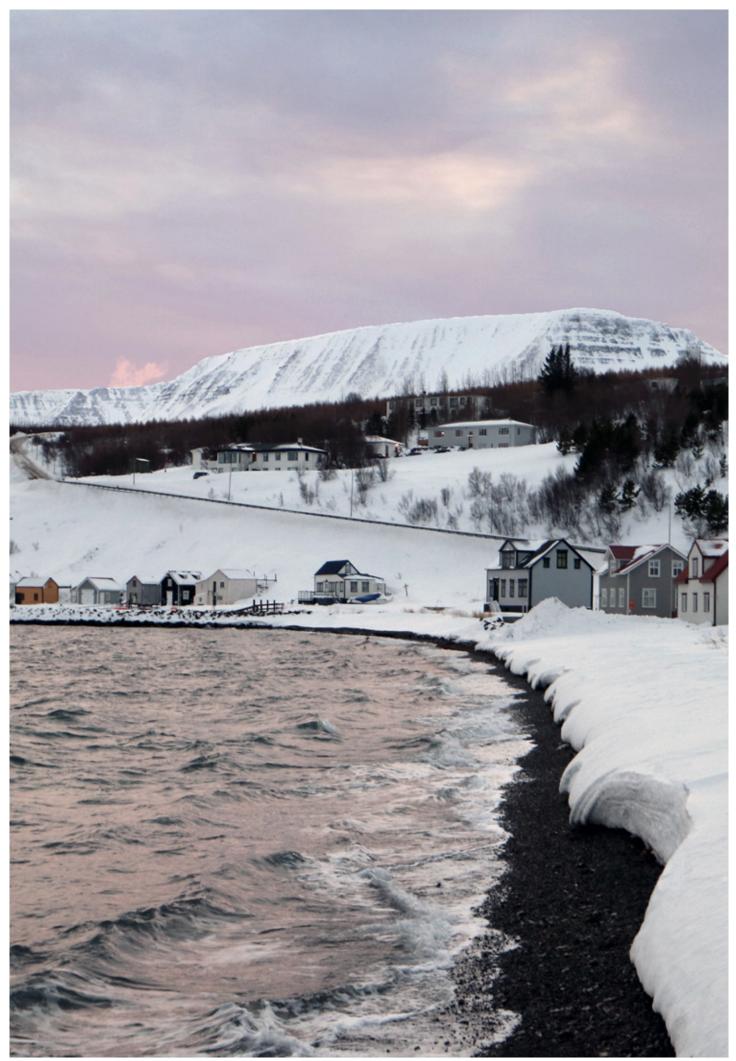
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## ABSTRACT

In an era of rapid urbanisation, rural settlements are becoming more fragile to population decline and other coinciding factors. The restrictions following the Covid-19 Pandemic have demonstrated that now there are more possibilities for remote work than before. Therefore, these conditions might have strengthened the potentials of choosing a place of residence regardless of the workplace location. The main objective of the thesis is to create a holistic design proposal for Hjalteyri village in North Iceland that illustrates a future vision of how the village can grow into an attractive and lively town. The project examines what qualities are important for the attractiveness of rural settlements and the possibilities of rural living in Iceland. The total population in Iceland is about 368 thousand residents, where almost 64% of the population lives in the capital region, and 5.9% live in rural areas and small towns with less than 200 inhabitants (Hagstofa Islands 2020). The project examines the future possibilities of Hjalteyri village, where today live fewer than 50 inhabitants. Hjalteyri is located within 22 kilometres from Akureyri, the country's fifthlargest town, making the village an ideal place to live for people working remotely or commuting.

The project follows qualitative methodology and is divided into a background chapter with literature review, site analysis and interviews. The literature review introduces theories about what qualities are important to influence the attractiveness of rural settlements. The site analysis of Hjalteyri examines the current conditions to identify future possibilities for the village. The interviews give informative insight from professionals and residents that highlight the identity and future opportunities. The main findings from the background chapter are summarized as design guidelines for the development of the design proposal. Finally, the project results in a holistic design proposal for the village, showing how Hjalteyri can expand and become an attractive place to live, and addressing how small towns in Iceland can be resilient towards depopulation and changes in the future.

*Keywords:* rural living, villages, attractions, public spaces, placemaking, landscape architecture, urban design, landscape identity



## POPULAR SUMMARY

## HJALTEYRI

65°51'N 18°12'W

## WHAT IS SO SPECIAL ABOUT THIS SMALL VILLAGE AND WHAT COMES NEXT?

Hjalteyri is a small fishing village by fjord Eyjafjörður in North Iceland where today, less than 50 people live. The village sits by the sea with breathtaking views to the landscape of the fjord. The area is rich in birdlife and natural qualities. Historical buildings create a beautiful townscape and remind of the history of the settlement. There is something special about Hjalteyri, something that one can almost not describe. The sense of history is nearly tangible. The old factory buildings stand out in the landscape and create a contrast against the small colourful village. Nature surrounds the settlement, and the sounds of nature are powerful: the singing birds remind that the community is living in harmony with nature, and the sounds from the waves are like a breathing rhythm of the village. Daylight and the seasons are the only signs of time in this magnificent place. The settlement is waiting for new opportunities, but at the same time, time stands still.

## THE PAST

About 70 years ago, almost 150 residents lived in the village. The herring industry was booming, and the village was full of life and prosperity. In the winter of 1937, the enormous factory buildings by the seafront were built with great manpower. The building marked a milestone in the development of the settlement that was followed by great employment opportunities. The development period lasted until 1966 when the factory ceased operations because the herring had disappeared from the fishing grounds. All eggs had been put in one basket, and the community was left in pieces. People were left unemployed, and their homes became almost worthless. The trauma was significant for the people living in the village, and Hjalteyri became a ghost village. In the following decades, several attempts were made to rebuild the industry, but the shock remained in memories.

## THE PRESENT

If we jump to the present day. Hjalteyri is a home to a small group of people, but many people own holiday homes in the village to enjoy in their free time. The marina is full of sea-related activities, and innovation opportunities hover over the old factory buildings. The contemporary art center has operated in the historic factory since 2008, creating a new role for the majestic buildings. Many artists visit the town for residencies and art exhibitions throughout the year. One of the factory buildings are facilities for a diving center that offer people to dive and experience the hydrothermal chimneys, a unique natural wonder in the sea off the coast. From the marina sails a whale-watching boat, and sometimes, whales swim close to the shore and are visible from the village. Recently a powerlifting gym opened that has attracted people from nearby towns. All this volume of built structure offers facilities for various activities, some opportunities that people have already come up with, and other future possibilities.

## THE FUTURE

Looking towards the future. With increasing urbanization, rural settlements experience coinciding factors such as depopulation due to urban migration. Depopulation in rural areas makes settlements as Hjalteyri vulnerable to becoming abandoned. In the past years, remote work has increased, especially in the wake of the Covid-19 Pandemic, allowing even more people to work from home. We are living in times where employment is becoming less dependent on location. Remote work and commuting might be the future for businesses, and therefore, people could choose a place of residence based on other qualities than the distance from the workplace. These circumstances create a great possibility for small towns and villages where people could choose the quality of living in the countryside but working in the city. These possibilities are ideal for the development of Hjalteyri. The village is located within 20 minutes driving distance from Akureyri, the fifth-largest town in Iceland. Akureyri is a regional center with

availability of the most important services and businesses. The proximity to Akureyri is an important aspect in the attractiveness of Hjalteyri and the development in the region could influence the development in Hjalteyri. In the future, there may become greater demand for living in rural towns in the vicinity of larger urban areas, where natural qualities play a more significant role. However, the demands of today mean that people also want to live close to specific services, therefore making Hjalteyri an ideal place to live.

Living in a smaller community comes with various qualities, especially due to the proximity to nature. However, for rural living to be attractive, certain qualities must be present. The project examines what qualities are important to strengthen the attractiveness for the livability of rural settlements. People want to live in communities where their children can walk to school and meet their friends. People want to have good housing and being able to work locally, at home or travel short distances to work. Beautiful nature, outdoor activities and beautiful architecture are also important to people and especially the image of the place.

## THE PROPOSAL

The main objective of this project is to present a design proposal that highlights the future vision for Hjalteyri. The vision shows how the village can grow in the coming decades and becoming an attractive town with about 300 inhabitants. There is something special about Hjalteyri, and the proximity to Akureyri, could influence people to aspire to live there.

The design vision shows a bright future for the village and how it can become attractive for people to move and live. Beautiful views and good recreational opportunities play an important role in the attractiveness. The unique townscape and proximity to nature attracts people, and the proposal includes an infinity pool, town squares, community greenhouses and innovation opportunities in the factory buildings. The new buildings and infrastructure follows the architectural features and the landscape identity of Hjalteyri, preserving the unique townscape. The proposal involves a new residential neighbourhood with a kindergarten and a primary school to attract new residents. The factory buildings become an innovation center and the new buildings in the town center are facilities for new businesses and opportunities. New guesthouses along the shoreline could be accommodation for artists and people looking for inspiration, being close to nature.

But for all this to become a possibility, it is necessary to look at what is so special about Hjalteyri and continue the development so that reputation raises curiosity about the village, attracting future residents and visitors. The proposal shows how Hjalteyri can grow to an attractive place to live in the future, a settlement surrounded by nature and with lively public life and historic architecture. The history of the village continues into a bright future with new memories, activities, and history.

The project is divided into a background study that examines qualities that are important for rural settlements. Since the project is placespecific to Hjalteyri, it was important to understand experiences from residents when developing the design proposal. Interviews gave great insight from the local perspective about the village and the landscape identity. When developing a design proposal, it is also important to understand the built and natural landscape, and the site analysis chapter highlights the identity of Hjalteyri. The design proposal is based on the previous findings from literature, site analysis and interviews.

As portrayed by the interviewees, there is time to preserve places like Hjalteyri, but the main challenge is that new development respects the past and the identity of the place. The proposal demonstrates future potentials of this vulnerable settlement and shows how the village can grow to a town of about 300 residents and at the same time, strengthening the identity of the area by respecting nature and historical architecture. Therefore, the project demonstrates future possibilities for rural villages in Iceland and how the settlements can enhance the attractiveness for future residents.



## PREFACE

The motivations for this project come from personal experiences. I am originally a city girl, born and raised in Revkjavík, the capital city of Iceland. My grandparents lived in small towns in the Westfjords and South Iceland, where I spent my childhood holidays. I practised skiing which involved travels to different parts of the country to various ski resorts. Therefore, as a child, I got familiar with the countryside, the settlements, the landscapes and experienced seasonal conditions. When I started my journey to become a landscape architect in 2013, I moved to a small village to attend the Bachelor program at the Agricultural University of Iceland. I remember my first months after moving from the city where I was amazed by living so close to nature; I listened to the birds flying and watched the mountains lit up by the full moon. I got to know my surrounding landscape in a new way and found out that I loved to live with what I call "the best of both worlds", living in the countryside but close to the city. In 2017 I moved to Dalvík with my partner, a town in North Iceland, and started working at a landscape architecture office in Akureyri. Every day I drove 40 km back and forth to work, feeling again "the best of both worlds". Nature is in my backyard, and I experience the benefits of living in a small community, but I also enjoy living close to the "city" with all its activities and services.

At the beginning of the Covid-19 Pandemic, I was studying at the *Landscape Architecture for Sustainable Urbanisation* program at SLU in Uppsala. The campus was closed, and on March 19<sup>th</sup> 2020, I moved back to Iceland and started distance studying from Sweden. Working on this master project, I studied from distance and met my classmates, teachers and supervisors via online communication programs. Meanwhile, in the past year, my friends and family have mostly been working or studying remotely. Our homes have become our offices and our lives have changed. The pandemic has demonstrated for us that we can do many things remotely. I imagine that when life is back to "normal" in the future, we will be more open to distance opportunities. Maybe we will think about different qualities than job opportunities when choosing a place to live, because with our computers we are closer to each other. We will be able to live where we want, maybe in the countryside, and maybe work from home a part of the week and a part in the city...

...experiencing the best of both worlds.

Anna Kristín Guðmundsdóttir, Dalvík, Iceland January - June 2021

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My dearest partner, *Einar Dan Jepsen*, I am forever grateful for our times together, your support and sincere faith in me since the day we met.

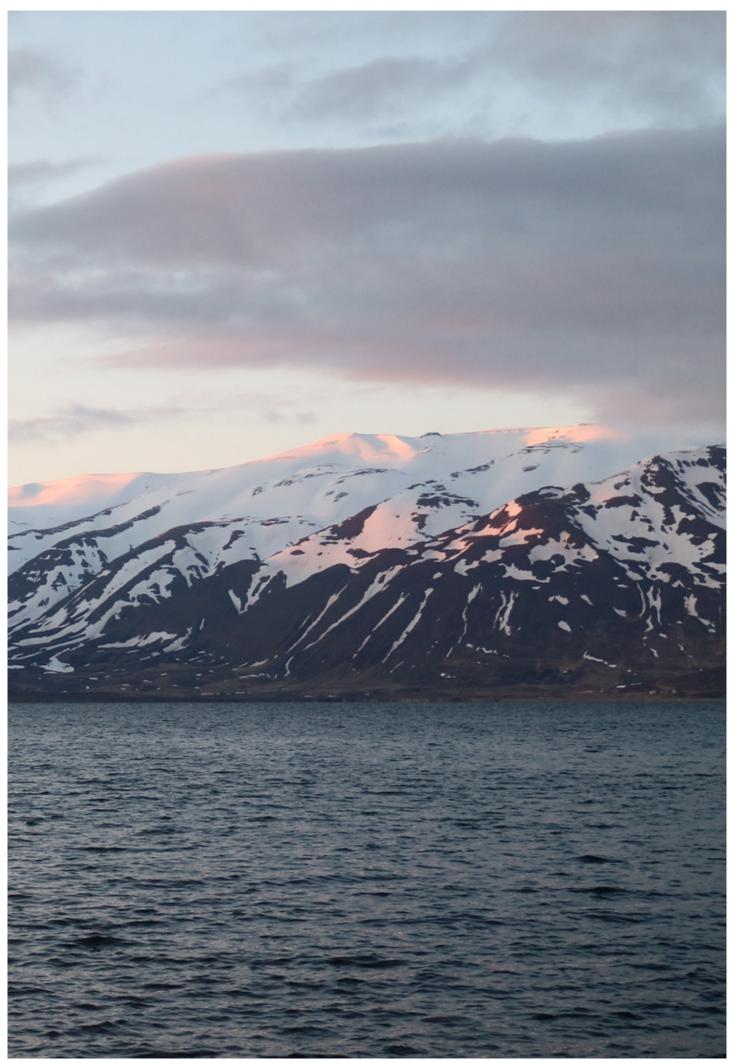


Fig. 3 View from Hjalteyri to the east coast of Eyjafjörður fjord. The texture of Icelandic nature, interplay of light and weather conditions.

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# 1 INTRODUCTION

## 1.1 MOTIVATION

In an era of rapid urbanisation, rural settlements are becoming more fragile to population decline and other coinciding factors. Around 68% of the world population is expected to live in urban areas by the year 2050, according to a 2018 announcement from the United Nations (2018). The ongoing urbanization poses major opportunities for the more sustainable urban world, but on the other hand, it also causes complications with population decline in rural areas. The impact of urbanization might drive communities in rural settlements to become less resilient and more fragile to future changes. If for example, important community service is transferred away from smaller towns to larger urban areas, it might lead to unemployment, and real estate prices might fall, and eventually, a chain reaction could lead entire areas to become almost abandoned. However, this situation can be prevented by enhancing the attractiveness of rural settlements. The restrictions following the Covid-19 Pandemic have demonstrated that now there are more possibilities for remote work than before. Residency preferences might not depend on the work location in the future but maybe on different place-specific qualities.

In 2020 around 64% of the Icelandic population lived within the greater capital area, according to Statistic Iceland (Hagstofa Íslands 2020). All around the country are numerous small coastal towns and villages that most are within a certain radius of a larger urban area. 5,9% of the total population live in rural areas and villages with less than 200 inhabitants (ibid). Many of these settlements have the advantage of being located within a reasonable distance away from larger urban areas, making the distance suitable for daily activities such as driving to school, work, or commerce and services. The Icelandic National Planning Strategy is a policy for municipalities to support sustainable development in planning (Skipulagsstofnun 2016:5-8). One of the guiding lights of the strategy is that the planning of settlements should contribute to the quality of life and support the competitiveness of all parts of the country. Planning should enhance the characteristics and the local spirit of places for making the places viable options for residence and business. Emphasis is placed on rural and urban development and areas around the largest towns are defined as work and service areas. The aim is to ensure growth and development within these core areas in each part of the country that can support a variety of services and enhance the quality of life.

This project examines the future possibilities of the village Hjalteyri, located in the fjord Eyjafjörður in North Iceland. Eyjafjörður is rich in agricultural land, and along the coastline are 13 towns or small villages and two islands with urban settlements. There are seven municipalities around the fjord, with a total population of 25.487 residents (Hagstofa Íslands 2020a). Eleven of the 15 towns in the



region have fewer than 300 inhabitants. By the head of the fjord is the country's fifth-largest town, Akureyri, with 18.933 inhabitants (ibid). Akureyri is the centre of business and services within the region. Hjalteyri is only within a 22 km distance north of Akureyri. The village has suffered from depopulation in the past decades and has today less than 50 inhabitants. The distance to Akurevri is short, and the travel time is within 20 minutes. With improved transport, a high level of road service during the winter months and increased possibilities for working remotely, it can be said that the opportunity to live in rural areas has increased. Certain qualities accompany living in these small towns, where nature plays a major role. However, the environment and community can also make a great difference in where people want to live.

## **1.2 OBJECTIVES**

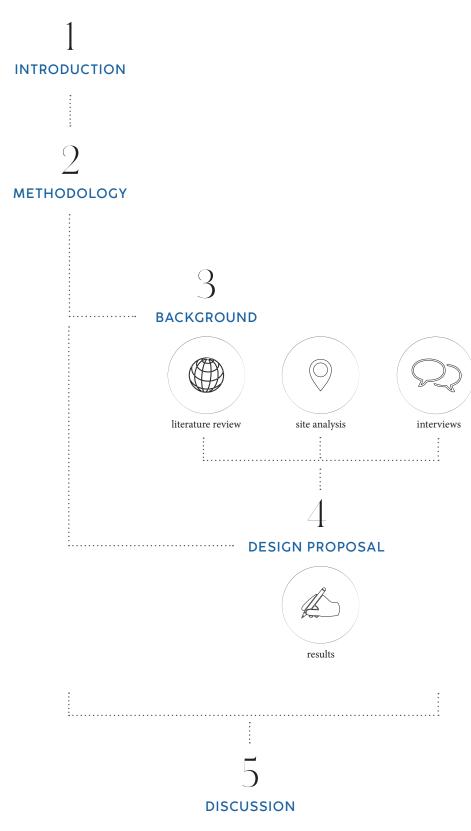
The main objective of the thesis is to create a holistic design proposal for Hjalteyri village that illustrates a future vision of how the village can grow into an attractive and lively town. The project examines what qualities are important for the attractiveness of rural settlements and the possibilities of rural living in Iceland. Emphasis is placed on how urban design based on the landscape identity can be strengthened to enhance liveability and attract residents, using landscape architecture and planning as a tool to strengthen the image of a place. With qualitative methods, the project aims to answer the following research questions:

What are the future development possibilities for rural villages in the vicinity of larger urban areas in North Iceland, like Hjalteyri village?

What qualities in urban design are important influencers for rural settlements to enhance the attractiveness of the living environment?

## **1.3 STRUCTURE**

The project follows a qualitative methodology and the structure follows academic standards and is divided into introduction, methods, background, design proposal and discussions. Figure 6 on next page illustrates the structure. The first chapter introduces the main objectives of the project. Methodology is explained in details in the second chapter. The background chapter is divided into three subchapters: starting with a literature review of research related to the topic, then a site analysis about current conditions in Hjalteyri, and after that, a summary from interviews is presented. The project results in a design proposal where previous findings are interpreted for the creation of a future vision for Hjalteyri village. The findings and the results of the project are then compared together in the discussion chapter, and the project is reviewed with a conclusion. The last pages present the reference list, a list of figures, and an appendix with the interview questions.



*Fig. 6 The structure of the thesis.* 

The project regularly includes full-page photos of Hjalteyri village taken by the author. The purpose is to help the reader connect with the place and to understand the context better. Hjalteyri village sits by the sea with panoramic views of Eyjafjörður fjord. The images allow readers from all over the world to understand the characteristics and the landscape of this Nordic village. Below each image is an informative text that explains what the reader is looking at. The author encourages readers to enjoy the images and experience the identity of Hjalteyri through them. Pictures and illustrations are by the author unless otherwise stated in figure captions and list of figures.

## 1.4 LIMITATIONS

Sustainable development aspects are taken into account with a focus on social and ecological values. However, the project does not delve into economic aspects other than understanding how jobs and places are connected in the literature review and the proposed development. Geographically, the work is limited to a Nordic context, and empirical findings are related to Hjalteyri in North Iceland. The knowledge gained from the project will be beneficial for landscape architects and other professionals in developing future planning and design strategies of villages and small towns all around Iceland. Similar methods can be adapted to other Icelandic coastal villages of similar size with less than 300 inhabitants or other vulnerable settlements undergoing depopulation. The project is mainly limited to creating an attractive environment for future resident and not focused on addressing tourists views due to the uncertainty of the tourism field following the Covid-19 Pandemic. The project discusses possibilities for people to live and move to small towns in the vicinity of larger urban areas, but the project is limited and will not analyse the housing market and real estate prices to understand the drive for people to move. The project is limited to the assumptions that in the future, remote work will be a common choice that could strengthen attractions of small towns that previously offered few or no specialized job opportunities. The project is also limited to that a specific infrastructure has to be in place to increase liveability, such as good road services, energy security and internet.

