Memories of Tomorrow

Reconnecting Community and Landscape in Roald - through participation

Ida Romslo & Tonje Cecilie Stordalen
Landscape architecture
"Oss må satse no."

"We must invest [in the future] now."

- Resident
Title
Memories of Tomorrow
Reconnecting Community and Landscape in Roald - through Participation

Tittel
Morgendagens minner
Å knytte sammen samfunn og landskap i Roald gjennom medvirkning

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This report is the conclusion of our five-year education at the Norwegian University of Life Sciences (NMBU). The thesis is equivalent to 30 ECTs.

Especially during the last years of our study, we have become aware of the lack of knowledge about citizen participation in municipal planning. When Giske municipality requested assistance to prepare an input to the land-use plan for Roald based on participation, we saw an opportunity to participate in this rewarding task and simultaneously test various participation methods. The thesis can serve as a guide to participation for Giske municipality and municipalities with similar challenges.

We want to thank our main supervisor, Associate Professor Deni Ruggeri, for his inspiration, patience, invaluable help, and guidance throughout the process. We would also like to thank our supervisor Professor Anne-Karine Halvorsen Thorén. A big thank you to Giske municipality and area planner Bjarte Friis Friisvold for the exciting challenge, financial support, and for lending us an office. Special thanks to the public health coordinator in Giske, Torill Valderhaug, for friendship and invaluable help to complete the fieldwork. A final thank you goes to the community of Roald and all stakeholders -- in particular Vigra skule, Vigra Sogelag, Roald Velforening, Joker Roald, and Tormund Grimstad-- for participating in the project.

We hope you enjoy the reading.

Ida Romslo & Tonje Cecilie Stordalen
Ás, December 15th, 2016
Fig. 0.1: Idiosyncrasies of Roald. The nature is important for the residents.
ABSTRACT

This thesis proceeds from the question: How can community participation facilitate a physically and socially sustainable development of Roald? It describes a process departing from the hypothesis that participation may strengthen the bonds between population and government and that ownership of place increases with increased influence upon the physical development of a landscape. The project area is Roald at Vigra island in Giske municipality, North-Western Norway, and the process has to goals: 1) To identify and perform an approach that is suited to the context of Roald, and 2) Arrive at a comprehensive plan for future development that empowers the community.

The thesis is divided into five main sections. The first part of the thesis provides an introduction to the case area and relevant literature and craft an approach adapted to the case study. The following three parts address the conducting of the case study and its main findings. The final part is a discussion that addresses the research question and goals.

The literature applied focuses on theories such as sustainability, the ladder of citizen participation and social capital. Based on The 12 Steps to Community Participation by Randy T. Hester Jr., the case study of Roald is divided into three main phases - explore, investigate, and develop. Each phase is introduced with a review of the participation methods applied.

In Phase 1, Roald: Explored the image of Roald is formed: presently a suburb to Ålesund and a former prosperous fishing and agriculture community. The image has derived from the online survey, personal interviews, workshops, social events and the landscape analysis, and identify the three main challenges of Roald: 1) a rapid and uncontrolled residential development that threatens the natural qualities of the area, 2) a dead village center, and 3) decentralized social networks that lead to alienation and disclaiming of responsibility. The challenges underline the need for a comprehensive plan for development that can involve and empower residents during the development and implementation. In Phase 2, Roald: Investigated, a workshop focusing on setting goals for Roald and drawing anticipated activity settings is conducted, and this results in a spectrum of plans. Phase 3, Roald: Designed, addresses the presentation of the spectrum of plans and the design of the final plan adapted to the community feedback. This phase also includes an implementation plan, demonstrated through “The Bridging Model,” which seeks to engage more members of the community.

Roald community is not familiar with community participation, but The 12 Steps to Community Participation has proven to be an approach highly suitable for the community because it is flexible and makes it possible to adapt to a particular context.