When talking about settlements, the context is in regards with the Icelandic scale of urban and rural areas. Following are explanations of the criteria that distinguish human settlements in Iceland based on population and geographical position:

## MUNICIPALITY

A municipality is an administrative unit over a specific rural and urban area. Municipalities have control over various projects in the field of planning, culture and social affairs and manage the operation of retirement homes, kindergartens and primary schools. Iceland is divided into 72 municipalities.

## CITY

Reykjavík is the capital city of Iceland and the only formal city with population of 133 thousand residents (Hagstofa Íslands 2020a). The second largest urban area, Kópavogur, has 38 thousand residents and is defined as a town.

## TOWNS AND VILLAGES

According to the Icelandic Planning Act (Skipulagslög 2010:123), an urban area is defined where the distance between houses does not exceed 200 meters and with at least 50 residents. Statistics Iceland define towns as areas with at least 200 residents, road system and maximum distance between houses of 200 meters (Hagstofa Íslands 2015). Settlements with population less than 200 are considered as rural areas but can be defined as villages, with at least 50 residents.





# $\mathcal{D}$

# METHODOLOGY

The methodology of the project is qualitative and based on empirical findings. Qualitative research is an appropriate approach for exploring a concept and understanding the meaning of a phenomenon from the view of participants (Creswell 2014:48-51). The strengths are that the approach allows room to be innovative and uses various forms of data from documents, interviews, and observations (ibid:234). Here, the methods of the project are explained in detail and how empiric data was collected and structured to produce the results. The project is divided into a background chapter with a literature review, a site analysis and interviews. Principles from the background studies are then used as guidelines to develop a future vision for Hjalteyri village in a design proposal. Main findings of the different aspects of the project are then discussed together in the discussion chapter.

## 2.1 LITERATURE REVIEW

The literature background focuses on getting an overview of the state of knowledge from journals, books, and other research projects. The review is divided into subchapters to cover various matters related to the objectives of the thesis. The first subchapter focuses on studies about what qualities are important to enhance the attractiveness of rural settlements. Then, literature about landscape identity is introduced and the role of place image to promote a place and attract residents and visitors. Looking into how landscape qualities can lead to a place attachment. The third subchapter introduces research about the human and nature relationship and how the environment affects well-being. The research is important to understand the benefits of experience with nature and what kind of outdoor environment offers restorative settings and enhances social connections. Finally, the literature review introduces studies about placemaking to understand important aspects in the design of a livable environment for public life and well-being.

## 2.2 SITE ANALYSIS

The analysis chapter highlights what identifies Hjalteyri village, the current condition and the history to identify future possibilities as a base for the design proposal. The author visited Hjalteyri frequently throughout the project work from January to May 2021. The purpose of the site visits was to experience the sense of place and the difference between the winter and spring seasons. During the site visits, the author took pictures of the built and natural environment, to help with the project work but also for the reader to understand the place characteristics as explained in chapter 1.3.

Data was gathered from maps and plans from the municipality and from site visits with empiric observations. The analysis is divided into subchapters with focus on diverse aspects. Location and landscape characteristics are introduced and a summary of the history of the village. Weather information from the Icelandic Meteorological Office are analysed and the daylight conditions. Population data from the municipality and Statistics Iceland are examined. Buildings, infrastructure, and elements from the built environment are identified in maps. Pictures are gathered to highlight the main identity of the village and to identify the sense of place. A short summary from the analysis is then introduced in chapter 4.1 as design guidelines for the design proposal.

## 2.3 INTERVIEWS

The main objective of the interviews was to receive a general overview of the subject and insight into personal experiences. The interviews were essential to receive local knowledge and understanding of the landscape identity of Hjalteyri to develop the design proposal. Through the interviews, the project aimed to understand the challenges and opportunities of living in small towns and the future of rural living – seen from the local perspective from residents and business owners in Hjalteyri and on a large scale from a development institute employee.

In order to ensure diversity in the selection of interviewees, it was decided to interview three residents of Hjalteyri, one male, one female and one young parent. Three residents of Hjalteyri were contacted in week 9 with a formal letter via the programs Messenger and Instagram, where the research objectives were stated and request for interview participation. Furthermore, two specialists in the profession of regional development were contacted via e-mail. All those contacted agreed to participate except one professional who did not answer the request, and it was consequently decided that an interview with one specialist would suffice. Due to the Covid-19 situation in March 2021, the participants were offered to participate either in-person or via the video communication software Zoom. All three residents of Hjalteyri agreed to participate inperson, but the specialist requested to receive the questions by e-mail and asked to answer in writing due to a busy schedule. The interviews were conducted in week 10 of 2021. Before each interview began, consent was requested from the participants to record the interviews and that a summary with indirect and direct references would be published in the project. Participants were also offered to remain anonymous. All participants agreed on these terms before the interviews begun.

In-person interviews with three residents from Hjalteyri village took place on March 10th and 12th, 2021. Since all participants agreed to be anonymous, pseudonyms are used hereafter. Birta is a young mother on maternity leave, Unnur is a self-employed craftsperson, and Nökkvi is a self-employed visual artist. Nökkvi and Unnur have lived in Hjalteyri for the past two decades, but Birta moved to Hjalteyri almost two years ago. Three separate interviews were carried out in the homes and studios of the residents at Hjalteyri. The duration of the interviews depended on the input from the participants, ranging from 40 minutes to 1 hour. Each interview was structured with the same questionnaire framework, and participants were asked to give their best input and reflections. However, the structure was kept open depending on the discussion flow and topics that aroused further interest and needed more explanation. The professional participant works at the Icelandic Regional Development Institute. She is an expert in the field of regional development and will go hereafter by the name Björk. Since the interview was through e-mail communication, a questionnaire and formal information about the participation were sent to the person on March 9th. The participant sent back completed written answers on March 12th. As this interview did not take place in person, it was not possible to ask the person beyond the scope of the prepared questions, and at the same time, it was not possible to examine reactions and interpretations. Nevertheless, the answers were very much informative and useful.

The interviews were performed in Icelandic and translated to English for the summary. Recordings and scripts are not a part of the thesis final version, but preserved by the author. The interview framework is presented in the appendices of the project in a translated English version. A summary from the interviews is presented in the background chapter 3.3, and findings analysed together with other conclusions in the discussion chapter. The summary is presented according to specific themes based on the questions and answers of the interviewees.

## 2.4 DESIGN PROPOSAL

Chapter 4 of the project introduces the main results of the project, a design proposal of Hjalteyri village where findings from the background research are expressed in practice. The aim is that the design highlights the identity of Hjalteyri village by creating attractive public spaces in the town center and showing how the settlement can grow in the future. By enhancing the quality of the built and natural environment, the village could attract future residents. The design proposal shows how villages in Iceland can grow and be resilient towards depopulation and changes in the future.

The design proposal chapter is divided into two subchapters: guidelines and the proposal. Design guidelines are introduced in the beginning of the chapter to show the main findings that were used to develop the design proposal. The guidelines are an analytical summary that synthesize information from previous literature studies, site analysis and interviews. Guidelines for different design elements are defined to support why certain design decisions are made. The guidelines result in a SWOT analysis that highlights important elements for the future development of the village. The SWOT analysis defines the strengths, weaknesses, opportunities and possible threats facing the settlement of Hjalteyri that the design proposal takes into account.

Finally, the proposal is introduced step by step from a concept to details. An overall plan is presented in the scale 1:5000 and diagrams draw out main elements such as vegetation, surface water, roads and paths, buildings and public spaces. Implementation stages are illustrated in diagrams showing how the village can grow over the next 40 years. Perspective illustrations show a view of some focus areas within the proposal and informative text explains the vision. Computer programs used are AutoCAD with base maps from the municipality, Sketchup, Photoshop and Illustrator for diagrams and illustrations. "WHEN YOU DRIVE DOWN THE HILL, YOU SEE THE BIG FACTORY AND THEN SUDDENLY DISCOVER THIS BEAUTIFUL VILLAGE, THIS IS SO AMAZING - IF YOU NOTICE IT."

(Unnur<sup>1</sup>)







3

# BACKGROUND

# 3.1 LITERATURE REVIEW

In the first subchapter of the literature review, research about rural living and the future of villages in an urbanizing world is introduced. This chapter will highlight important qualities that people inspire when living in small settlements. Literature about landscape identity is examined and the role of place image in design to promote a place, attract visitors and residents. Research about the human and nature relationship is explained and the benefits of nature activities for wellbeing. Finally, literature concerning placemaking in the Nordics is studied to understand what is essential for designing lively urban spaces that attract public life. These studies will be precedent for the overall design proposal for Hjalteyri village.

## ATTRACTIVE RURAL LIVING

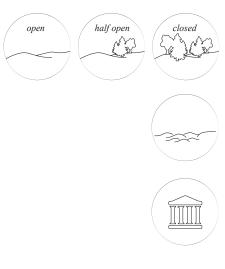
In an urbanizing world, the trends have been on the migration from rural to urban. Around the world, rural regions are experiencing population decline due to urbanization trends and lower fertility rates (Elshof, Haartsen, van Wissen & Mulder 2017:39). Young adults who move from rural to urban areas searching for education and employment play a significant role in the depopulation of rural areas. Fielding's 1992 study (see Elshof et al. 2017:40) found that some young adults return to the countryside later in life, but many remain in the city due to its liveliness and to take full advantage of their investment in education. However, work opportunities in villages have become less valued by locals than in the past, with an increased commute to the workplace (Elshof et al. 2017:41). With fewer employment opportunities in most villages, it has become more critical that village residents can commute to work to urban areas within a reasonable distance (Thissen & Loopmans 2013 see Elshof et al. 2017:41). Rural villages have now developed into communities where people live but work elsewhere. Therefore, villages located within commuting distance of workplaces can be identified as more attractive than remote villages (Van Ham 2002 see Elshof et al. 2017:41).

While those moving to the urban areas are looking for more liveliness, research has shown that desire for peace and quiet can motivate people to move from urban to rural areas (Champion 1999 see Elshof et al. 2017:39). People decide where to live, depending on the characteristics of a place that suit their interest (Elshof et al. 2017:39). Natural qualities of the living environment and other amenities are expected to influence rural villages' attractiveness for movers' flow. Mulligan and Carruthers (2011:107) defined amenities as the: "...key to understanding quality of life because they are precisely what make some places attractive for living and working, especially relative to other places that do not have them and/or are burdened with their opposites, disamenities."

Various amenities influence the competition between different places and the choice of living, affecting regional development and urban growth (Mulligan & Carruthers, 2011:109). Amenities include both natural varieties that are not influenced or produced by people, and human amenities produced by people (ibid:108). Weather, landscape, ambience, public services and infrastructure are examples of the broad diversity of amenities (Partridge 2010 see Elshof et al. 2017:40). Following are various amenities that Elshof et al. (2017:40-41) defined in their research that enhance the quality of the living environment and can influence the attractiveness of a place:

## SCENIC BEAUTY

The scenic beauty of an area consists of natural elements and man-made infrastructure that influences the image of rural idyll.



## LANDSCAPE

The degree of openess of a landscape influences the attractiveness.

## WATER

The precense of ocean or other bodies of water has been found to be an amenity of scenic beauty and provide recreational opportunities.

## HISTORICAL ARCHITECTURE

The built entvironment can also influence the scenic beauty of a place.

## **SERVICES**

Places with specific services that fulfill practical needs may attract people.



PRIMARY SCHOOLS For families with children.

## **GROCERY STORES**

Buying groceries in the village can be a reason for older people to socialise.

## HEALTH SERVICES

Need for health care f.ex. for elderly.

## **RECRATIONAL SERVICES**

Providing leisure activities and employment opportunities

### DISTANCE AND TRANSPORT

Villages within reasonable distance from urban areas are attractive for residents that commute to a workplace.

Fig. 10 Amenities that enhance the attractiveness of a place. Based on Elshof et al. (2017).



Fig. 11 Categories that can enhance the attraction of places for three different types of parties (based on Vareide 2018).

The link between people and their jobs is fundamental and the tradition is that people follow job opportunities and move to new places in the way of making an income (Florida 2002 see Kull et al. 2020:9). However, with the rise of technology in recent decades, the opposite trend is growing where jobs follow people. According to Florida, highly talented individuals, or the creative class, can therefore choose where to live and then attract businesses. A rural development analysis carried out by McGranahan and Wojan (2007) supports Florida's creative class theory which indicates that people in specific creative and knowledge concentrated professions are likely to be attracted to areas that contribute to a high quality of life. The analysis explains that rural areas with a density requiring a reasonable level of services are attractive to the creative class (ibid:199). Rural areas affluent with natural amenities such as appealing landscapes and recreational opportunities can be attractive for many in the creative class and an essential attribute for quality of life. These amenities have a role in shaping rural attractiveness and influence the growth of employment and population in rural areas. "People choosing the countryside for residence are to some

extent forsaking urban amenities for access to the outdoors, so these natural amenities should be especially salient in rural areas" (ibid:200). Another attribute that may be critical in attracting the creative class is the quality of a local school and public places for social and cultural interaction (ibid:213-214). The presence of an artisanal community and the existence of a rich cultural heritage may also be significant for rich cultural interaction in rural areas.

In his book, Vareide (2018) discusses the forces behind regional development and why some places grow while others are shrinking, and how places can affect their growth through enhanced attractiveness. Vareide proposed an attractiveness model that explains the growth and development of places, showing different scenarios over time of possible workplace and population growth for municipalities. However, to understand why some places attract more residents beyond what can be explained by job opportunities, Vareide (2018:186-187) also defined four categories that can help make a place attractive: areas and buildings, amenities, reputation, and local culture and identity, here illustrated in fig. 11.

The Nordregio research center published a report studying rural attractiveness in the Nordic countries (Kull et al. 2020). Fourteen municipalities in the region were studied, including 2 Icelandic municipalities in south and east Iceland. The primary objectives were to understand the motivation to live in rural areas and capture why some municipalities show success in employment and demographic development and how they strengthen the municipalities' attractiveness. By comparing interviews and findings across case studies, Kull et al. (2020:221-234) identified various factors underlying the attractiveness of a place. Some cases revealed some challenges regarding the availability of services in more remote parts of the municipalities, with health services in particular. Schools and kindergartens were highlighted as fundamental contributors to the attractiveness of places. High quality of life was named a critical factor for people deciding to move to an area, staying or returning after studying elsewhere. Proximity to nature and the availability of local amenities for culture, recreation and outdoor activities were described as factors enhancing life quality. The need for affordable housing for young families and transport connections was discovered as a fundamental value and accessibility to regional centres. The lack of jobs for people with higher education was defined as a challenge, but good transport connections were reported as necessary to sustain local businesses and enable commuting.

Kull et al. (2020:11) created a model that describes how people, jobs and places connect. Their approach is built on the rationale that jobs attract people to places and other attributes such as availability of local services, low housing prices, cultural and natural amenities and other elements that enhance the quality of life. The attractiveness model highlights three key relations of how jobs and places are connected, here explained (Kull et al. 2020:11):

## **DEMAND-DRIVEN MIGRATION**

Job opportunities are the main reason why people move to a place. This type of migration follows an indirect impact on the labour market since people and their families need services such as schools, welfare support, housing and infrastructure.

## SUPPLY-DRIVEN MIGRATION

People decide to move to a place for different reasons than following job opportunities. The attractiveness of a place can be because of the availability of kindergartens and cultural and recreational amenities, or the place is known for being an excellent place to live due to safety and family support.

## INDIRECT SUPPLY-DRIVEN MIGRATION

When a population of a place is growing, it positively impacts business development and the labour market because people need specific availability of services, housing, infrastructure, schools, and suchlike.

## LANDSCAPE IDENTITY

Stobbelaar and Pedroli (2011:321) defined landscape identity as "the perceived uniqueness of a place". In this sense, landscape identity will not have an absolute nature since individual perceptions are not parallel, and the attributed identity belongs as much to the onlooker as to the area (Stobbelaar & Pedroli 2011:321-324). People are in constant interaction with their surrounding landscapes and can feel a sense of belonging to a specific landscape where they, for instance, experienced a significant period in their life. Memories and symbolic meanings attached to the landscape and other landscape features formulate the existential identity that people perceive from the landscape. Another implication of the identity concept is the spatial identity that is based on features that people recognize the landscape from, such as colours, forms, patterns, smell, sounds and other elements of the landscape. Ingold (2000 see Stobbelaar & Pedroli 2011:324) explained that people could build an image of their surroundings by perceiving a landscape from the outside. Moreover, on the other hand, people can merge into and dwell in the landscape by perceiving its inherent qualities.

Another approach to landscape identity studies is the cultural identity that is characterised by signs and care for the landscape or by shared memories of events and a matter of human consensus rather than personally perceived landscape qualities (Stobbelaar & Pedroli 2011:324). Cultural landscape identity describes how communities value landmarks and stories about places in the landscape. Personal landscape identity, on the other hand, expresses the experiences of individuals and life events attached to the landscape. Place identity covers the emotional connection and identification between residents and their living surroundings, including the landscape, weather, history, culture and communication (Elmarsdóttir 2015:17-19). The concept sense of place describes as well this connection of people and places. Place image is based on tangible and intangible characteristics of a place that create an image of a place that can influence interests in visiting a place.

Throughout history, places have worked towards attracting residents and visitors by promoting the place image (Anholt 2010). The brand image of a country, city or a region depends on good management of places and commercial practices. The competition between places has increased with globalisation and affects not only cities but also towns and villages that now "...find themselves competing for the same people, products and capital..." (Anholt 2010:3). According to Anholt, the concept of brand image refers to the beliefs and reputation in the minds of the audience. In his article, Anholt (2010:7) explained that visual identities often characterise a place brand and that place branding enhances the image of a place, in a way of "...making places famous." The brand image illustrates the special features that distinguish a place from other places and highlights what the place offers, what characterizes it and what can be experienced there (Elmarsdóttir 2015:15).

According to Elmarsdóttir (2015:4-6), place branding methods have been used to develop and market places and promote tourism. Now, place branding is used to an increasing extent in rural development. The brand image for a specific area is based on the experiences and characteristics of the environment, culture and services available and even the relationship "LANDSCAPE" MEANS AN AREA, AS PERCEIVED BY PEOPLE, WHOSE CHARACTER IS THE RESULT OF THE ACTION AND INTERACTION OF NATURAL AND/OR HUMAN FACTORS

(Council of Europe 2000:2)



between the inhabitants and their surroundings. Place brand strategies can likewise play an essential role as tools to promote positive development and strengthen the image of an area to attract visitors, residents, and businesses and improve residents' quality of life. In this context, a place can be a tourist destination, a town or a larger urban area, a municipality or certain landscape units on a regional scale (Elmarsdóttir 2015:10-11). The benefits of place branding are that by defining the image, development can increase the attractiveness of the area and improve the competitive position. The relationship between the residents and the area can be strengthened, and an improved reputation can affect the real estate market.

## LIVING WITH NATURE

The relationship between human and nature has been widely researched, highlighting the benefits of the nature experience for human mood, health and cognition. A meta-analysis carried out by Capaldi, Dopko and Zelenski (2014) showed that those connected to nature had a more positive affect, vitality, and life satisfaction than those less connected. A study carried out by Bratman, Daily, Levy and Gross (2015) investigated the influence that experiences with nature have on affect and cognition. Sixty participants in Stanford, California, were asked to take a 50-minute walk in an urban or natural environment and to perform a series of psychological tests before and after their walk. The study revealed that anxiety, negative affect and rumination decreased after walking in nature, and working memory performance increased. The results indicate that a brief nature experience may provide a positive restorative impact on people.

The restorative potential of Icelandic nature has as well been investigated in a study conducted by Kristjánsdóttir, Sigurðardóttir and Pálsdóttir (2020). The study was carried out in various nature sites in the vicinity of a town in the Westfjords. The sites were urban parks, coastal areas, shores and forests. The participants went out for nature visits once a week for a period of time and were encouraged to observe and sense their surroundings by listening, smelling, touching and feeling. Participants filled out questionnaires before and after each visit with the purpose to evaluate "the perceived mental state and perception of the environment regarding the restorative qualities in each location, according to the ART theory (Attention Restoration Theory)" (Kristjánsdóttir, Sigurðardóttir & Pálsdóttir 2020:3). The study results showed that after visiting the nature sites, participants felt more relaxed, clearheaded, peaceful, happier and more alert (ibid:11-12). Shores were perceived as the most restorative nature sites with the highest ART factors for being away, fascination, extent and compatibility. Forest sites came thereafter, but the urban park was perceived as the least restorative.

Research by Grahn and Stigsdotter (2010) shows how urban green spaces are vital for public mental health. The study aimed to identify how people perceive green urban spaces and what spatial qualities people prefer in outdoor experiences. The study classified *the Eight Perceived Sensory Dimensions* indicating preferences when visiting urban green spaces. The dimensions can be used as guidelines to promote health through planning and design. Figure 13 describes these eight (2010:270) and Stigsdotter et al. (2017:3).



#### SERENE

Being in an undisturbed, silent and calm environment. Spaces for retreat.



#### NATURE

Wild and untouched environment, designed on nature's own terms.



#### SPACE

Spacious and free environment with certain amount of connectedness feeling of being in a larger whole.



#### **RICH IN SPECIES**

Environment with a wide range of expressions of life, with variety of birds, animals and plants species.



#### REFUGE

Enclosed and safe environment where people can stay, and watch other people being active.



PROSPECT

Open and plane areas with vistas over the surroundings.



#### CULTURE

Environment that contains an essence of human culture, and historical relics.



# SOCIAL

Environment for social activities, where people can meet and see each other.

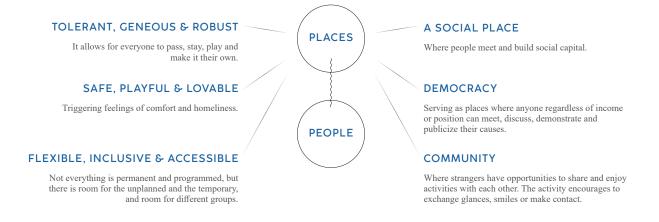


Fig. 14 Values that define what makes a good place (based on Perrault et al. 2020:44).

# PLACEMAKING IN THE NORDICS

The *placemaking* concept originates from the 1970s where urban activists such as Jane Jacobs, William H. Whyte, Fred Kent and Jan Gehl were key figures in the movement (Perrault et al. 2020:8). They called on planners and politicians to think about the human scale in planning and the need for diversity, walkability and meeting places in public spaces. Placemaking is about designing sustainable and attractive urban environments with a focus on the residents. "Making places more attractive is a central focus for placemaking. It creates the conditions for people to go and to stay in a public space, thus making them more lively and inclusive." (Perrault et al. 2020:11).

Perrault et al. (2020:3-4) explored with the *Placemaking in the Nordics* project how placemaking processes can be implemented with good success in the Nordic countries. The project was initiated by the organisation *Future Place Leadership* and ran for 10 months, where 70 participants explored placemaking projects and analysed challenges and success factors from them. This work resulted in the creation of a toolbox that provides a framework for developing public spaces in Nordic countries, with a focus on conditions in

the Nordics. Two challenges can be addressed for public spaces in the Nordics according to Perrault et al. (2020:10): The first challenge is to work with placemaking in areas with low population density to achieve a critical mass, such as suburbs, small towns and rural areas. The second challenge is the long and dark winter months that limit the time spent outdoors for people. Therefore, winter placemaking is important for creating conditions for people to enjoy spending time in public spaces during winter. The Placemaking in the Nordics project captures a set of values that define qualities of places, highlighted in figure 14. According to Perrault et al. (2020:44), a good place allows everyone to stay and meet regardless of position or income. A good place is accessible and safe and gives people opportunities to enjoy activities and make contact. Good public places offer room for the unplanned to happen and enhances the sense of community, where people can make contact with other people and exhange smiles.

The book *Life between buildings* by the Danish architect Jan Gehl examines human life in public spaces. Gehl (2011:9) defined three types of outdoor activities that happen in public spaces, and explained how each activity places different requirements on the outdoor environment.

#### "SOMETHING HAPPENS BECAUSE SOMETHING HAPPENS BECAUSE SOMETHING HAPPENS"

(Gehl 2011:75)

Here the three types of outdoor activities are introduced according to Gehl (2011:9-13):

## NECESSARY ACTIVITIES

Everyday tasks such as going to school or work, running errands and shopping are described by Gehl as necessary activities. Because these activities take place in almost all conditions year-round, they are less dependent on the quality of the environment.

#### **OPTIONAL ACTIVITIES**

Outdoor activities that people attend to because they wish to, have time for, and the place makes it possible, is described by Gehl as optional activities. To go for a walk for fresh air or sitting and enjoying a view are examples of optional activities. These activities are very dependent on the quality of outdoor spaces.

#### SOCIAL ACTIVITIES

Social activities evolve from necessary and optional activities, when people are in the same public spaces. These activities depend on the presence of other people, to see, hear and meet other people and having some form of contact. The design of the outdoor environment can influence possibilities for people to meet and therefore enhance social activities.

Furthermore, Gehl (2011:129-197) discussed important qualities in the design of public spaces to make them attractive for public life of all age groups that are summarized here:



#### WALKING

Accessibility for everybody is important. Path widths and paving materials need to be accessible to people of all ages, a wheelchair, and a baby carriage. The environment surrounding the paths affect the experienced distance between places. An acceptable walking distance is less than 500 meters. Winding or interrupted paths reduce wind disturbance and are more interesting for pedestrians than straight routes.

#### STANDING

Having a good place to stand allows people to stay in the public spaces when waiting for someone, having a conversation with people or enjoying the surroundings. Edges, where two different spaces meet, are ideal for standing, such as near building facades. Staying by the edges allows people to stay without being themselves in the spotlight. Street furniture and details in public spaces that allow people to stand and linger are ideal staying possibilities.

#### SITTING

Sitting opportunities increase the possibilities for people to dwell in public spaces for longer times. If there is no seating, people walk by and might miss out on an attractive environment. Seating increases the quality of public life where people can sit and eat, read, talk, sunbathe or knit. The activity is very dependent on external conditions such as the location, sun and shelter. By paths and in public spaces, benches should be located at regular intervals of 100 meters.



#### SEEING, HEARING AND TALKING

Seeing other people requires that public spaces are open but not too big and that people can overview the spaces. Good lighting conditions are important for people to spend time in public spaces when it is dark. Hearing people talking and birds singing without the disturbance of traffic is an essential value for public spaces. Benches and other elements that enhance social interaction create opportunities for people to sit and watch, listen and talk to one another in the public environment.

#### A PLEASANT PLACE

A safe place protected from traffic and other risks or crime can be perceived as pleasant. Shelter from unpleasant weather is also important. In Nordic countries, people use the outdoors differently between the seasons. Spaces with direct sun and shelter from the wind are considered pleasant. It is essential to improve the local climate with planning to create a better outdoor environment for public life to thrive. Windbreakers, trees, hedge, the location of buildings and paths and other aspects are important to enhance the pleasantness of a place.



Outdoor life in residential areas can be supported with semiprivate front yards by the access street and a private backyard behind the house. Residents can therefore choose between staying on the public side or the private side of the house. To ensure a certain privacy, the houses should be placed around 4 meters from the sidewalk, far enough to be private but close enough for contact.

Fig. 15 Qualities for public life (based on Gehl 2011:129-197).

This chapter presents an analysis of the identity of Hjalteyri. Information is based on empirical findings from site visits and interviews and data from the municipality and other sources. The analysis is a key factor in understanding the built and natural landscape of the village and a basis for the development of the design proposal.



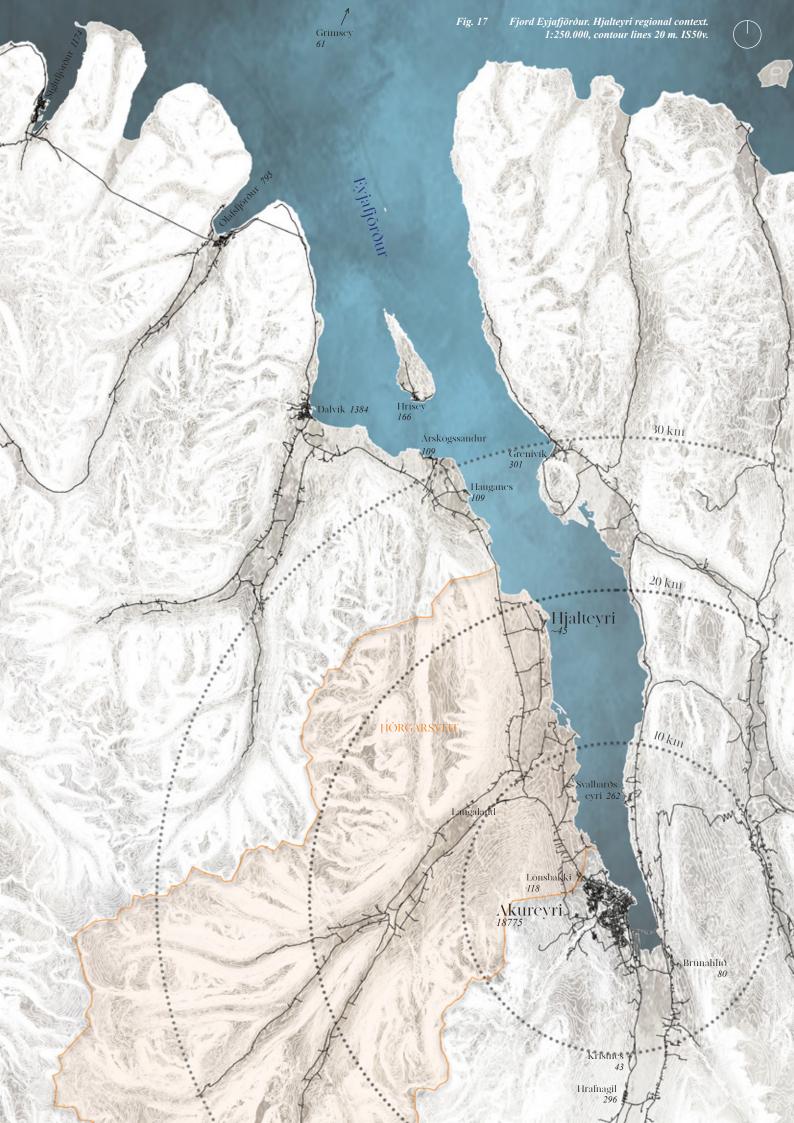
Fig. 16 Hjalteyri location in North Iceland.

# LOCATION AND POPULATION

Hjalteyri is a small village within Hörgársveit municipality in North Iceland (see limits on the map in orange color on figure 17). Agricultural landscape and rural areas identify the municipality land covering 893 km<sup>2</sup> in Eyjafjörður fjord (Loftsson, Gunnarsson & Ólafsdóttir 2015:5). Two urban areas are defined in the municipality, Hjalteyri located around 22 km north of Akureyri and Lónsbakki located by the town limits of Akureyri. The kindergarten is located at Lónsbakki, but the elementary school is located in the rural area Laugaland. Therefore, children living in the municipality travel by bus to school. Hjalteyri is within a short driving distance from Akureyri, where stores, services, businesses, institutions, colleges, a university and a hospital are located.

The map on the next page illustrates the location of Hjalteyri in a regional context of fjord Eyjafjörður. Distance from the centre of Akureyri is demonstrated with circles with a radius of 10, 20 and 30 km and the boundaries of Hörgársveit municipality. The location of other towns and population numbers are shown based on data from Hagstofa Íslands (2020a). Along the coastline of Eyjafjörður are 13

towns and two islands settlements (see location, name and population in figure 17), and the total population of the area is 25.487 residents, with around 74% living in Akureyri (Hagstofa Íslands 2020a). At the beginning of 2021, the Hörgársveit municipality population was 653 inhabitants (Hagstofa Íslands 2020b). According to Snorri Finnlaugsson, the municipality manager, it is estimated that the population will approach 1000 people with planned development in the coming years (Sveinn Arnarsson 2019). The latest numbers about the population of Hjalteyri are available from the year 2009 when 45 people were recorded to be living there (see figure 18, data by Hagstofa Íslands 2020a). It is unclear how many permanent residents live in the village now since many of the houses are used as holiday homes (Filippusdóttir & Ólafsson 2018:7). The population of Hjalteyri peaked in 1948 when 150 inhabitants were registered to live in the village, but since then, the population has gradually declined (Hagstofa Íslands 2006). The municipality predicted that by the end of the planning period the population would be around 620-690 residents in the municipality (Loftsson, Gunnarsson & Ólafsdóttir 2015:65). The population has increased from 584 people in the beginning of the planning period to 653 residents (Hagstofa



Íslands 2020b). The population in Lónsbakki, the other urban area in the municipality, is 145 residents and the municipality plans that the settlement will grow to 400 people in the next years (Hörgársveit 2021). The population projections by Statistics Iceland predict population changes with low, medium and high forecasts (Hagstofa Íslands 2021). The medium forecast predicts that by 2030 the Icelandic population has increased by around 37 thousand people from today and by 62 thousand in 2050, or from 1-1,7% increase. If the medium forecast ratio is calculated for the population in Eyjafjörður fjord, then the population in the region could be around 28 thousand in 2030 and 30 thousand by the year 2050. The comprehensive plan of Akureyri (Jóhannesson 2018) predicts that by 2030, the population of the town will be around 21 thousand residents, which means that the next 9 years, Akureyri is expected to grow of about 2 thousand inhabitants. From this, it can be assumed that the population increase might cause a chain reaction to other settlements in the region.

In the current comprehensive plan, the municipality defines a 10 hectare area in Hjalteyri for residential area (Loftsson, Gunnarsson & Ólafsdóttir 2015:66-67). South of the main residential area is a 3 hectare field that is defined as a recreational area and north from the residential area, the municipality has defined a 4,5 hectare area for holiday homes. The municipality plans that in residential areas, the exploitation rate for single family homes should be between 10-15 dwellings by hectare. This means that the current residential area can have up to 150 dwellings. The comprehensive plan predicted with a population forecast that 20-50 new residences were needed during the planning period, which is valid until 2024 (ibid:64-65). The municipality considered that the plot supply was in line with needs. Due to the proximity to Akureyri, there has been a continued demand for residential plots in the municipality in recent years. The planning period is coming to an end, so it can be assumed that needs have changed, and terms will be updated with a new comprehensive plan.

# **MUNICIPALITY PLANS**

Current comprehensive plan for Hörgársveit municipality is valid from 2012-2024. The main objective of the plan is to promote effective development of settlements in the area by supporting good conditions for business and human life, making the municipality attractive for living (Loftsson, Gunnarsson & Ólafsdóttir 2015:5). To achieve this goal, the municipality intends to strengthen aspects related to employment, education, social facilities and transport. The municipality plans to reserve building land for future urban growth and supply plots for industry, tourism and other economic activities to support innovation. The vision is that the countryside will remain a thriving settlement with good transportation. The municipality plans to preserve natural and historical monuments and other environmental qualities and strengthen the foundations for tourism based on the uniqueness of the area. Furthermore, the goal is to promote vegetation protection and soil reclamation, and that land use is in accordance with the condition of the land.

In 2018, a new zoning plan for Hjalteyri was validated (Filippusdóttir & Ólafsson 2018:3). In the plan, the municipality sets out detailed terms for Hjalteyri and defines streets, plots and open areas. The plan defines 20 new residential plots and sets terms about the architecture of the buildings. The aim of the plan is to protect the image of the old village. The plan sets policies about the preservation of the townscape and the pond area. In the zoning plan are policies about outdoor lighting which the author of this thesis developed in collaboration with the municipality (ibid:29-30). The lighting plan proposes that the lighting conditions and the light fixtures should fit well with the image of the place. The park around the pond is defined as a dark quality area to protect birdlife and improve conditions to experience the night sky. The terms of the plan state that outdoor lighting should strengthen the appearance and attractiveness of the settlement.

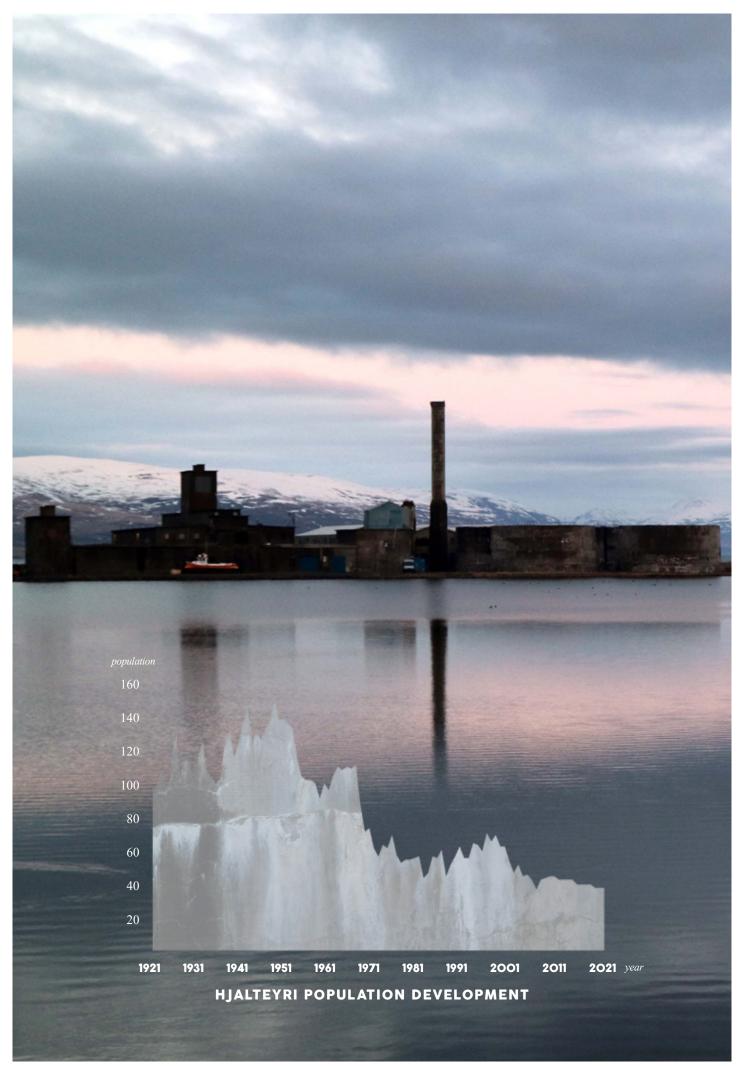


Fig. 18 Population development in Hjalteyri from 1921-2021 (data by Statistics Iceland). Background: the factory buildings reflected in the water one May evening.



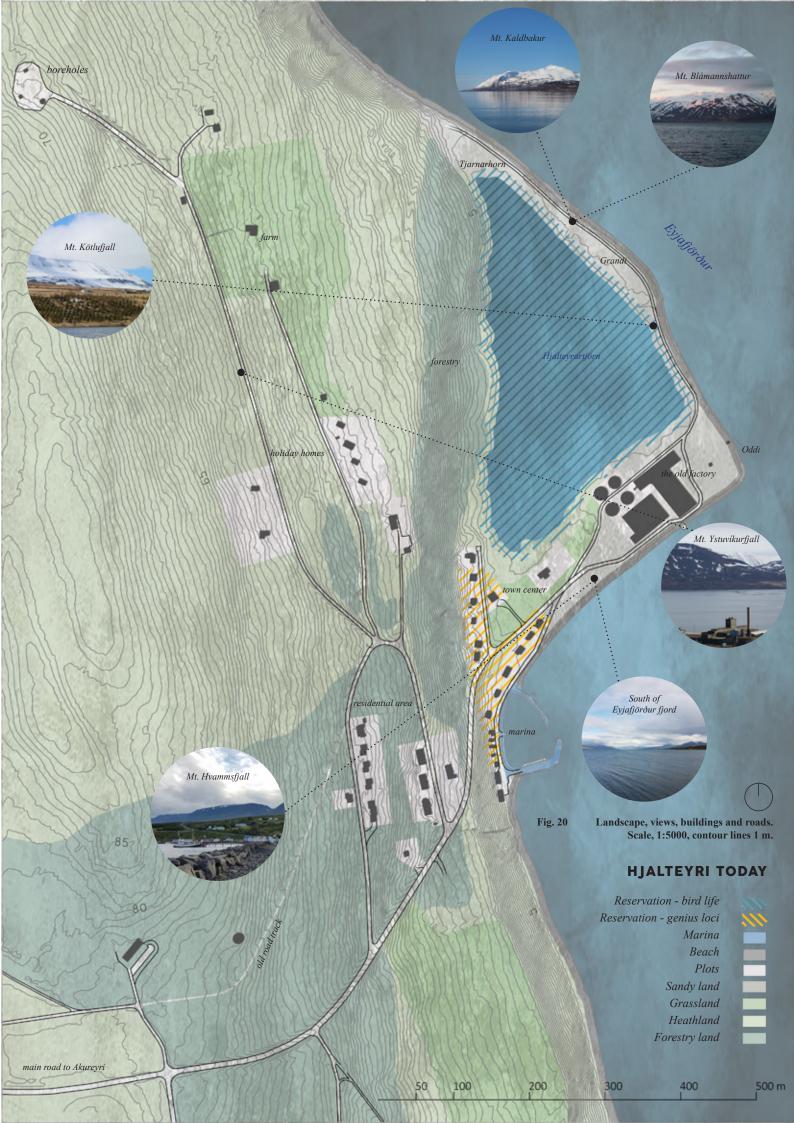
Fig. 19 Details of the landscape and nature elements in Hjalteyri.

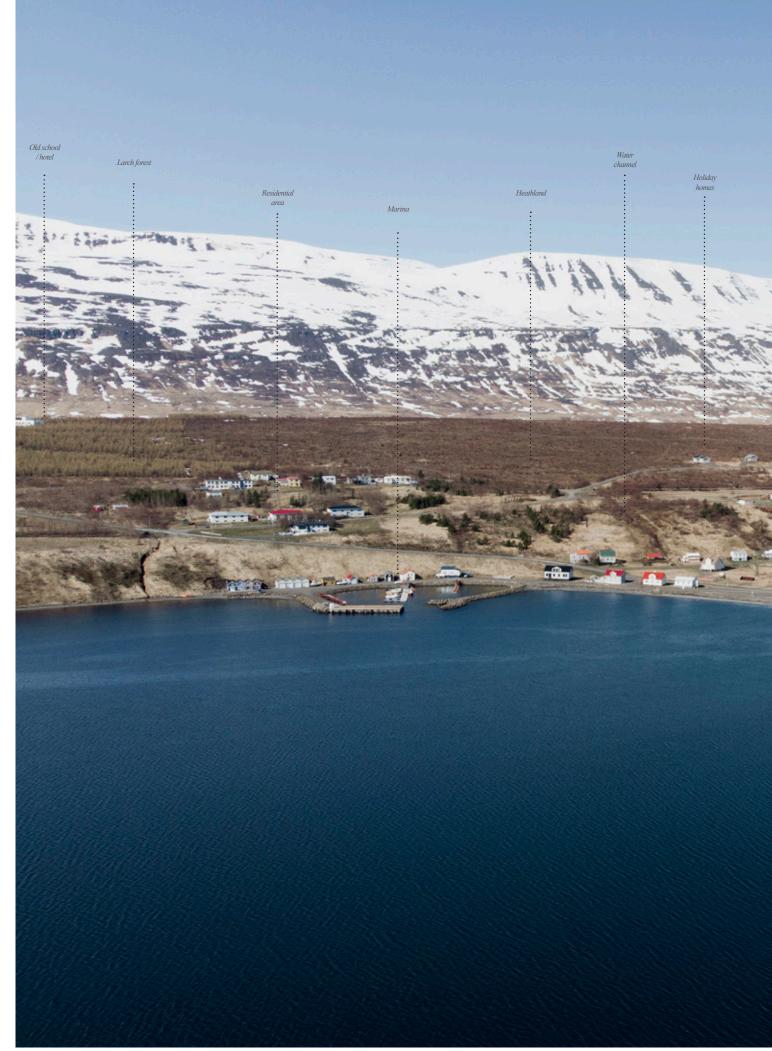
# LANDSCAPE AND TOPOGRAPHY

The village is by the sea with magnificent panoramic views of the landscape of Eyjafjörður fjord, where the mountains rise high from the sea by the east and west coast. The landscape is marked by a high slope and the area extends from sea level to about 75 meters above sea level (see fig. 21 on page 46). By the sea the landscape is flat and protrudes into the fjord. The pond Hjalteyrartjörn is a sea lagoon seperated from the sea through time with gravel reef (Filippusdóttir & Ólafsson 2018:9). The area is a reservation due to the diverse birdlife. Sandy land, rocky beaches, heathland and forestry areas characterize the natural landscape of Hjalteyri, as illustrated in figure 20. The landscape images on the map show views towards the surrounding landscape from certain locations within the settlement. The landscape in Hjalteyri is open and from there is a panoramic view around the fjord.