The conclusion confirms the hypothesis but simultaneously highlights that it, because of its simplicity, provides an inadequate representation of the outcome. Through The 12 Steps to Community Participation the bonds between power holders, the community and the landscape are strengthened, but in addition, the distances decrease. The Bridging Model is designed to ensure that the bonds remain strong, facilitating a more socially sustainable development. When individual citizens are provided with more responsibility through The Bridging Model, their connection to the landscape, and their urge to care for it, will grow stronger, thus resulting in a more physical sustainable development.
Oppgaven utgår fra problemstillingen: 
Hvordan kan samfunnsdeltakelse legge til rette for en fysisk og sosialt bærekraftig utvikling av Roald? Den beskriver en prosess med opphav i hypotesen om at deltakelse kan styrke båndene mellom befolkning og myndighet, og at eierskap til et sted øker i takt med innflytelsen man har på den fysiske utviklingen av et landskap. Prosjektområdet er Roald på øya Vigra i Giske kommune i Nord-Vest Norge, og prosessen har to mål: 1) Å identifisere og utføre en tilnærming som er egnet i konteksten Roald, og 2) Komme frem til en helhetlig plan for fremtidig utvikling som myndiggjør samfunnet.

Oppgaven er inndelt i fem hoveddeler. 

Første del av oppgaven gir en innføring i oppgaveområdet og relevant litteratur samt utformer en tilnærming for medvirkningen. De tre neste delene tar for seg utføringen av casestudien samt hovedresultatene. Avslutningsvis følger en diskusjonsdel.


I fase 1, Roald: Utforsket dannes bildet av Roald: i dag en forstad til Ålesund og tidligere et velstående fiske- og jordbrukssamfunn. Bildet er formet gjennom funn fra en elektronisk spørreundersøkelse, personlige intervjuer, idéverksteder, sosiale arrangementer samt landskapsanalyser, og identifiserer de tre viktigste utfordringene i dagens Roald: 1) en rask og ukontrollert boligutvikling som truer naturkvalitetene i området, 2) et dødt sentrum, og 3) desentraliserte sosiale nettverk som fører til fremmedgjøring og ansvarsfraskrivelse.


Samfunnet på Roald er ikke vant med medvirkning i planprosesser, men The 12 Steps to Community Participation viser seg å være en velegnet tilnærming fordi den er fleksibel og mulig å tilpasse til denne bestemte konteksten.

TERMS & ABBREVIATIONS

Bonding social capital

Bridging social capital

Community participation
- Can be loosely defined as the involvement of people in a community in projects to solve their own problems (The European Union, 2015, p. 177).

Democracy
- A system of government by the whole population or all the eligible members of a state, typically through elected representatives.

Dugnad
- Unpaid voluntary orchestrated community work.

Ecological democracy
- The term involves shaping our inhabited landscapes through a fair and direct government by the people, guided by the understanding of the relationships between our environments and us (Hester, 2006, p. 4).

Eit Levande Roald
- A project initiated by the municipality that aimed at reviving Roald, from 2010 to 2012.

Gatå
- The main street of Roald officially called Postveien. Early development in the 20th century was structured along this street.

Gestalt
- A gestalt is a configuration or pattern of elements so unified as a whole that it cannot be described merely as a sum of its parts. The term has its origin in the Berlin School of experimental psychology. In this thesis, the term is used in the context of Randolph T. Hester Jr.’s approach 12 steps to Community Participation.

Herred
- Mainly a historical term for administrative areas (corresponding to the current municipality). Used in Norway and several other countries.

Janteloven
- Also referred to as The Law of Jante. The description of a pattern of group behavior towards individuals within Scandinavian communities that negatively portrays and criticizes individual success and achievement as unworthy and inappropriate (Sandemose, 1933).

Landscape
- Landscape means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors (ELC, 2000, p.2).

Mjølner
- The community hall, built by the community on dugnad in 1953.

NCA
- The Norwegian Coastal Administration.

NMBU
- Norwegian University of Life Sciences, Ås.

NTNU
- Norwegian University of Science and Technology, Trondheim.
Sacred Structure
- The composition of all the Sacred Places in the landscape.

Sambruken
- The community’s “joint-use-house” where retired men hang out twice a day, every day.

Social capital

Social sustainability
- The ability of a community to develop processes and structures which not only meet the needs of its current members but also support the ability of future generations to maintain a healthy community (WebFinance Inc., 2016).