The vicinity of Hjalteyri is a geothermal area with high performance low-temperature boreholes that serve the area with hot water and partly Akureyri (Filippusdóttir & Ólafsson 2018:7). In the ocean right off the coast of Hjalteyri are Strýtan hydrothermal chimneys, unique natural wonders and the only ones that have been found in shallow water (Umhverfisstofnun 2003). The ridges can be reached with standard scuba diving equipment, making them accessible for research and inspection. The phenomenons are protected as natural monuments.

Figure 21 on the next page shows a drone view over the village in April 2021. The picture shows the urban structure of the village and the location in the landscape by the sea.







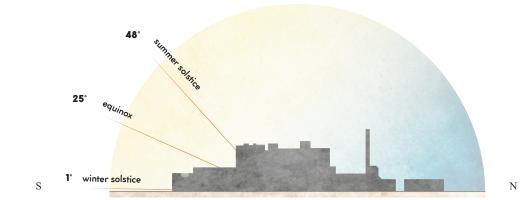


Fig. 22 Sun altitude at solar noon by equinox, summer and winter solstice in Hjalteyri (data from Time and Date 2021).

# DAYLIGHT AND WEATHER

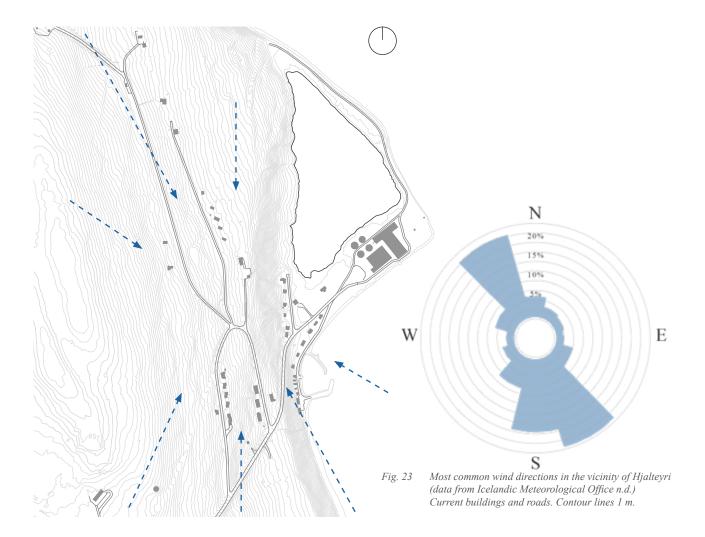
Hjalteyri is located at 65°51'N 18°12'W. Due to the notherly latitude, the days are short and dark in the winter, but bright and long in the summer. Hjalteyri has midnight sun in June, and for 10 days around Summer Solstice, the sun is up all day (Time and Date 2021). Winter Solstice in December is the shortest day of the year in terms of daylight. The daylength in Hjalteyri is then 2 hours and 55 minutes, with sunrise around 11:43 and sunset by 14:38. Figure 22 illustrates the sun altitude at solar noon by equinox, summer and winter solstice. The dramatic changes in daylight conditions affect the everyday life, with darkness prevailing majority of the winter and sunlight in the summer.

In the Eyjafjörður region, there is a clear difference between the seasons (Ívarsson 2019:8). Winters can be heavy with snow, and the northerly winds are cold and followed with precipitation. Summer days can be warm with the southerly thaw, but sea breeze is common on sunny days with northerly winds. The prevailing wind directions in the area follow the landscape of the fjord and the area around. According to the Icelandic Meteorological Office (n.d.), south, south-east and north-west winds are most common in Hjalteyri as seen in the wind rose in figure 23. The settlement of Hjalteyri is by the sea, and the land is open to the most common wind directions.

*Möðruvellir* weather station is located 10 km away from Hjalteyri. Daily meteorological observations are made there, and information from them can be used to understand the weather conditions in Hjalteyri. Figure 24 shows average temperature on the Celsius scale and the highest and lowest recorded temperature in the period from 2010-2019. The data shows that the average temperature during the summer months is from  $9,8^{\circ}$ -11,2°C (Veðurstofa Íslands 2019). The highest registered temperature in the weather station was around 26°C, recorded in July. The average temperature during the winter months is around freezing-point, but as the diagram shows it can fluctuate.

Trees and vegetation can help strengthen shelter formation for the built environment, and in open areas surrounding the village is a low-growing spruce forest. Due to height differences in the village and that the landscape runs from north-south, the streets are levelled with the land. As the streets are open to the most common winds, vegetation and other implementations are essential to create shelter in the area and prevent the streets and buildings from causing wind effects. Daylight and weather conditions such as wind, temperature and precipitation are all important factors that affect outdoor possibilities in public spaces and the development of the built environment.

In the next few years, sea levels are predicted to rise, ranging from 0,4-0,9 m rise and causing flooding and land erosion (Loftsson, Gunnarsson & Ólafsdóttir 2015:56). There is a considerable wave action off the coast of Hjalteyri, and it is therefore important to protect the settlement and vulnerable areas from rising sea levels. In the years 1999, 2007 and 2011, a sea wall was built along the entire coast of Hjalteyri, protecting the settlement from the intrusion of the sea.



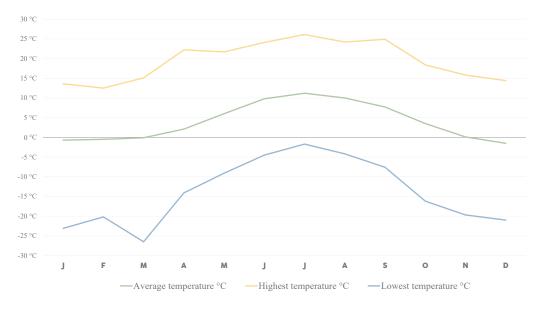
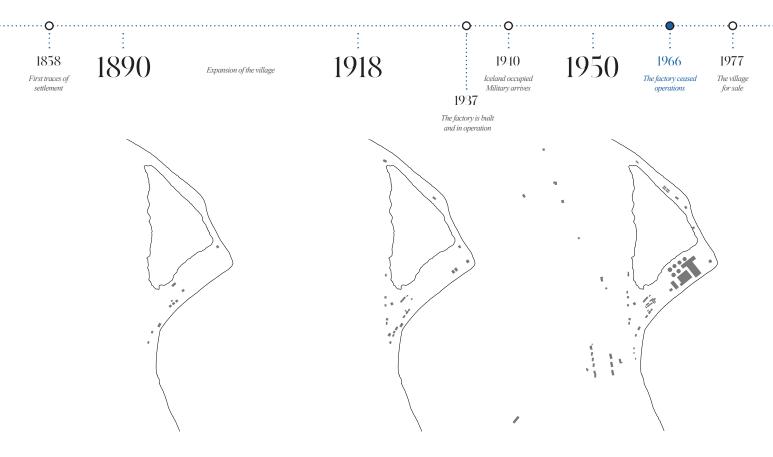


Fig. 24Average temperature °C, highest and lowest temperatures in the period 2010-2019<br/>recorded in Möðruvellir weather station, 10 km away from Hjalteyri (data from Veðurstofa Íslands 2019)

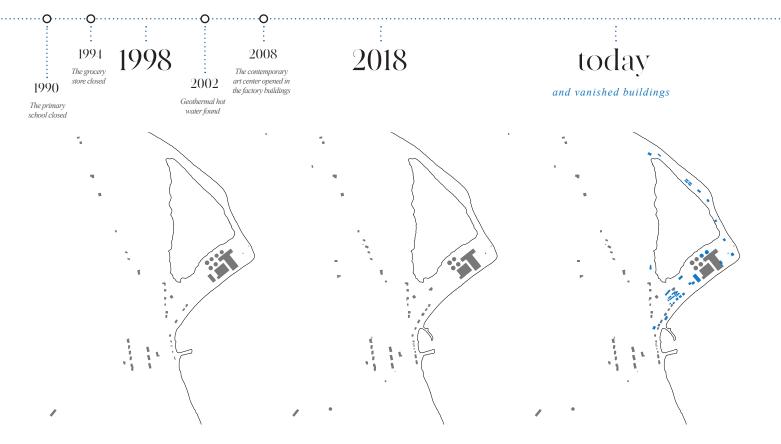


# HISTORY AND TODAY

Figure 25 shows the settlement development of Hjalteyri. The last diagram in the sequence shows the buildings of Hjalteyri today and those that have vanished through the years. The first traces of settlement in Hjalteyri are from around 1858, but the village expanded by the turn of the twentieth century when Hjalteyri was the largest settlement in the Eyjafjörður region besides Akureyri (Benediktsson & Ólafsson 2017:7-9). From 1905-1966 was a period of prosperity in Hjalteyri, when people began to earn a living from marine products. In the harsh winter of 1937, the largest herring factory in Europe was built. The herring processing was a significant operation that created employment opportunities, and the settlement continued to grow. Residential buildings were built, and a large number of workers lived there in cramped conditions. In 1948, a new building for a primary school was built for the children in the village and the countryside. The school operated until 1990.

During World War II, Iceland was occupied by the British military, and there was an army base in Hjalteyri (ibid:35-36). The army built many Nissen huts with accommodation for the soldiers and other facilities, observation posts and water and drainage systems. Their activities impacted the community and some residents worked for the army or rented their houses. The military even invited locals to dances and movie screenings in their facilities.

Eventually, the herring disappeared, which put an end to this development period in Hjalteyri when operations in the herring factory ceased in 1966 (ibid:10). Job opportunities in Hjalteyri had relied on the continuity of the factory, and with its closure, most of the villagers became unemployed. In the years that followed, people moved from the village searching for work and new opportunities elsewhere and left their valueless properties. Newspaper headlines from 1976 said: "an entire village for sale" and "Hjalteyri ghost village for sale" (see figure 27). By this time, a nature conservation



council required that the environment of the village should be cleaned because scrap iron and debris had been left there over the years (ibid:50-51). The cleaning work went well, but various relics from the past disappeared, such as piers that were not considered useful.

In the years after 1978, there was a rising positive development again in Hjalteyri (ibid:51-55). New harbour was built, and the regional cooperative in Eyjafjörður fjord (KEA) started fish-processing that gave good employment opportunities again. KEA also opened a grocery store that became a kind of a community center where people came to pick up their mail, meet their neighbours and buy groceries. By this time, transportation improved with paved road to Akureyri and Dalvík, 44 km altogether. Supermarkets with lower prices opened and took over the market from the small merchants. This development eventually led to that the grocery store in Hjalteyri closed in 1994, thus ending 110 years of continuous trading history in the village.

Today, the old factory buildings create notable scale to the small village, but the contrast in scale and appearance characterize the built environment. The old buildings are reminiscent of human activity in previous decades. In recent years, the old houses have been renovated to protect the appearance of the village. Various activities have sprung up in the factory buildings, and today there is a contemporary art center, diving center, tannery workshop, powerlifting gym, workshop and various other activities. Several small boat fisheries operate from the marina, and a whale watching company sails from the old pier. A café is open during the summers, and the old primary school is now a hotel.

Figures 26-34 in the following pages show photographs of the village and activities related to the herring processing from earlier times. The pictures show how extensive the operation was and how rich of life and activities the village was.



Fig. 26 Hjalteyri townscape in 1950s (Agnarsson 2018).



Fig. 27 Hjalteyri - ghostvillage, newspaper article from 1976. (Tímarit.is)



Fig. 28 Herring salting. In the background, it can be seen that the herring factory is not built. (Þórhallsson 2015)

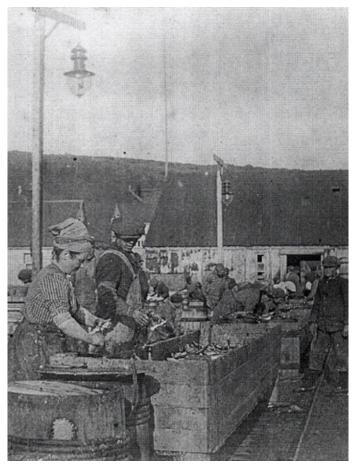


Fig. 29 Fish processing on the pier at the beginning of the 20th century. (Þórhallsson 2015b)



Fig. 30 People working on the pier. (Tryggvadóttir 2018)



Fig. 31 Period 1901-1909. House, production area and piers at the far corner of the pond. The piers were demolished by sea ice in 1918. (Minjasafnið á Akureyri)



Fig. 32 Hjalteyri townscape in 1908-1912. (Minjasafnið á Akureyri a)



Fig. 33 Hjalteyri village, period 1921-1926, characterised by the many piers and settlements along the coast. (Minjasafnið á Akureyri b)

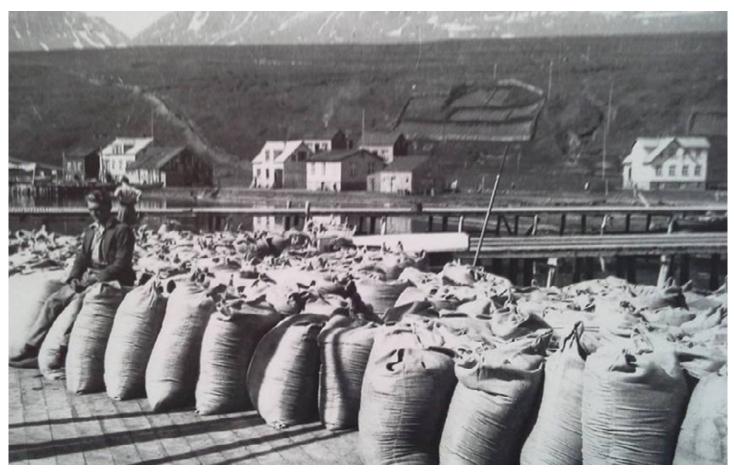


Fig. 34 Unloading on the pier around 1937. The first buildings on the hill are not built, but visible are vegetable gardens. (Karlsson 2015)

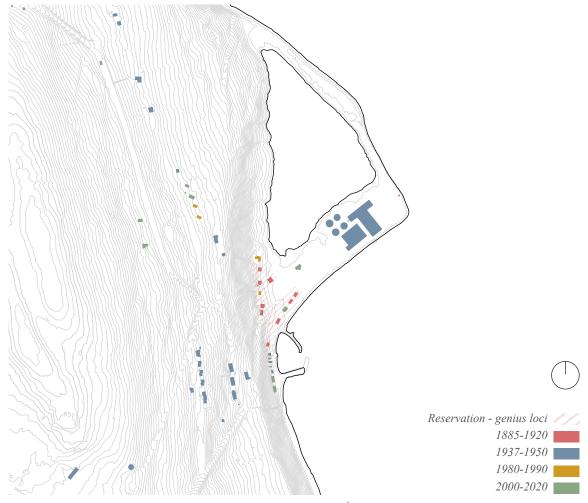


Fig. 35 Construction period of existing houses (based on Benediktsson & Ólafsson 2017). Contour lines 1 m.

# **BUILDINGS AND TOWNSCAPE**

Eleven residential buildings stand at the top of the hill. The houses are single-family homes and duplex houses on two floors due to the land slope. The buildings were built in the period of prosperity in Hjalteyri, from 1938-1950 (Benediktsson & Ólafsson 2017). The architectural style is modernism, and the building material is concrete. North on the hill from the residential area are six holiday cottages built in recent years. Above the village stands the old primary school that is now a hotel, a majestic modernism building from 1948. Below the slopes are seven wooden houses, and five have a conservation value due to age. The oldest houses are from the period 1905-1918, but the newest are cottages built in the eighties. Figure 35 illustrates the construction period of the existing houses and the area with preservation values.

By the marina are seven small and colourful cottages that are used as storage huts related to fishing or some as holiday homes. The row of houses along the shoreline forms a unique appearance and contributes to the place image. Five wooden houses with corrugated iron cladding stand gracefully by the shore, and four of them have a conservation value (ibid). The houses are from the period 1885-1918, but one was built in 2015 and follows the same architectural style, showing an excellent example of how the architectural identity of Hjalteyri can be preserved. Farthest out by the sea are the factory buildings, built in the years 1937-1950. The old factory is prominent in the built landscape of the village and visible from many areas in Eyjafjörður fjord. Figure 36 is a collage of images showing the characteristics of some of the buildings in Hjalteyri.

# FORM, COLOUR AND DETAILS

*Fig. 36* Detail images showing characteristics of the buildings by the shoreline.



# SENSE OF PLACE

The images on this page show a collage of the main identity of the built and natural environment of the village. Highlighting the visual elements and place characteristics that define the unique sense of place and the landscape identity of the village.

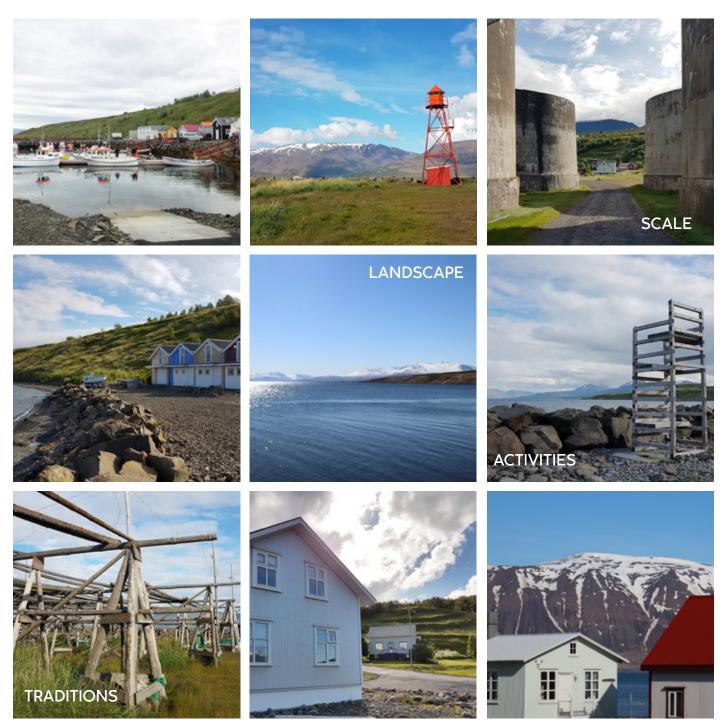


Fig. 37 Image collage highlighting the characteristics of Hjalteyri village.



# ARCHITECTURE













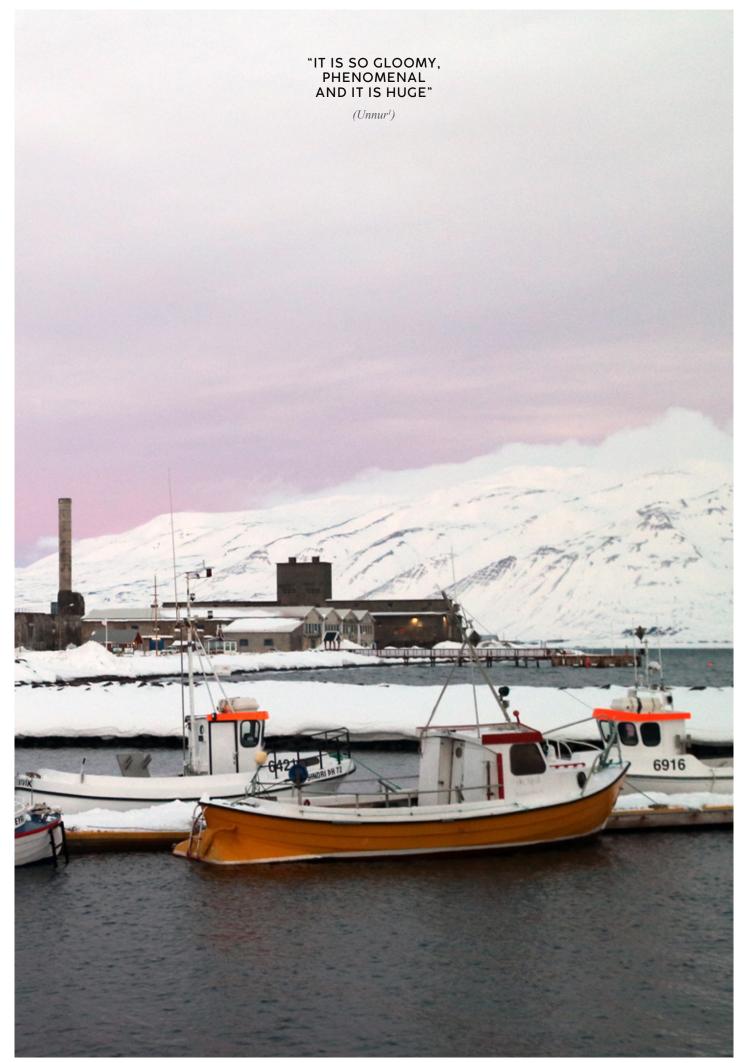






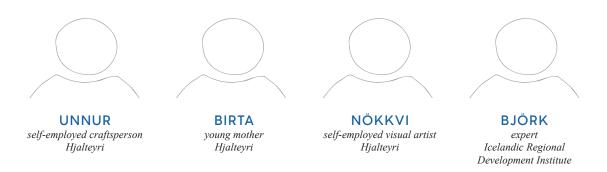






# 3.3 INTERVIEWS

This chapter presents a summary from all interviews with three residents of Hjalteyri and one specialist at the Icelandic Regional Development Institute. The summary presents direct and indirect quotes from all interviews, gathered together based on different themes that characterized the interviewees' responses. The interviews are analysed and compared to other findings in the discussions chapter. Interviewing residents of Hjalteyri is a way of receiving local knowledge and understanding their perspectives, that help identify the main possibilities and challenges when developing a design proposal.



#### NATURE AND LANDSCAPE

After moving to Hjalteyri, Unnur<sup>1</sup> describes that she has somehow circled closer and closer to the sea. Unnur explains that the sea affects her soul, gives her breath, and helps her settle down roots to belong in the place as Unnur says: "it is that sound, memory"<sup>1</sup>. Unnur portrays Hjalteyri as an energy point, surrounded by water and daylight. Mindfulness marks her life in Hjalteyri and the feeling that time stands still. She considers the landscape around the village remarkable, and finds it very special being surrounded by water from all directions except from the west. She enjoys the changes in daylight conditions, savouring the 9 minutes of sunshine by the shortest day of the year and when the sun sets into the sea in the north by the summer solstice. Due to the location of the village in the landscape, Unnur states that from Hjalteyri, you can see as far as your eyes can see. Unnur explains the visual experience when entering the village:

"When you drive down the hill, you see the big factory and then suddenly discover this beautiful village, this is so amazing - if you notice it."<sup>1</sup>

When asked about her favourite places in Hjalteyri, Unnur<sup>1</sup> describes an area at the northern end of the pond which she calls Tjarnarhorn. From there, she enjoys overlooking the pond and observing the village reflected in the water. The easternmost point of the isthmus Grandi is also one of her favourite places because the sea is very deep off the shore. She enjoys watching the currents and the tides and observing the great life in the sea. From there, she can sometimes see whales swimming and diving right off the coast. Unnur also enjoys walking through the forest because she likes to observe all the trees, flowers, and growing species. She feels that it affects her and assumes it has a positive impact on everyone who walks there. Unnur explains that her favourite places are connected to her experiences with nature.

Unnur<sup>1</sup> creates her work in Hjalteyri and connects it with life in the sea and the countryside. She explains that she uses time as a tool and that it fits very well with living in Hjalteyri because there, she does not experience the stress of modern times. Unnur finds total freedom for doing her work, and she feels that it is a privilege.

Birta<sup>2</sup> enjoys going out for a walk around Hjalteyri with her baby in a pram. Birta mentions that she never wears her headphones when walking because she likes to listen to the surrounding nature, which nourishes her. Her favourite place in Hjalteyri is her home, where she enjoys the view outside of her kitchen window. She is very excited to care for the garden and spending time outside in the good weather this summer. Quiet and scenic beauty are the main elements that characterise the village, according to Birta. She lives up on the hill, where she experiences good privacy, but she likes to walk down towards the factory to socialise. The area around the factory she describes as a kind of downtown with an attraction. Birta says that the village has so much to offer with the forest, the beach and the sea.

Nökkvi<sup>3</sup> enjoys walking along the isthmus *Grandi* on the steep and rocky beach and finds the area very beautiful. He explains that the area is full of diverse birdlife and it is common for him to spot falcons, ptarmigans, and various species of waders. He likes to examine the clay in the slopes and formations in the rocks that he says are like crystals. In his work, Nökkvi is inspired by landscapes that have been disturbed and the connection with people. The landscape of Hjalteyri is according to him an emotional magnet.

# PLACE IMAGE

During the period of prosperity of herring processing in Hjalteyri, every resident was working in the factory, Nökkvi<sup>3</sup> explains, and when it was over, there was nothing left. Nökkvi thinks that no investment was made for the development of the village, which he believes should have been done as a part of community responsibility. The factory buildings were avant-garde in the Icelandic landscape, and Nökkvi imagines that the factory must have been "an absolute monster"<sup>3</sup>, bigger than the village and the community. By the time the production shut down, Nökkvi assumes it must have been a big trauma for the community. He explains that he has heard many stories regarding that Hjalteyri became a ghost town afterwards and that everyone who could, moved away from the village.

Landscapes that have been disturbed and changed by human intervention have aroused great interest for Nökkvi<sup>3</sup>. He explains that the factory buildings are a good example of houses specially designed by men to utilize most of nature and then turning into ruins. He finds Hjalteyri an interesting place because it is, in a way, ruins that have an aesthetically strong effect on him. Nökkvi describes some chaos going on because the buildings were allowed to stand in weather and winds and therefore change with time. He considers it very important to allow this image of the place to live by preserving the buildings and giving them value.

When asked about the image of Hjalteyri, Unnur<sup>1</sup> explains that the main element that makes the place unique is the experience of being somewhere in a place that stands still. Not too much has changed in the appearance of the village, she tells, and few places are left like Hjalteyri. Her opinion is that it is time to preserve places like Hjalteyri. She explains that if the factory buildings were demolished, it would not be Hjalteyri anymore for her.

The appearance of the old houses in the village and the atmosphere surrounding the factory buildings are elements that fascinate Birta<sup>2</sup> very much. She appreciates how the old buildings are being used with new purpose, and she feels that everyone is doing

<sup>&</sup>lt;sup>1</sup> Unnur, resident of Hjalteyri, interview 2021-03-10

<sup>&</sup>lt;sup>2</sup> Birta, resident of Hjalteyri, interview 2021-03-12

<sup>&</sup>lt;sup>3</sup> Nökkvi, resident of Hjalteyri, interview 2021-03-12

<sup>&</sup>lt;sup>4</sup> Björk, specialist at IRDI, e-mail communication 2021-03-12

something different. When she walks around the village, she always hopes to see someone because she finds that the people working in Hjalteyri are doing interesting things. Birta explains that she understands why people like to visit Hjalteyri because she says that there is always something to see. When Birta and her family told their friends and relatives that they were going to move to Hjalteyri, they got two types of reactions. Her relatives that live in the countryside in the area, did not quite understand their choice and had some doubts. However, friends living in different areas told them they envy them because they found the village really cool. Birta explains that she was surprised about how many people knew about the village, and she thinks that is because of activities related to the factory buildings, such as the center for contemporary art.

## RURAL LIVING & REMOTE WORK

When asked about the future of rural living, Björk<sup>4</sup> explains that despite the miserable aspects of Covid-19, the situation threw regional development many years forward and opened up new possibilities that might change the scenarios considerably in the coming years. According to Björk, the main challenges for small towns in the Icelandic countryside are depopulation and the rising age composition of the population. Isolation, difficult transportation, and long distances to basic services are great challenges for remote towns. Björk explains that one of the biggest challenges is also unequal gender distribution. However, with increased opportunities for jobs without a location, rural communities might be in a position to meet these challenges.

Björk<sup>4</sup> believes that to strengthen the attractiveness of small towns in the countryside, then transportation needs to be improved, and electricity and good internet connections need to be secured. She explains that more diverse jobs make these smaller communities a viable place to live, especially for people that have

finished higher education and are interested in moving back home. Björk implies that a local school is another important aspect of making rural settlements attractive. She mentions that schools have been closed in some settlements with a higher population age and few children attending the schools. Björk explains that it might not be attractive for a family with children to move to a settlement where there is no primary school, while the school depends simultaneously on the same family deciding to move to the settlement. In this context, Björk mentions that social maturity is vital for children and being able to communicate with other children than siblings.

Björk<sup>4</sup> describes that demands today are not the same as they were fifty or even ten years ago. She believes that people are looking for more than the bliss of the rural idyll that originally fascinated them, such as connection to nature, a safe environment to raise children and less stress away from the urban speed. Björk believes that people consider more demands on services, culture and recreation and even sports for the children. As Björk demonstrates: "We want to live where we feel good, and we are happy, but we also want to do the work we were educated for, in a community where we do not have to travel long distances to seek medical care."4 Stable economic life, services and cultural activities are the very essences for settlements to flourish according to Björk which states that people: "...must not forget the human factor, settlements do not flourish without the individuals who build the communities, and in order for settlements to attract people, the above factors must be present."<sup>4</sup>

There is not that much housing available in Hjalteyri, and nothing stands empty, according to Unnur<sup>1</sup>. While everything was booming in tourism, houses were rented out. Unnur thinks it is important that people live in residential buildings and that the houses are not converted into vacation rentals. In the summertime, people who have their roots from Hjalteyri

and their relatives spend time in the old houses by the shore. There is no school in Hjalteyri, and the children have to travel a distance to the kindergarten and the elementary school. Unnur mentions that not so many children live in Hjalteyri and that some families that have moved there have not lived there for a long time. She thinks that maybe it is because if the parents do not work in Akureyri, they need to make trips back and forth, pick up and drop off from school and other activities. Unnur mentions that there is a risk that Hjalteyri will be a "*sleeping place*"<sup>1</sup> and that the village needs young people and children.

When Birta<sup>2</sup> and her family moved to Hjalteyri, their house changed from being used as a summer house into a year-round settlement. She believes they were lucky because it is a popular place and a great view from the house. The family feels happy living in Hjalteyri, and Birta thinks that everything they need is really close, but they also have privacy. Birta assumes it was great for the village when they moved there, a little renewal in the population with young parents with a child. Birta hopes that the village will continue to grow. She sees much potential in the place, and she believes that young people are seeking to move to the countryside. She has noticed a trend in South Iceland where young people move to towns around 45-75 km away from the capital city Reykjavík, because housing prices are lower there than in the city. Birta reflects on that even though housing prices in Akureyri, the largest town in North Iceland, are lower than in Reykjavík, that young people should pursue moving to the small towns in the area. She thinks that if the municipality showed initiative in building new apartments in Hjalteyri, there would be great demand.

Nökkvi<sup>3</sup> mentions that he knows people who would like to buy a house and live in Hjalteyri, and he thinks it is for different reasons. He thinks that people find the village a beautiful place, and he believes that the attitude has changed from times when people had other

<sup>1</sup> Unnur, resident of Hjalteyri, interview 2021-03-10

<sup>2</sup> Birta, resident of Hjalteyri, interview 2021-03-12

opinions of the place. He thinks that maybe it will become a trend for people to move to Hjalteyri, but he hopes it will not be too much.

The pandemic clearly demonstrated the potentials in remote work Björk<sup>4</sup> states. When numerous office workers were sent home to work in the spring of 2020, the companies and institutions' operations continued to succeed. These situations showed the managers that employees perform as well at home and in the office, Björk asserts. She mentions that the development of technology for remote work took a huge leap during this time, strengthening the foundations for jobs without locations. According to Björk, the Icelandic government plans that in 2024, 10% of advertised jobs in institutions will be jobs without location. Before this decision, people living in rural areas had to move to pursue job opportunities. Increased job possibilities for people living in the countryside and jobs without a location will, according to Björk, have a positive impact on the choice of residence. With Covid-19, Björk has noticed many changes, and it has turned out that many jobs can be done anywhere. She mentions that the prerequisite is, however, stable infrastructure such as internet connection and electricity.

Most people that live in Hjalteyri drive to Akureyri for work, according to Birta<sup>2</sup>. However, some residents are self-employed and have facilities in the factory buildings for their work. Birta mentions that the distance to Akureyri is a short drive of around 15 minutes, which she finds "naturally, no distance"2. She envisions that when she starts working after the maternity leave and the child starts going to kindergarten, then she will look for a job in Akureyri because it will be "just on the way"<sup>2</sup>. Today Birta goes a few times a week to Akureyri for meeting friends and going to the supermarket. She finds it very easy to drive because she is mainly driving on the highway. Sometimes in the winter, the road is impassable due to weather, and then Birta thinks it is ideal for people to work remotely.

<sup>&</sup>lt;sup>3</sup> Nökkvi, resident of Hjalteyri, interview 2021-03-12

<sup>&</sup>lt;sup>4</sup> Björk, specialist at IRDI, e-mail communication 2021-03-12

When the Covid-19 pandemic started, Birta was in school and was able to study in distance which she found very convenient. Birta thinks that having the opportunity to work home occasionally is crucial, especially when people are worried about driving in bad weather.

# **ACTIVITIES AND TOURISM**

When people visit Hjalteyri for the first time, they are a little surprised, Unnur<sup>1</sup> has noticed. She thinks that maybe it is because of the old houses and that the village is not modern, as she describes it: "It is so gloomy, phenomenal and *it is huge* "1. Unnur says that people do not even have to pick up their wallet while spending time in Hjalteyri, and that she believes that people feel calmed down. Some people she knows planned to stop for a few minutes but end up dwelling for two hours. The factory buildings are full of life, and Unnur says that there is a definite attraction, especially because there is an overwhelming another time there and that the buildings have not been remodelled for making them eye-pleasing for tourists. Diverse activities are available in Hjalteyri, and Unnur mentions the diving centre facilities in one of the factory buildings. She explains how remarkable it is for her to witness when people have experienced seeing the hydrothermal chimneys for the first time, as she describes: "it is just like they have seen God"<sup>1</sup>. Unnur describes that it is nice when students arrive for workshops in the art center Verksmiðjan. She mentions that the students normally come from a completely different environment and are a bit shocked, but she admires them. She describes how some of the students sit and watch the sea for maybe the first two days, and are completely stunned.

Hjalteyri is located in a geothermal area, and by the shore, south of the factory buildings, is a hot tub heated up with run-off water, taking advantage of the heat that passes away anyway, Unnur describes<sup>1</sup>. Before Covid-19, the hot tub was trendy, and people would even go for a swim in the sea by jumping from the pier and swimming ashore and heating themselves again in the hot tub. Unnur explains that people have to be vigilant because there can be currents, the sea is deep off from the coast, and if people swim to the first buoy, the deep is around 20 meters.

All kinds of sea-related activities are popular in Hjalteyri, and Unnur<sup>1</sup> mentions that kayaks can be rented, but many visitors and residents bring their own kayaks. Unnur has noticed that paddle boards have become more common, and people arrive to Hjalteyri with all kinds of equipment. Unnur mentions that people do not go out into the pond, especially in the summer, not to disturb the birds during the breeding season. In recent years there has been a whale-watching boat at Hjalteyri, and Unnur mentions that some days the company took up to 4 trips a day. She encounters that people are coming and going and forgetting to experience Hjalteyri, and for the residents, it is a bit of a stimulus. However, some visitors spend a longer time in Hjalteyri, and she mentions that some arrive with a camper or a tent and spend up to three or four nights because they find it so quiet there. Unnur says that some residents find it uncomfortable having so many people visiting Hjalteyri, and she understands that because she thinks it is wonderful to be alone in Hjalteyri.

Birta<sup>2</sup> states that people aspire to visit Hjalteyri, and at the weekends, she notices many families playing on the beach. In the summertime, she says there is significant traffic to the village of people just visiting, seeing the factory and going to the beach. Before Covid-19, she says that the hot tub was always full, and when her family has been in it, there has always been someone with them. She thinks it is pleasant, and the hot tub gives people a reason to stay, making it an attraction.

According to Nökkvi<sup>3</sup>, people of all ages visit Hjalteyri. Students from Icelandic and foreign design schools visit for workshop seminars, coming from Scandinavia and France. He says



Fig. 39 Summertime in the village, view from the marina.

it has often had a huge impact on them being there. He mentions that in the past years, there have always been some ideas about doing something for tourism in Hjalteyri. However, he believes that usually, tourists that visit Hjalteyri are most interested in: *"what exists and what we have, the landscape, nature and culture as it exists*"<sup>3</sup>.

# INFRASTRUCTURE & SERVICES

When Birta<sup>2</sup> takes a walk with her baby, she is dependent on the conditions of the paths around the village, and rough paths made of gravel can be an obstacle for her. She has found her favourite path where she walks around the factory buildings and down to the pier and back home, staying on pavement all the time. One day, her family went on a picnic and sat on the steps on the pier, and Birta mentions that there need to be more benches and sitting opportunities in the village. She is happy that there is a playground in the village and thinks it is important for children to be able to play there, but she thinks that some things need to be fixed. Birta also mentions that it would be nice if the pond was more accessible for play, just like the beach is. Last year through a community initiative, a hiking trail was made around the pond. Unnur<sup>1</sup> thinks it is wonderful because now people can walk around the pond, taking a previously impassable path because

<sup>1</sup> Unnur, resident of Hjalteyri, interview 2021-03-10

<sup>3</sup> Nökkvi, resident of Hjalteyri, interview 2021-03-12

of trees and swamps and, therefore, disturbing the birds. Now Unnur decides which way she goes depending on the wind direction.

Recently, a gym for a power-lifting club opened in one of the factory buildings, and Unnur<sup>1</sup> explains that now young people are arriving every day from Akureyri to Hjalteyri to practice their sport. She finds this reverse development very exciting because the people have a good mindset and care for the facilities, which she believes radiates positivity. Birta<sup>2</sup> mentions that she was delighted when the gym opened, even though she has not practised there yet. Her family is happy to have this opportunity in the village. This summer, she hopes that the restaurant will open again so she can go for a walk and sit down for a coffee and see other people. She thinks that it is important for the community that it is possible to buy refreshments in the village, it is good for the social atmosphere. Nökkvi3 thinks it is great to have a café or a restaurant in the village. When the restaurant was open before Covid-19, he enjoyed going there and found it nice to have a place to spend time. Nökkvi mentions that when artists and students visit Hjalteyri for a short or long time, they need a place to stay, and therefore Hjalteyri needs more accommodation possibilities that are not too expensive. Even though there is no store in Hjalteyri, Birta<sup>2</sup> finds it charming. If she wants

<sup>&</sup>lt;sup>2</sup> Birta, resident of Hjalteyri, interview 2021-03-12



something, then she always needs to drive to Akureyri. So, she is more aware of what she wants or needs. She mentions that if she wants to buy chocolate in the evening, she will not drive to Akureyri for it, and that is helping her save money, a situation that people living in the town do not realize. However, sometimes her family takes a drive to Akureyri to buy icecream and drive around, which is an Icelandic cultural thing.

# FUTURE OF HJALTEYRI

When asked about how she sees the future of Hjalteyri, Birta<sup>2</sup> explains that she dreams that young people will start building new homes in Hjalteyri. She does not want the village to become big, but she thinks it would benefit the community. She believes that the people that already live in Hjalteyri are not moving away because everyone feels good living there. Birta says that the place has so much to offer and finds it an advantage how close to Akureyri the village is. She hopes that the municipality will continue to develop the village to reach a population of 1000 people within the municipality. Her family is happy to live in Hjalteyri, and they do not want to leave. Therefore, she dreams that more young people move to the village, hoping that her children could play with other neighbouring children. Unnur<sup>1</sup> says that now await: "new times, new

opportunities and new thinking". She has experienced much change in Hjalteyri in the past years but hopes that the village will be just as it is in the future. She finds it important that people agree on doing good things for the village. Unnur imagines that the place will be preserved in the future, a little raw, and all development will be with that in mind. She hopes that the old buildings will be well maintained, and she feels that the local spirit needs to be preserved, and it is important to use materials from the surroundings. She hopes that the café will start to flourish again because she thinks it is wonderful to have a café or a restaurant in Hjalteyri; she feels it gives everything more value. If there will be some construction in the future for tourism, Unnur hopes it will be in good context with the identity of the village.

Nökkvi<sup>3</sup> hopes as well that the sense of the place will be preserved in the future. Nature has been allowed to influence the buildings, but he thinks it is important that the houses are not destroyed. If the area and the buildings will be redesigned, he hopes that it will be done on an aesthetic basis, not just following ideas in the spur of the moment.