SSB
- The Norwegian Central Bureau of Statistics.

Stewarding/Stewardship
- The act of, or actions taken to maintain, restore, and improve one’s community, the landscape, and larger ecosystems.

Resilience
- The ability to recover quickly from difficulties.

Sacred Places
- Places in the landscape that have great value for the community’s identity and health.

Steady hands
- A person from Vigra.

PBL
- The Planning and Building Act, 2008

Physical sustainability
- By this, we mean how the three dimensions of sustainability are accounted for in the physical landscape.

Representative democracy
- A type of democracy founded on the principle of elected officials representing a group of people.

Resistance
- The act of taking part in something.

Participation approach
- The holistic approach to participation in a project. In this thesis, it is The 12 Steps to Community participation by Randolph T. Hester Jr.

Participation method
- The various methods utilized to perform the participation approach. Here divided in workshops, personal and group interviews, online survey, walking tours and other social events.

PBL
- The Planning and Building Act, 2008

Physical sustainability
- By this, we mean how the three dimensions of sustainability are accounted for in the physical landscape.

Resilience
- The ability to recover quickly from difficulties.

Roalding
- A person from Roald.

Vigring
- A person from Vigra.

ROBEK-list
- A list which ranks the municipalities in Norway with the greatest economic challenges.
Fig. 0.2: Idiosyncracies of Roald.
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Fig. 0.3: Fisherman from Vigra. The dependency of the landscape resources that the local fishermen had created a profound awe and respect for the landscape and shaped the community’s way of life. Copyright Vigra Sogelag.
The following chapter will frame the background for this thesis and present the goals and research question.
We were first introduced to the municipality of Giske, a four-island municipality located in Møre og Romsdal county on the west coast of Norway through the course “LAA341 - The urban landscape as a social arena” in the fall of 2015. The municipality consists of the four islands Giske, Godøya, Vigra, and Valderøy. The latter was the primary focus of the work in LAA341. The Norwegian Center for Design and Architecture (DOGA) launched the pilot project “Barn i by - implementering av Barnetråkk.” The focus was involvement of children in the planning process through the digital platform Barnetråkk. Giske was one of three municipalities participating in this project. Students from NMBU utilized the results from the research and developed ideas that had emerged further through the design process.

We explored the use of digital platforms for information gathering and held a workshop with students at Valderøya middle school. The design was well-received, both by inhabitants and the municipal administration. We felt, however, that the participation approach mostly consisted of collecting information and working out a design primarily based on our perception - a way of working that we, in retrospect, do not consider as true participation. Nevertheless, the project raised the question about how participation in municipal planning could be improved and increased our curiosity to explore different methods of participation in community planning in Norway.

The desire to write a master’s thesis that primarily focused on approaches and procedures for participation was further strengthened by the knowledge of the challenges related to the modern way of governing a society. The legislative power lies with the elected officials, but everyone has the right to vote. However, not everyone does. In the municipal and county election in Norway in 2015, the voter turnout on national base was 60%. (Kommunal- og moderniseringsdepartementet, 2015). In addition, only individuals over the age of 16 were entitled to vote. This insinuates that in practice it is possible that only about half of the Norwegian population voted in the last election, a percentage which, according to the Central Bureau of Statistics’ measurements, has been steadily dropping (Statistisk Sentralbyrå, 2015a).

Local authorities play an essential role in promoting participation and ensuring that the needs and wishes of all residents are considered. More often than not, these goals are challenged due to lack of expertise and time. Our hope is that this thesis can provide municipalities that wish to perform participation with a rich description of how participation can be improved, so it is easier to initiate this type of work and so that true participation might, with time, be easier to achieve.