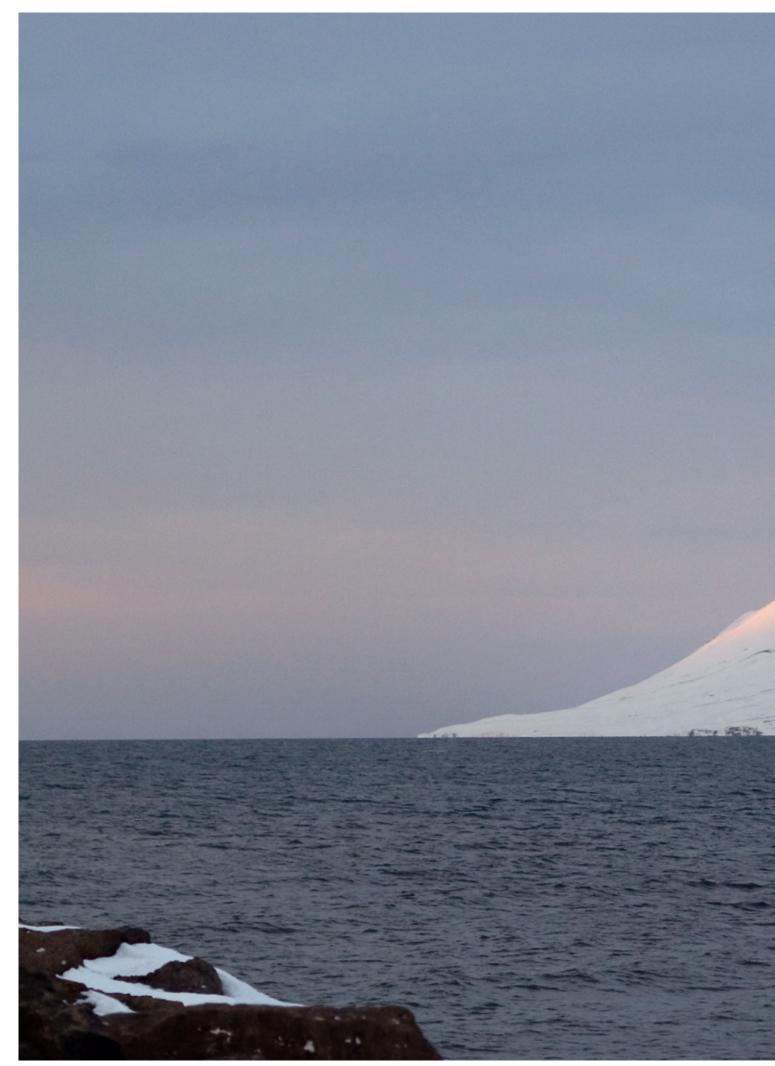
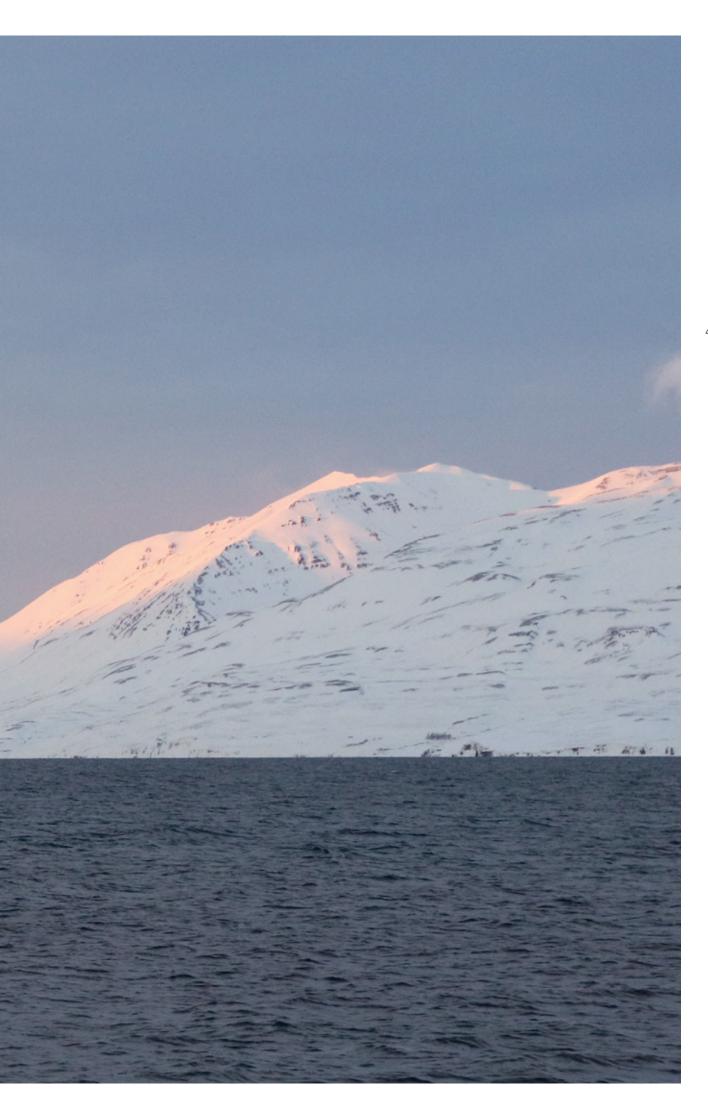


Fig. 40 Looking out over the horizon from Hjalteyri, Mountain Kaldbakur rising from the sea and golden by the sun.



# DESIGN PROPOSAL

# 4.1 GUIDELINES

The previous background chapter examined theories about rural living, landscape identity and placemaking with a literature review. The site analysis chapter examined the history of Hjalteyri and the goals of the municipality. Current conditions in the built and natural environment of the village were explored to understand what identifies the area. Interviews provided good insight into the life in the village, the image of the place and the future vision from the perspective of residents. In this subchapter, highlights from the previous background studies are summarized to illustrate how the research is used to develop the design proposal. The following guidelines synthesize information from previous literature studies, interviews and site analysis.

# **KEY POINTS FROM LITERATURE REVIEW**

#### ATTRACTIVENESS OF A SETTLEMENT

The attractiveness of a place for residents, visitors and businesses is based on various amenities that are important contributors to enhancing the quality of life. The following elements were mentioned in the literature review as fundamental influencers for attractive rural living:

> (based on Elshof et al. 2017, Kull et al. 2020, McGranahan & Wojan 2007 and Vareide 2018)



Scenic beauty in landscape and historical architecture, natural qualities providing outdoor opportunities.



Residential plots or affordable housing for residents and accommodation for businesses and visitors.



Local school and kindergarten, important for families with children and provides job opportunities.



Grocery stores and other services that fulfil practical needs such as health care. Also, serve as a meeting place for the community.



Services for leisure activities and employment opportunities, attracting people and impacting the availability of services and infrastructure.



Reasonable commuting distance to a larger urban area with good public transport opportunities.

Fig. 41 Key points summary from the literature study.

#### GOOD PUBLIC SPACES

The image of a place is an important strategy to increase the attractiveness of a place for residents and visitors. It is based on how people observe and experience their surroundings and the spatial qualities of a place. It is important that urban design takes into account, values and strengthens the landscape identity. The following aspects were mentioned in the literature review as important elements that enhances the relationship between people and public spaces:

(based on Kristjánsdóttir, Sigurðardóttir & Pálsdóttir 2020, Gehl 2011, Grahn & Stigsdotter 2010, Perrault et al. 2020)



Access to wild and natural environment, rich in species, can have a positive impact on well-being.



A good place is accessible for everyone and is safe from traffic, risks and crime. Good outdoor lighting is important for the use in dark hours.

Fig. 42 Key points summary from the literature study.



Public spaces are environments for social and cultural activities. The spaces can have diverse spatial qualities and enhance different feelings.



Public places with good seating opportunities offer people to stay and enjoy. Paths have to be accessible and benches should be at regular intervals.



Semiprivate frontyards by access roads and paths are soft edges that contribute to the life between buildings.



It is important that public places have good local climate with sunlight and shelter from wind.

# **KEY POINTS FROM SITE ANALYSIS**

The purpose of the site analysis was to examine the history of Hjalteyri and understand how history has influenced the settlement to this day. The site analysis examines the built and natural environment and the goals of the municipality. Following are the main aspects mentioned in the site analysis chapter and are important for developing the design proposal:

(based on information from chapter 3.2)

#### LOCATION AND POPULATION

• 20 minute driving distance to Akureyri.

- Less than 50 residents today, but 150 in 1948.
- Demand for residential plots in the municipality.
- Two urban areas in the municipality, Hjalteyri and Lónsbakki.

#### DAYLIGHT AND WEATHER

- Midnight sun in June by Summer Solstice.
- Less than 3 hours of daylight by Winter Solstice.
- On sunny summer days, sea breeze is common.
  Winters can be heavy with snow.
- The land is open for the common wind directions, S, SE and NW.
- A sea wall protects the village from sea level rise.

#### LANDSCAPE

- The village is by sea level and on a high slope extending to about 75 meters above sea level.
- The nature consists of heathland, forest and beaches.
  Hot water comes from local geothermal boreholes.
- The pond area has reservation due to birdlife and the old townscape is protected due to genius loci.
- There is a panoramic view from Hjalteyri to the sea and the mountains in Eyjafjörður fjord.

#### HISTORY

- The history is characterized by times of prosperity until the herring factory closed in 1966.
  - Many old houses and piers have vanished.
- The school closed in 1990 and the store in 1994.
- Today there are various businesses in the factory.
- The old houses and the factory buildings characterize the townscape.

# **KEY POINTS FROM INTERVIEWS**

The interviews gave a great insight into the life and future of rural living from the perspective of local people and a specialist in regional development. The following aspects were mentioned in the interviews as important factors for attractive rural living:

(based on Unnur<sup>1</sup>, Birta<sup>2</sup>, Nökkvi<sup>3</sup> and Björk<sup>4</sup>)

NATURE	Nature is important for the residents for recreational opportunities and their work. The area is rich in birdlife by the pond, the heathlands and the forest. The beach is popular among families. The sea is deep off the shore and rich of life, and sometimes whales are visible.
PLACE IMAGE	Quiet and scenic beauty characterise the village. The residents experience mindfulness, and find the place as an energy point where time stands still.
	The atmosphere of the old houses and the factory buildings contribute to the sense of place. The factory symbolises the past, from times of great prosperity until today, where the buildings stand against the weather, waiting for new roles. The residents find it important to preserve the buildings because they are a part of the place image.
RURAL LIVING	Good transportation, electricity and internet connection are the fundamental infrastructure for rural settlements. The proximity to Akureyri is short and allows the residents to commute to work or for services. The interviewees see potential in more business in the village or remote work.
	Today the children in Hjalteyri need to travel to school. All interviewees mentioned that a local school is essential. They explained that a school attracts families with children, is meaningful for children's well-being and provides job opportunities.
	Many houses in Hjalteyri are used as holiday homes. No residential housing is available, but people can build new homes on vacant plots. The interviewees hope that more people will move to the village.
ACTIVITIES	The main attraction of the village is the nature and the downtown area with the old houses, the marina and the factory buildings.
	Sea-related activities are popular, and people go out in the sea on kayaks and paddleboards. Whale watching boat operates from Hjalteyri, and the marina is full of small fishermen boats. A diving company operates from Hjalteyri, taking people to see the unique hydrothermal chimneys in the ocean. The hot tub by the shore is heated with geothermal energy. It is popular among residents and visitors, and people even swim in the sea.
	A contemporary art center is in one of the factory buildings with art exhibitions and workshops for Icelandic and international students. Some businesses are in the factory buildings, but there is space for more. The interviewees miss having a restaurant or a café in the village, having a place to go and meet people.
FUTURE	The common response from the interviewees about the future of Hjalteyri was that the spirit of the place, nature and the old buildings should be preserved in the development of the village. The proximity to Akureyri was mentioned as an advantage, and they hoped that the municipality would continue to develop the village and

more people to move there.

#### **SWOT ANALYSIS**

The SWOT analysis highlights the main strengths, weaknesses, opportunities and threaths that the village of Hjalteyri faces. Based on the background research and empiric findings, the SWOT analysis summarizes important elements for the future development of the village.

### STRENGTHS

20 minute drive from Akureyri Cultural history and historic architecture Landscape identity and spirit of the place Proximity to nature and the sea Art exhibitions Geothermal area

#### **OPPORTUNITIES**

Housing development and population growth Year-round services and attractions Kindergarten and primary school Accessible path system and outdoor activities Cultural center and exhibitions Innovation and remote job center Improved public transport

#### -WEAKNESSES

Vulnerable settlement, less than 50 residents Empty and eroded buildings Few or no job opportunities No housing available and limited accommodation No grocery store or restaurant open all year round 15 minute drive to school and kindergarten No public transport

#### THREATS

Depopulation and deserted settlement Damage to cultural monuments High tides and storms causing flood

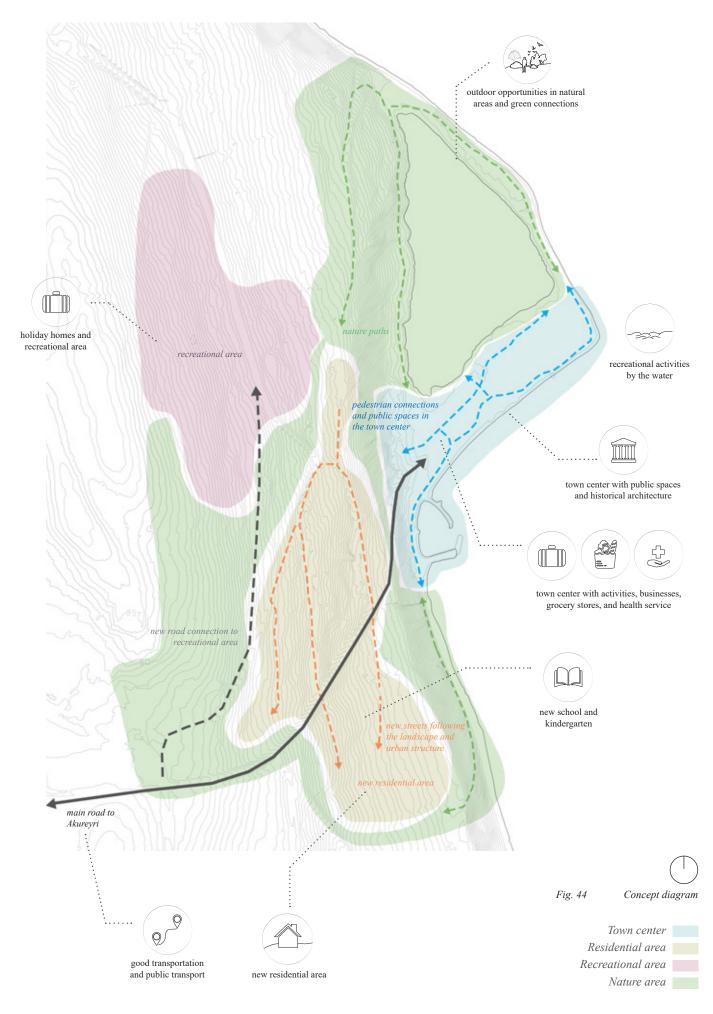
# 4.2 The proposal

#### CONCEPT

The aim of the design proposal is to design attractive public places that enhance the liveability and the quality of the village. The proposal shows a future vision of how Hjalteyri village can grow from a small settlement of fewer than 50 residents to a small town of about 300 inhabitants. The proposal exhibits how rural villages in the vicinity of urban areas in North Iceland can strengthen the attractiveness. The design proposal follows sustainability goals, involving ecological, social and cultural values with care for landscape identities. The goals of the proposal is to highlight the opportunities that the village possesses. Settlement development that enhances population growth will create more opportunities for year-round services.

Figure 44 shows a concept diagram of how the proposal is developed. The area is divided into a town center, residential area and recreational area, and all parts are connected by the natural areas. The division follows the urban structure formed over time and is based according to the comprehensive plan. New residential area is proposed south of the current neighbourhood. The new streets follow the urban structure of the settlement and the landscape. Good path connections are important factors of the design to strengthen the accessibility and connectedness of the areas for pedestrians (Gehl 2011). The proposal is developed in accordance with main aspects highlighted in the background study that are summarized in chapter 4.1 and follows the main opportunities addressed in the SWOT analysis.

#### FROM <50 RESIDENTS TO ≈300 ATTRACTIVE RURAL LIVING



#### THE PROPOSAL

The design proposal aims to improve the quality of public spaces in Hjalteyri to make the village an even more attractive place to live. The proposal introduces a vision for the future where the village could grow into a small town with around 300 inhabitants. With more residents, there will be an increased need for services, and the proposal shows possible areas for a kindergarten, primary school, accommodations, and facilities for stores and other services or offices. Increased population will create a basis for specific services in the town and employment opportunities, but the proposal also involves opportunities in the factory and new buildings for self-employed people or individuals doing remote work.

The proposal presents a path system around the town that strengthens possibilities for residents to enjoy outdoor activities. Along the path system are rest areas with benches. Paths create and limit access to natural areas to protect the local bird and animal life. The proposal aims to improve public spaces in the heart of Hjalteyri and enhance the place image to increase the attractiveness. Various elements that reminiscent of the history of Hjalteyri are reinforced, such as the old piers. In an open area by the shore will be a swimming pool with facilities for sea swimming to strengthen leisure opportunities for residents and create an attraction for visitors.

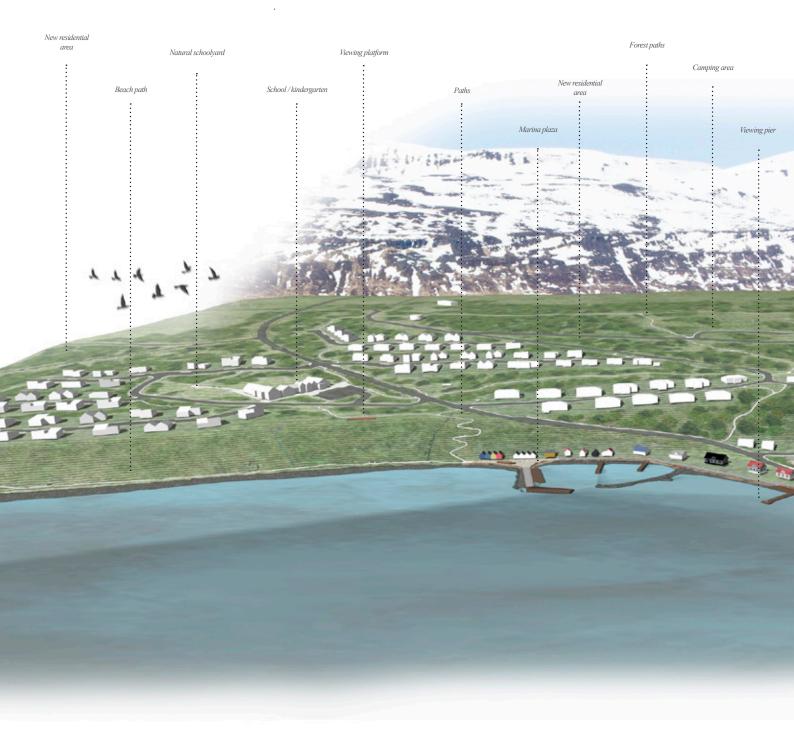
The future vision is that Hjalteyri can grow as an attractive town for a diverse group of people and all age groups. The proposal considers creating an attractive settlement for people who enjoy outdoor activities to move to a new home, creative individuals, young families who want their children to grow up in a natural environment and many other people searching for living in the countryside, but close to a city.

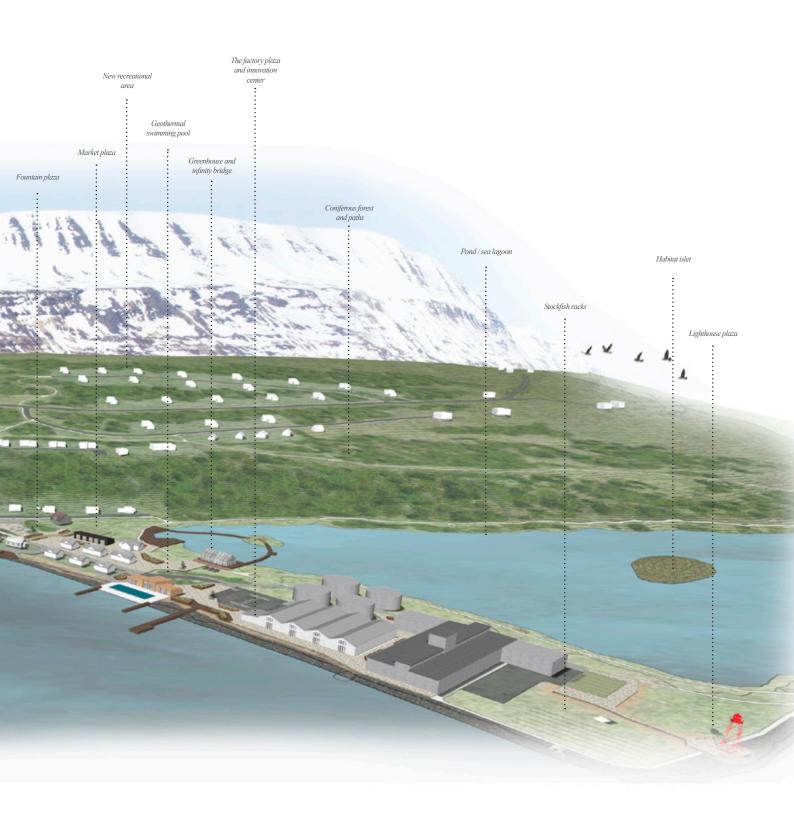
Figure 45 shows the overall design proposal and figure 46 on the next page shows the proposal in perspective. For comparison of today and the future vision, see figure 21 on page 46.

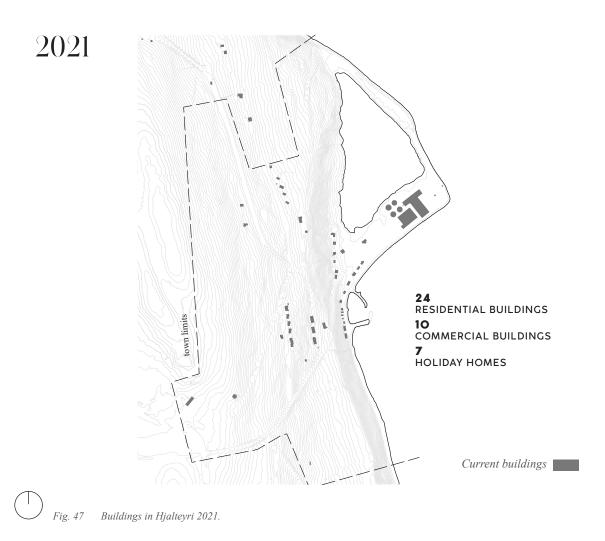




#### Perspective of Hjalteyri design proposal (Background image, Hjálmarsson 2021).







#### **IMPLEMENTATION STAGES**

Today less than 50 residents are registered to live in Hjalteyri but, during the period of prosperity around 150 people lived there. The trauma when the herring factory closed the operation was a turning point for the population which since then has gradually decreased. However, many people own holiday houses in Hjalteyri and with the activities in the old factory buildings, the village is full of life throughout the year. The design proposal envisions that the residential area grows towards south on a field that is defined for recreational area in the valid comprehensive plan of Hörgársveit municipality. The land is ideal for a new neighbourhood, with majestic views, less land slope and good connections to the current residential area. Together these two areas cover around 13 hectares of land. The proposal plans that the settlement develops in stages in accordance with housing demands in the Eyjafjörður region. As mentioned in the

literature chapter 3.1, people, jobs and places are connected. In order for the settlement to grow and attract new residents, there need to be job opportunities to drive demand-driven migration (Kull et al. 2020). The indirect impact when people move to places is that there is more need for service and infrastructure, and therefore new job opportunities are created. A supply-driven migration is also important because people can decide to move to a place for other reasons than following job opportunities, when the place is known to be an attractive place to live.

Figures 47 and 48 show how the settlement of Hjalteyri can grow through time and develop from a small village to a small town. In order to attract people to move to the village, there needs to be infrastructure and attraction, job opportunities and reasonable amount of services. The implementation stages show the vision of how the village could grow in the next 10 years and until 2050 and further.





Fig. 48 Implementation stages, future visions of the settlement development in Hjalteyri for 2030 and 2050.

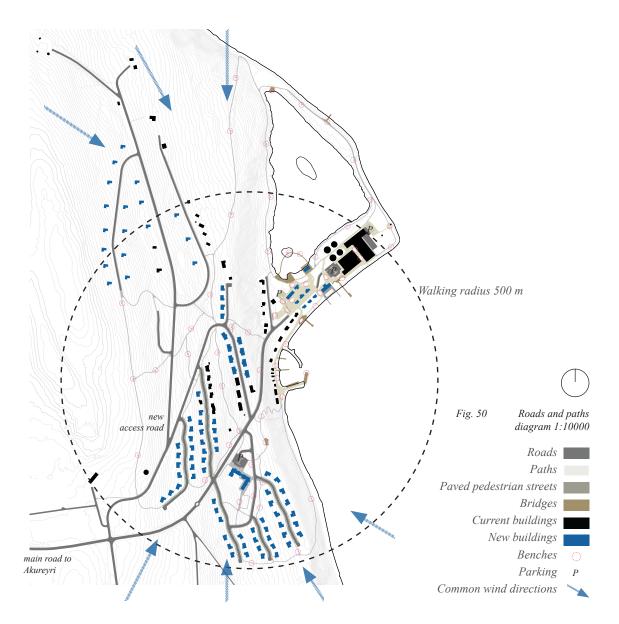


## VEGETATION

It is vital that the local vegetation continues to grow in the area and that new development does not disrupt the vegetation and species habitats. Small scale forestry with various conifers and deciduous trees will continue in the area. The forest forms a shelter for the settlement but also supports species richness. Heath vegetation is prominent in the area, and in open areas, local vegetation will be allowed to grow naturally. Local trees and shrubs are planted in public places in the residential area and the town center.

#### SURFACE WATER

Due to the height difference, surface water flows from the settlement down to the sea and into the pond as seen in figure 49. Along the new residential streets are plant beds or surface water solutions, natural drainage channels that filter water through the soil, and leading water in channels back into the sea and the pond. In this way, surface water is cleaned, and the pressure on drainage systems is reduced. These surface water channels are rich in vegetation which gives the residential area a natural appearance and are important ecological aspects.



#### PATHS AND ROADS

Figure 50 shows a diagram of paths and roads. The main road into the village continues to play its role, but a new access road is defined in the line of an old and overgrown road. The new road diverts the traffic to the recreational area away from the residential area. New streets are presented in relation to residential development. All streets are two-lane, but of a minimum width and *cul-de-sac* to limit traffic. This is an important aspect for safety for pedestrians in the residential area. The streets follow the landscape from north to south and levelled with the terrain. The streets are curved to break the wind and along them are plant

beds so the vegetation enhance the quality of the public space. New public parking lots are planned by the school grounds, by the factory and the new square.

An overall path system is presented, and the main goal is to enhance good connections from the residential area to the center of the village and natural areas. The circle in figure 50 illustrates a walking radius of 500 meters, the acceptable walking distance according to Gehl (2011). Along the paths are good resting areas with benches at regular intervals. The main goal is that all residents and visitors should be able to find suitable outdoor recreation routes and that accessibility matters are in good conditions.



#### BUILDINGS

Figure 51 presents the future vision of the village and shows new residential, commercial and recreational buildings. New buildings in the center of Hjalteyri are planned as facilities for services, accommodation, offices and stores. Figure 52 introduces the main commercial buildings. The buildings are planned to be two-story and with gable roof, colorful and made from materials following the form and architecture of the old houses that characterize

this part of the village. The new buildings follow, to some extent, the location of lost houses to try to recreate a lost townscape, as seen in figure 25. School buildings are planned in the new neighbourhood and the recreational area north on the hill is planned to expand more with new plots for holiday homes with great view over the village.



#### THE FACTORY

The large factory buildings are the main architectural identity of the village. The buildings will become facilities for innovation and design center attracting diverse visitors and businesses for residents.



#### **GROCERY STORE**

The new building for the grocery store is located by the new market plaza and parking lots. The architecture and the location of the building is a reference to old work camp building that can be seen in figure 26.



#### SCHOOL & KINDERGARTEN

The most important aspect in the growth of the village is to open a school and kindergarten. The school buildings are in the residential area with a natural schoolyard to encourage play and well-being.



#### GEOTHERMAL SWIMMING POOL

Infinity pool with great views, the main attraction and leisure opportunity. The swimming pool will be heated with geothermal energy. The piers are references to old times and the purpose is to encourage people to jump and swim in the sea.



#### COMMUNITY GREENHOUSE

The greenhouse is a new recreational opportunity and a meeting place for the community to grow vegetables and fruits. It is heated with local geothermal energy.



#### COMMERCIAL BUILDINGS

The new commercial buildings in the town center serve diverse purposes. There will be offices, guesthouses, restaurant, salon, concept store and a café. The architecture follows the character of the oldest houses of the village.

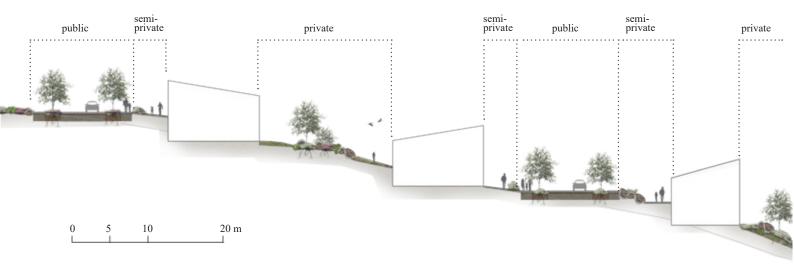


Fig. 53 Section A-B 1:1000 (see section cut in fig. 45) showing the streetscape with plantbeds for surface water and how the buildings follow the landscape.

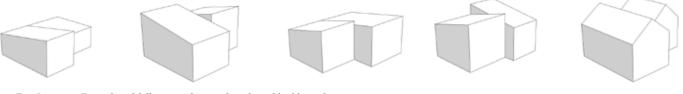


Fig. 54 Examples of different roof types of residential buildings that break wind and enhance the appearance of the village.

#### **RESIDENTIAL BUILDINGS**

The proposal presents a new residential area on the hill south of the main road with new streets. New plots for single-family homes or duplexes are planned in the current and new residential streets that follow the urban pattern. The buildings vary in size, but the requirements are that the form fits well with the architecture and appearance of the village. The buildings follow the landscape and are on two floors. The buildings have roofs that break the wind (see figure 54), and they are positioned in the landscape for private gardens to have sun and shelter. The buildings are placed not against each other to avoid a wind tunnel effect, and so every home owner can enjoy the majestic view from the residential area. Residential buildings are placed at least 4 meters in the plots to create semi-private frontyards that are soft edges contributing to the life in the street scape (Gehl 2011). Residents can then have more privacy in the backyards, and communicate with their neighbors in front of their houses (see figure 53). Figure 56 on page 88 shows perspective illustration over the residential area with view to the north. The illustration shows how the streets curve that helps breaking wind. The buildings are not placed in straight line but follow the align of the street. Roof types are diverse and along the streets are paths and plant beds that are surface water solutions.



# **RESIDENTIAL AREA**

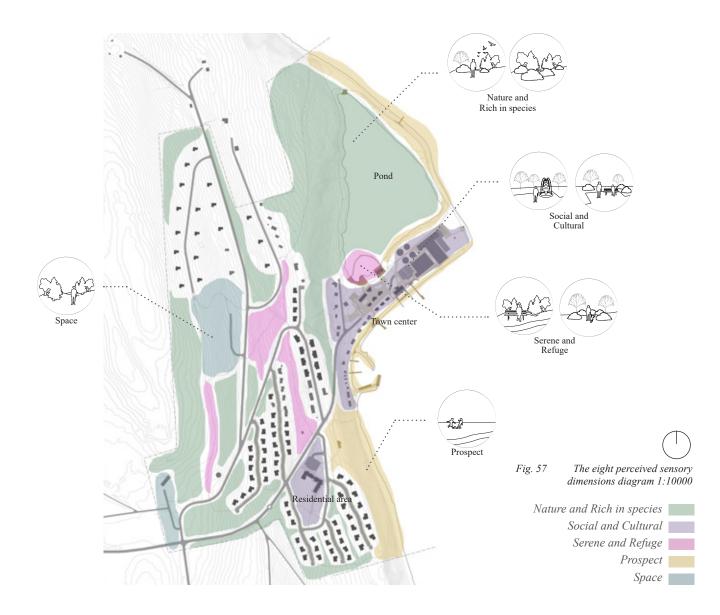
The surface water solutions are along the new streets in the residential area. On rainy days, these channels divert water to natural areas and are a part of a natural cycle. The image shows the future residential area and the new school buildings in an autumn scenario.



Perspective of Hjalteyri design proposal. View towards north over the new residential area (Background image, Hjálmarsson 2021).







#### **PUBLIC SPACES**

Public spaces and urban green areas in the proposal are classified in figure 57 according to the eight perceived sensory dimensions introduced in pages 36-37. The proposal preserves the natural environment that is rich in birdlife and forest. The town square, the marina and the area around the factory buildings are described as social and cultural places where people can meet and see each other and enjoy the essence of human culture and historical relics. Open areas that have views over the surroundings are defined as a prospect. Peaceful areas within the neighbourhood and by the pond area are described as serene. The proposal creates environments that enhance the outdoor experiences by offering a variety of spatial qualities. Therefore, residents of Hjalteyri have great opportunities to enjoy the outdoor environment, from a calm natural environment to more cultural and social.

#### POND AREA

The pond area is rich in species and has conservation value due to birdlife. There is a path around the pond with a high outdoor value. Along with it are several rest areas, large and small. By the northern end of the pond is a bird-watching house, with views overlooking the pond (fig. 58). By the coast is a viewing pier reminding the old piers that were demolished in 1918 (see fig. 31 and 59). Along the paths are smaller areas with benches and signs.

A lush islet will be on the pond to create habitat for birds, plants and animals, away from human activities. A smaller islet will be structured at the southwestern end of the pond, and a timber bridge will run to the island, creating an attraction. Wooden platforms will improve access to the pond for wading and small rowing boats.



# **BIRD-WATCHING HOUSE**

Bird-watching house with views overlooking the pond. Attraction for residents and visitors that are interested in the rich birdlife.



# VIEWING PIER

The viewing pier is an attraction for residents and visitors to enjoy the view of the fjord. The location is by the nortwest coast, reminding of old piers that were demolished by sea ice in 1918 (see figure 31).

Viewing pier.

Fig. 59

#### **TOWN CENTER**

The new town square, illustrated in figure 60 on the next pages, is a meeting place for the community. The square is paved with stone slabs that flow through all the public areas in the center and create connections for the eyes that indicate that this is a town center. Fountains are on the square which promotes play and attraction for all ages. Wide steps take the difference in height and create spaces for people to stay in the area. The market plaza is a new square with café and stores and an ideal space for farmers markets and other community events. The factory square connects the factory buildings with the new town center. Plantbeds with seating are with regular interval throughout the town center to provide seating with shelter.

The current pier continues its role, and a new pier has the role of being a viewing point. The structure and location of the new pier is in reference to demolished piers. The geothermal swimming pool has beautiful views and accessibility for sea swimming. The two bridges by the pool reminiscent the old timber bridges of former times. Pool guests can jump from the bridges to the sea and swim back to land. The bridges and the pool area have good access to the shore with stairs and ramps. Perspective of Hjalteyri design proposal. View over the town center.







# OUTDOOR LIGHTING

Due to dynamic difference in daylight conditions, outdoor lighting is important for the town center to be lively all year round. Street lamps that fit the character of the village give general lighting conditons and along the coastline are light bollards that strengthen the atmosphere. On the new squares are playful and atmospheric lighting and the old herring tanks are illuminated with colorful lights.



# THE TOWN CENTER

View over the fountain and market plaza. The new buildings follow the form of the old buildings, preserving and creating a new townscape. Seating opportunities invite people to stay and enjoy the area and vegetation helps creating shelter from the sea breeze on sunny summer days.



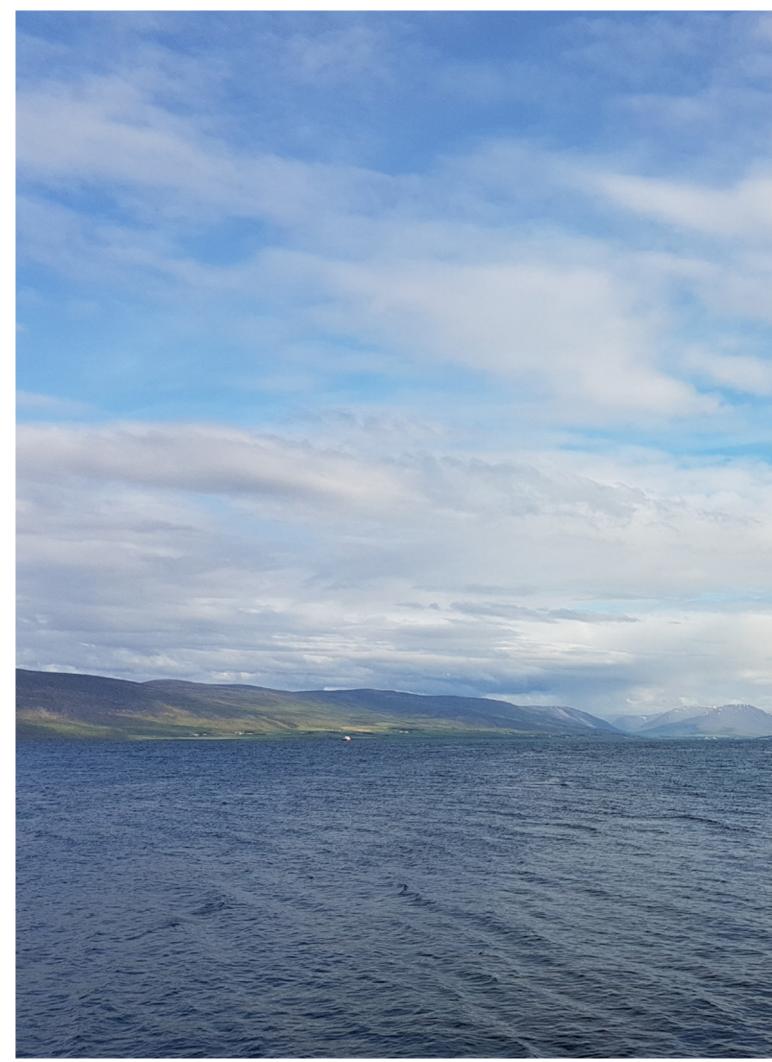
# THE FACTORY PLAZA

A new plaza is designed by the factory buildings with views south of the fjord. The new geothermal swimming pool stretches out to the sea, giving the experience of an infinity pool. The piers remind of old piers and allow people to jump in the sea and swim. The plaza will be lively due to all the activities in the factory buildings and the swimming pool is one of the main attraction.



# COMMUNITY GARDENS

By the south end of the pond will be a greenhouse with community gardens. This area has good connection to other parts of the town center and the outdoor paths around the pond. The infinity bridge stretches out on the pond to a small islet.





DISCUSSION

# 5 discussion

The main objective of the thesis was to create a holistic design proposal for the village Hjalteyri that shows a future vision of how the settlement could grow to an attractive and lively town. Geographically, the project was limited to a Nordic context, and place-specific to Hjalteyri in North Iceland. The project was divided into a background research with literature review, analysis of the built and natural landscape of the village and interviews with residents and a rural development specialist. Findings from the background study were summarized into guidelines as basis for the development of the design proposal that illustrated how the village could grow from a less than 50 residents settlement to an attractive town of about 300 inhabitants. By following the said qualitative methods, the project aspired to answer the following research questions:

#### What are the future development possibilities for rural villages in the vicinity of larger urban areas in North Iceland, like Hjalteyri village?

# What qualities in urban design are important influencers for rural settlements to enhance the attractiveness of the living environment?

In the following subchapters, the main results of the study are interpreted together, the strengths and limitations of the study are reviewed, and finally, the final implications and conclusions of the project are presented, along with suggestions for further studies.

## 5.1 RURAL ATTRACTIVENESS

The project analysed what makes rural living attractive, to understand rural living opportunities and challenges for Hjalteyri village in North Iceland. Through the interviews and by reading about the history of the settlement, the author of the project now understands that there has been a great story in the development of the village with periods of prosperity and downfall. When the herring factory was in full operation, Hjalteyri was full of life and activities. The shock when the main industry shut down and people lost their jobs and had to leave the settlement must have had a significant impact. As mentioned in the analysis chapter, headlines from newspapers show that the reputation turned into a ghost village and the population declined. Depopulation can be a great risk for fragile settlements like Hjalteyri. People have lived there for more than hundred years and the village is full of history of activities through the decades. It is interesting to look at the effect of one dominating industry and its impact on society when the industry collapsed. With depopulation, the history, the stories and the memories of the settlement disappeared. In fragile settlements, each individual is important in maintaining the community, but at the same time, the community needs certain services and culture to belong and attract more residents. In the past decades, some individuals, cooperations, and the municipality have started new businesses, probably hoping to restore the life and reputation of the village. Even though Hjalteyri has few residents, the infrastructure and the activities in the factory buildings and by the marina have some attractions. During the site visits throughout the project work, the author experienced that Hjalteyri is full of life and these feelings were confirmed in the interviews. It is remarkable that a small place like Hjalteyri has an art museum, diving center, tannery workshop and a gym, to name a few of the many activities in the area. What characterizes the place is that people seem to be very keen on improving the appearance and the image of the place, and every small thing makes a big difference. When asked about the future of Hjalteyri, it was clear that all interviewees care for the village and hope that all development will value and protect the landscape identity.

#### **BUSINESS AND SERVICES**

The literature review introduced research by Elshof et al. (2017) that highlighted key amenities that can influence the attractiveness of a place. Scenic beauty of an area, the combination of natural and man-made elements were found to enhance the image of a place. The research also showed that specific services that fulfil practical need are important to attract people, such as that primary schools are important for families with children, grocery stores can be a reason to socialise within the community, and health services and recreational services are essential for health and leisure. Furthermore, reasonable distances from urban areas were found to be attractive, especially where people need to commute to follow job opportunities. Research by McGranahan and Wojan (2007), Vareide (2008) and Kull et al. (2020) also demonstrated that a reasonable level of services have a role in shaping rural attractiveness, but also appealing landscapes and recreational opportunities can be an essential quality. The interview with Björk<sup>4</sup>, a specialist at the Icelandic Regional Development Institute, confirmed these statements. Her opinion is that good transportation, electricity and internet connections are also essential. She mentioned that a local school is vital in making rural settlements attractive, attracting families, and creating a social environment. Today, there is no school or kindergarten in Hjalteyri and Unnur<sup>1</sup> discussed in the interview that the distance is too much for people, if the parents are not working in Akureyri and have to go back and forth every day. She expressed that Hjalteyri needs young people and children, or else the village becomes a *sleeping place*. Birta<sup>2</sup> was in her interview very keen on that young people should move to Hjalteyri and build new homes for their families. Her dream is that her children can play with other children in Hjalteyri and experience the quality of living surrounded by nature.

<sup>&</sup>lt;sup>1</sup> Unnur, resident of Hjalteyri, interview 2021-03-10

<sup>&</sup>lt;sup>2</sup> Birta, resident of Hjalteyri, interview 2021-03-12

<sup>&</sup>lt;sup>4</sup> Björk, specialist at IRDI, e-mail communication 2021-03-12

The proposal presented a future vision for Hjalteyri with residential plots for up to 70 new homes and area for school and kindergarten. It has been a long time since the primary school in Hjalteyri closed, and the old school buildings have now a new purpose as an apartment hotel. If a new school and kindergarten were a part of the future development, that could become an attraction for new residents. The proposal illustrates how the village can grow to a lively town with a reasonable amount of services and good facilities for a community to flourish. The settlement could expand to around 300 inhabitants divided into stages according to housing needs and demand in the region. That is consistent with other small settlements in Evjafjörður fjord, where eleven of fifteen settlements have fewer than 300 residents, as mentioned in the introduction chapter. More residents could create a basis for more services to thrive in the area, but Akurevri would continue to serve the role for the settlement as a regional center.

Kull et al. (2020) described three key relations of how jobs and places are connected. When people decide to move to a place based on other reasons than following job opportunities, it is called *supply-driven migration*, which could be the case for Hjalteyri. Then, the reasons for moving are based on the attractiveness of the place due to various qualities. A town with a good reputation for being a safe and family-friendly place to live can be attractive for young families. Schools, kindergartens and other cultural and recreational amenities are mentioned as important aspects for the attractiveness. On the contrary, when people follow job opportunities when moving, as Kull et al. describe the *demand-driven migration*, the population of a place grows, which creates an indirect impact on the availability of services and infrastructure.

From Hjalteyri, there are good transport connections to other towns in the fjord and Akureyri. That means that if people decide to move to Hjalteyri, they could either pursue job opportunities there, commute to other towns or work remotely from home or offices in Hjalteyri. The design proposal shows how the village can grow in the next decades with more supply of residential plots. Even though there would be a great supply of plots, there needs to be a demand. Possibly could some initiatives from the municipality help with increasing the attraction and the demand. The municipality could attract certain groups of residents to move, for example, by opening a small kindergarten to attract young families. The municipality could use the geothermal heat to create a swimming pool with majestic views that would attract visitors, and create a chain reaction of enhancing the reputation of the place. Many initiatives could help develop the village, and maybe the first steps can happen with branding strategies within the municipality.

Vareide (2018) described how places can enhance the attraction for three different types of parties; for residents, visitors and businesses. First of all, a place should have housing or residential plots for residents to build their home. For visitors, a place should have accommodation available and attractions that create a reputation for visiting. For businesses, a place should have commercial buildings and the local culture to have will to grow and take risks and open for cooperation. All the interviewed residents described that Hjalteyri has a lot to offer for residents, visitors and businesses. Residents enjoy the natural areas in their daily life and sea-related activities are popular for people that visit the village for recreational purposes. Before Covid-19, the hot tub by the beach was popular and the café house. They all mentioned that having a meeting place to grab a coffee was important to them, either for an alone time or to socialize with neighbours or visitors. Grocery stores and other services can as well be important meeting places for the social life of communities and can influence the attractiveness as described in the literature review.

#### PUBLIC LIFE

The design proposal proposed that the town center will become a place of attraction for visitors and residents. 11 new commercial buildings are planned for stores, offices, cafés, restaurants and other services. Creating a lively downtown area rich in public life where people can show themselves and see other people on daily basis, and a place for visitors to dwell for a while in the town - possibly affecting the reputation. The area around Hjalteyri has geothermal heat and hot water that gives many opportunities. A new geothermal swimming pool is designed in the center, creating a place of attraction with beautiful views and accessibility for sea swimming. Activities in the factory buildings will continue to evolve and along with the new buildings, will create good opportunities for job development and innovation in the area.

The design follows the vision of Gehl (2011) in creating public spaces that enable people to enjoy different activities in an environment of good quality. Streets and buildings are located to create shelter from wind and to improve the local climate in the public spaces. In the town center and by all paths are opportunities for people to sit down and stay. Public spaces and green urban areas in the proposal are classified according to the eight perceived sensory dimensions by Grahn & Stigsdotter 2010. These different spatial qualities are important for outdoor experiences and are vital for public health. The proposal creates great opportunities for residents and visitors of Hjalteyri to enjoy the outdoor environment of diverse spatial qualities. The proposal preserves the natural environment and paths increase the accessibility for people to enjoy calm environments rich in species. People

can also experience cultural and social environment in the town center, so the quality of public spaces in the village range from a more calm and natural environments to more social and cultural.

#### SUSTAINABILITY VALUES

The project follows ecological, social and cultural values to enhance the built and natural environment. Public spaces, paths, natural areas and new buildings with services are important for the community and serve as meeting places for residents - enhancing the attachment to the place. The availability of services also decrease the need for people to travel to other towns. The project envisions how Hjalteyri can become resilient to future changes and depopulation. The most important sustainability aspects are that the proposal shows how the settlement can grow in implementation phases by demand in the next decades.

The use of current infrastructure and buildings such as the factory buildings is an important sustainability aspect and the use of local geothermal heat. Some aspects of the design proposal are references to the traces of the past. Demolished piers are rebuilt and new buildings follow the architecture of the old houses. The new townscape respects the old appearance of the village, giving strong clues of the history of the place. As mentioned in the site analysis chapter, the pond has protection value due to birdlife. The nature walks are important for the residents as mentioned in the interviews. Paths around the pond and the forest are great for outdoor recreation and divert accessibility and prevent human activities from disturbing birdlife. Two islets are in the proposal, and the larger one has the purpose of becoming a habitat for birds. Greenblue solutions are along the streets in the new residential areas, diverting surface water to channels that flow to the sea and the pond. The vegetation and the soil help filter pollution from the water before it streams back into circulation. Sustainability values are important for the settlement to be resilient to future changes and for the community to live in harmony with nature.

#### 5.2 STRENGTHS & LIMITATIONS

The methods used in the project were important to understand what attracts people to live in settlements in rural areas, both from the perspective of literature and residents living in a vulnerable settlement. Interviewing residents of Hjalteyri and talking to a specialist in rural development was helpful to gain insight into their perspective and strengthened the vision for the design proposal. In this way, the author received an insightful understanding of living in a smaller settlement and what is important to the community and the individual. The project illustrates landscape architecture in a visual and theoretical way and demonstrates a future vision of how a vulnerable settlement can become more resilient to depopulation. If the project were to continue, it would be ideal to look more closely at the benefits and challenges in rural living through interviews with more residents or a questionnaire. It would be interesting to understand better the tendency to move to villages and small towns in the countryside, especially if people are not from the area or raised there. It would also be interesting to gain insight into planning and future goals through interviews with representatives from the municipality council or the planning department.

Due to the scope of the thesis, it was a conscious decision to interview only three residents and one specialist in rural development. The main purpose of the thesis was to create the design proposal, while the purpose of the interviews was to support the proposal with a local perspective. The project benefitted from the discussions that came up in the interviews since the interview framework was thorough and each participant was given a good time for expressing their thoughts. The interview with the specialist was important to receive an overall insight into the emphasis on rural development today. For diversity in the interviews with residents of Hjalteyri, it was decided to interview one young parent, one male and one female participant. The young mother interviewed moved to Hjalteyri 2 years

ago and is still on maternity leave, and the two other people are self-employed and have lived in Hjalteyri for around two decades. It would be interesting for further studies to interview more residents of Hjalteyri and especially people that are working and commuting to different towns. Since the population is low, it would be interesting to interview more residents of different ages and occupations and get an overview of the people living in Hjalteyri. The project needed to have limitations, and the author believes that the interviews were relevant and successful. For continued work, the author would pursue to interview a broader spectrum of residents and specialists.

The introduction chapter expressed that the project has a limitation in not covering the tourist view due to the Covid-19 Pandemic and the uncertainties in the field. The literature review mainly focused on attractive rural living from a residence perspective, but, also addressed what aspects are important for visitors and businesses. The design proposal illustrated the design of public spaces that create attractions and opportunities for activities for residents and visitors. The town center and the activities in the factory buildings could be attractive to tourists and the outdoor path along the pond with the beautiful view and birdlife. The main attraction could be the geothermal swimming pool, the piers and all the activities that the place could offer. In fact, the unique atmosphere could be the main

attraction. However, even though the project addressed attractions for visitors, it is not by the same scale and emphasis as it would have been before the Pandemic. In the past years, the tourism field in Iceland was booming, with millions of people visiting the country. What the proposal and all aspects of the project highlight are in regards to the small scale visitors.

The theories and aspects presented in the literature review chapter are one approach to the topic of the project. Since the project deals with the Icelandic environment, it is important to question whether the theories fit with the Icelandic context that contrasts with other countries in terms of landscape and degree of rurality. Iceland is a low population country, and the rural settlements are small compared to other countries. As mentioned in the introduction of the project, settlements with at least 200 residents are defined as towns, but villages if the population is below 200. In the region of Eyjafjörður fjord are 11 settlements with less than 300 residents and Hjaltevri has fewer than 50. The design proposal showed how the village could grow in the next decades with implementation stages in harmony with demand in the region. The expansion of the village to 300 residents is in line with other smaller towns in the region and considered realistic for the settlement without affecting the landscape identity. Values have changed through time, and the industrial remnant now has recreational values and new business opportunities. Due to the location of the village in the region, it could become an attractive settlement. However, the population

increase must be balanced to protect the unique characteristics of the village. If the proposal had suggested that the population would be more than 300 residents, then the expansion would grow on a larger unbuilt area in the settlement that would drawback natural qualities. The proposal suggests that the new residential area has similar housing types to those already in the village, but housing types would have to be redefined with increased population. With a larger population, the settlement might become denser and the houses higher, which would not suit the urban structure of the village that has developed since the beginning of the twentieth century.

The literature review introduced research by Elshof et al. (2017) that defined amenities that can influence the attractiveness of rural settlements. The study analyses the flow of movers in a declining rural region in the Netherlands, which contrasts significantly in population from the Icelandic context. However, there was a similarity in the findings of the study and the interviews with local people in Hjalteyri, both in regards to the attractiveness of scenic beauty and specific services. The residents mentioned that it is important for them to have recreational services in the village, such as accommodation and a restaurant or café, and a local primary school was something that they wanted to attract families with children to the village. The distance to Akureyri was considered reasonable to seek more specialized services, jobs or for buying groceries. From the interviews, it was clear that the services which the residents found essential to have, were related to

having a meeting place in the community, and therefore, it can be assumed that is an essential aspect in the context of small rural towns in Iceland. The review of literature in this thesis about what makes rural living attractive was considered relevant for the Icelandic context. However, it is vital to address that population, landscape, and culture is different from country to country, and therefore, it would be interesting to study further rural living in the Icelandic context.

Research by Grahn and Stigsdotter (2010) was introduced that shows the connection between urban green spaces and health. The Eight Perceived Sensory Dimensions classification was introduced and used as guidelines for the design proposal of public spaces in Hjalteyri. These categories helped to identify various spatial qualities that enhance different outdoor experiences in urban design. In figure 57, the public spaces of the proposal were divided by these guidelines. These criteria can be fit with the Icelandic context for the most part. Since the proposal suggests that the village will grow into a small town, this approach was considered appropriate. The proposal designs various spatial experiences that accompany the identity of the place. However, the definitions of some of the categories were considered too similar in the context of Hialtevri, and were merged, as seen in figure 57. Natural areas around the pond and the forest surrounding the settlement were defined both as nature and rich in species. The town center was defined as cultural and social since the area is characterized by historical relics and is an environment for social activities. Paths and

resting areas between the forest and on the islet were defined as serene and refuges since these spaces offer enclosed and calm environments for retreat. This classification was considered appropriate to analyze the spatial qualities of the design proposal. However, the categories were defined by Grahn and Stigsdotter (2010) as a result from a study in the context of Swedish urban areas that differ from Icelandic urban structure of rural villages. For further studies it is recommended to study spatial qualities of urban green spaces in Icelandic context.

The surrounding landscape of Hjalteyri plays a significant role in the urban structure, and therefore it was important to examine the relationship between human and nature in the literature review. Research by Kristjánsdóttir et al. (2020) was introduced that showed the restorative potential of Icelandic nature. A meta-analysis by Capaldi et al. (2014) and a study by Bratman et al. (2015) were also introduced for international comparison. The study by Bratman et al. (2015) investigated the restorative benefits of an environment in California, and it is important to address that the Icelandic landscape and climate are different from California. For further work, it would be more appropriate to look at research from the Nordic context. However, the study was interesting and showed that accessibility to natural settings is essential for well-being. The findings were necessary for developing the design proposal of Hjalteyri to understand the importance of preserving natural sites in the village and improving the accessibility from residential areas.

### **5.3 CONCLUSION**

Various qualities accompany living in small towns around the country. The distance to the next large urban area plays a vital role for residents to seek specialised services. With improved transportation, secured electricity and internet, and the progress in remote work during the Covid-19 Pandemic, the strength of the countryside has increased. Today and hopefully in the future, people will have more opportunities to live where they want to, regardless of the workplace location. Other place-specific qualities might play a more significant role. As mentioned in the interview with the Icelandic Regional Development Institute specialist, workplaces have seen in the Pandemic experience that employees can work from home and be as productive. For some people, it could be attractive to move to the countryside and work from home or in community offices. However, as mentioned in the literature review and the interviews, most people care for living in a community with certain services. Therefore, the greatest opportunity for small towns and villages to increase the attractiveness for residents is by strengthening the quality of the living environment. It can be done by improving outdoor recreation areas, establishing facilities for remote work and innovation, and creating attractions and good public spaces for people to enjoy their everyday life. These opportunities can be strengthened through urban design and planning and with place branding strategies to enhance the competitiveness of the settlement.

Hjalteyri village has great advantages: it is close to Akureyri, the view from the village is beautiful, it is close to nature with recreational opportunities, there is a certain infrastructure already there and geothermal heat, historic architecture and marina with sea-related activities. In fact, there is everything in Hjalteyri already for the village to expand and become a lively town that no longer suffers from depopulation. The project follows ethical values by taking

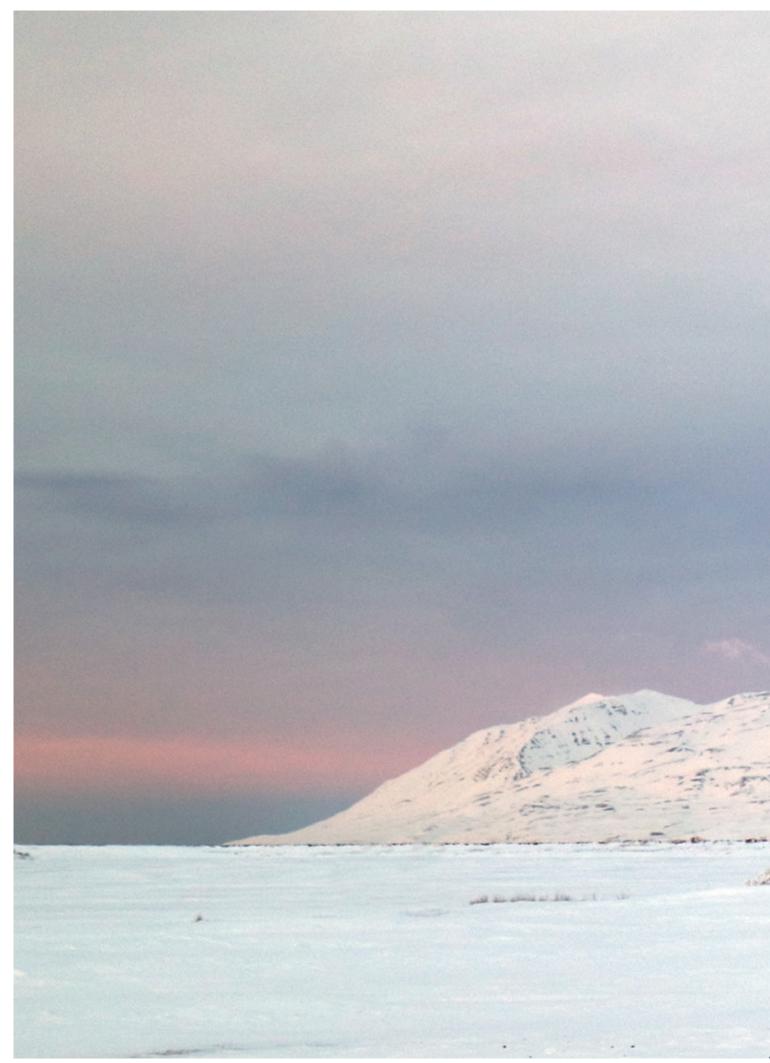
into account societal needs and caring for the history and identity in the development of the proposal. The project shows a vision for the future that would happen in the next few years and decades. For the project to become a reality, it must first go through a certain consultation process with residents, the municipality and stakeholders. A zoning plan is already in effect and includes 20 new residential plots. Therefore, the first steps are that there must be a demand for those plots before anything else happens. As explained in the literature review, certain services must be available to attract residency. However, it is important for the municipality to envisage possibilities in the future and look beyond the development in the coming years. The proposal shows how the village can become a small town with development by the year 2050, but the increase in population in the region could affect the demand for living in Hjalteyri. The implementation stages of the proposal show how development can take time and evolve with increasing demand over a long period. The proposed population increase is in context with the size of other towns in the region. The settlements in the Eyjafjörður region are close to Akureyri regional center, and therefore, it can be assumed that development in Akureyri creates a chain reaction in the region.

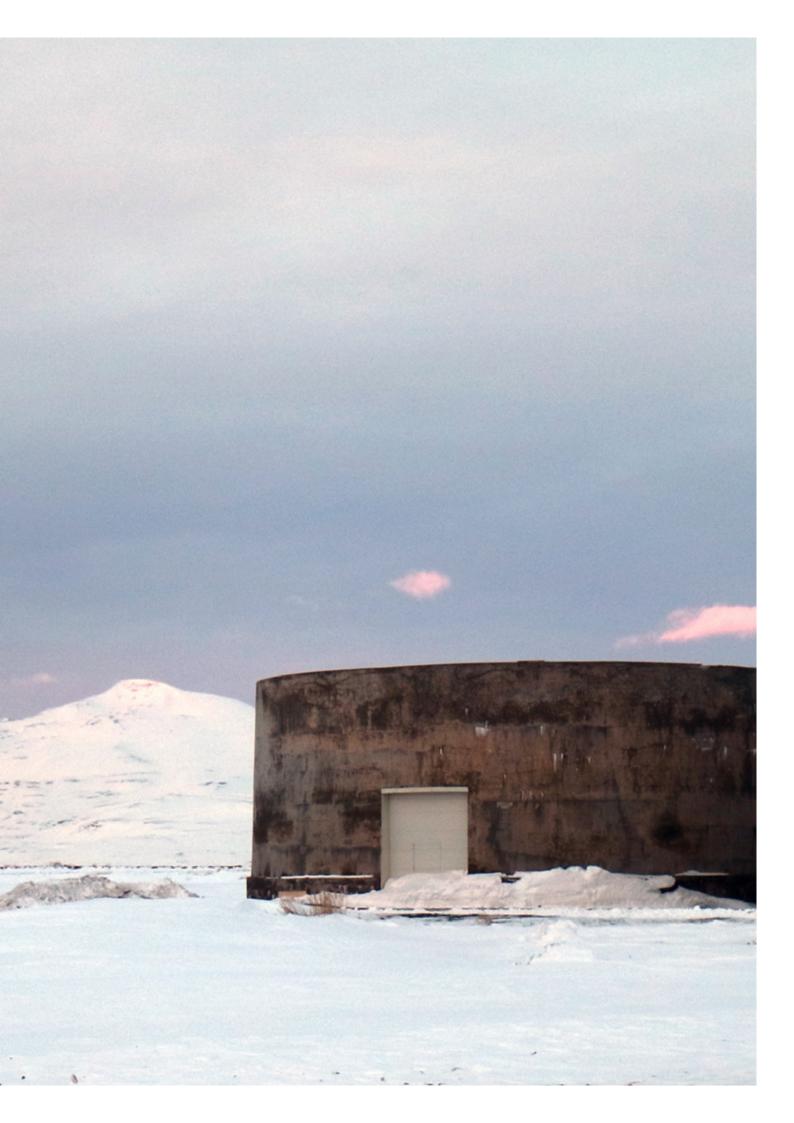
The new residential area is proposed on a field defined as a recreational area. Therefore, the plan proposes new land use on current agricultural land, so decisions need to be in concordance and harmony. The most important thing in the development of the area is that all development respects the spirit of the place, history and nature, but with the goal of maintaining residence in the area for the future.

For further studies, it would be ideal for examining even more closely how the municipality could strengthen the competitive position of Hjalteyri within the region to attract more residents. Plots are already available, but maybe the municipality needs to adapt place branding strategies and create a basis for future development. It would also be interesting to take a closer look at why other settlements in Eyjafjörður fjord have grown with population increase, while Hjalteyri has not.

The main strength of the project lies in seeing opportunities in a settlement that has become very vulnerable to changes over time. Hjalteyri is a fascinating village with multiple potentials. There lie opportunities for futuristic development with the advantages of there are already buildings, roads and other infrastructure available. Not to mention the place has a strong history and identity. The main weaknesses are that Hjalteyri is a vulnerable settlement with less than 50 residents. There are few job opportunities and no housing available. The primary school and kindergarten are located in different parts of the municipality, and there is no public transport to the village. These weaknesses are as well the most important opportunities for the village to influence the attractiveness. The design proposal shows a future vision of the village where all the village opportunities are strengthened. In the next decades, the vision shows that Hjalteyri can grow to a town of about 300 residents with an attractive residential area, town center, and multiple recreational opportunities. The vision includes developing the current land and strengthening the landscape identity and local spirit of the area by respecting nature and historical architecture.

There are great development possibilities for rural villages in the vicinity of larger urban areas like Hjalteyri in the future. For the settlements to strengthen the attractiveness for residents, certain qualities of the living environment are needed. I hope that the findings of this project will be beneficial to the municipality Hörgársveit and other municipalities in the region and that the project will encourage them to show initiatives with development strategies that are in line with the qualities mentioned. By enhancing the place image with actions and future vision, the potentials of the settlements can be strengthened to develop towards a bright future. Hopefully, living in rural villages and small towns will become even more attractive for people of all ages in the future.





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# APPENDIX

### INTERVIEW QUESTIONS

### INTERVIEW FRAMEWORK FOR THE RESIDENTS OF HJALTEYRI:

- 1. Information about the interviewee: Name and age, where do you work, and your background?
- 2. How long have you lived in Hjalteyri?
- 3. Can you tell me, do people work in Hjalteyri or drive to other towns? What jobs do people do here? Is it common for people to seek work or services in Akureyri? Do you think that remote work could strengthen the feasibility of living in Hjalteyri?
- 4. Tell me about your favourite place in Hjalteyri and why? Do you have any activities here or hobbies related to the environment?
- 5. Can you explain to me the image you experience of Hjalteyri? What makes the place unique?
- 6. Do you feel that people seek certain experiences when visiting Hjalteyri?
- 7. What are the main recreational opportunities and activities in the area?
- 8. How do you see the future of Hjalteyri?
- 9. Can you tell me about what opportunities you see in Hjalteyri? *What about challenges? What do you consider important issues so that the community and the village of Hjalteyri flourish in the future?*
- 10. Is there anything else you would like to mention?

### INTERVIEW FRAMEWORK FOR THE SPECIALIST IN RURAL DEVELOPMENT:

- 1. Where do you work? Tell me about your education and background?
- 2. How do you see the future of rural development in the Icelandic countryside?
- 3. What do you think are the main challenges and opportunities for smaller communities in the countryside?
- 4. Do you think that remote work in the days of COVID-19 demonstrated the potential for jobs that are not place-specific?
- 5. Can you tell me about the Icelandic Regional Development Institute's mapping of housing for the program jobs without a location?
- 6. Do you think that increased opportunities for jobs without a location and remote work affect residence choices, like other qualities, e.g. environment, community/network, service or distance to a larger service centre or other options more important than the location of the workplace?
- 7. How do you think it is possible to strengthen the attractiveness of small towns in the countryside?
- 8. What are the possibilities for strengthening the living conditions of families and increasing employment opportunities for young and educated people in rural areas?
- 9. Do you think that the character and image of the place influence the choice of residence?
- 10. What do you think are important issues for the country's settlements and communities to flourish?