Since we had already established a relationship with the administration in Giske we were eager to work with them again. We were asked to prepare an area plan based on participation for the village Roald, situated in the northern part of the island of Vigra. Now home to 574 residents, Roald was once a prosperous agricultural and fishing community and an important destination as well as the regional center in the area.
Fig. 0.4: Taking a walk with the children at Vigra elementary school. The value in giving everyone the opportunity to affect their home landscape was one of the reasons why we wanted to write a master’s thesis concerning participation.
DESTINATION: ROALD

Over the last decade, Giske municipality has experienced a rapid population growth, largely due to the entry of a mainland connection to Ålesund and later when the connecting bridges and tunnels were made free of charge. Low-density, sprawl-like development has prompted most of Giske’s growth. Vigra, with child-friendly rural living conditions, has been an attractive place to settle and there is a need to assess the consequences of this continued urban sprawl. Vigra is the island with the best conditions for agriculture in the municipality and feature many important nature reserves and bird sanctuaries. This has made us aware of the conflict of interest between preservation and development in the area and prompted us to find a solution that can accommodate future residents and at the same time preserve important recreational areas and natural and cultural resources.

The connection to Ålesund reaps benefits in the form of new residents and tourists coming to experience the landscape, but it has also made the community more car-dependent. Also, Giske is experiencing a decrease in trade and jobs within the municipal borders. This, among other things, has led to a weak economy in the municipality. In 2016, Giske was listed on the ROBEK list, which ranks the places in Norway with the greatest economic challenges. The economic challenges led to a desperate situation where private developers have been given free rein for the development of residential and industrial areas, unconcerned of the consequences in an overall perspective and how the development affects the local community. We speculate that this way of development may have weakened residents’ connection to the landscape.

Both the physical and the social development that has taken place in Roald will have an impact on the local place identity and place attachment. We saw this to be true during the work in LAA341 where the population of Valderøya appeared to be split into “long-time dwellers” and “newcomers,” each with very different needs in terms of retail offers, housing typology, and social interaction. This division was mainly due to the rapid growth the past decades and has led us to believe that a similar development could happen in Roald. For this reason, we are interested in looking into Roald’s place identity and citizens’ sense of belonging to identify possible design solutions that can be used to strengthen both in the future.

The shift from being a central destination to becoming a dead end has caught our attention, and we are particularly interested in exploring how Roald can change its physical structure to become a resilient, vibrant community again and a destination for both residents and visitors. The definition of the geographical area of the case study will be presented in the analysis section as the citizens’ perception of Roald’s boundary lines is our starting point.
Giske Municipality, Møre og Romsdal
Population: 8094 (Jan 16)
Area: 40 km²

Vigra
Population: 2061 (Jan 16)
Area: 18.9 km²

Population Roald:
574 (Jan 16)
RESEARCH QUESTION & GOALS:
How can community participation facilitate a physically and socially sustainable development of Roald?

1. Identify and perform an approach that is suited to the context of Roald.
2. Arrive at a comprehensive plan for future development that empowers the community.
Only a few hundred years leap back in time the structuring of the community of Roald show clear signs of a reciprocal impact between the landscape and humans. Humans made use of the resources available to them, and the landscape was in turn shaped and changed by the people. At the same time, the dependency of the landscape resources created a profound awe and respect for the landscape and shaped the community’s way of life.

Today, however, with a greater percentage of the population employed in the secondary and tertiary industries, we see a tendency that people are less connected to their everyday landscape. The power holders, who often lack local knowledge, determine and shape physical features in the landscape and set the conditions for the social life of the masses. An unfortunate consequence is that residents are “pacified” and projects are standardized instead of adapted to the place - a development that is neither sustainable nor equitable.

To respond to this sort of development one should focus on the “missing link” - the information flow and relationship between citizens and power holders. We believe that through more problem and place specific participation where power holders listen attentively to residents’ knowledge and needs, it is possible to achieve a development that corresponds better with the opportunities inherent in the local landscape. When citizens participate in the planning process, they get more involved in deciding, and acknowledge changes in the landscape.

Consistent use of participation can create other positive ripple effects. Landscape & power holders: When power holders attain the valuable local knowledge they will (1) make decisions that work with natural landscape features. In other words, (2) the landscape will to a greater extent set the premises for the development. Landscape & Community: When the landscape is shaped by local knowledge and needs the landscape will (3) control the way of life in the community to a greater extent. When the residents realize that the landscape provides the framework for their living the (4) urge to conserve and preserve the landscape will become stronger. This will create a new, modern reciprocal cycle.
STRUCTURE OF THE THESIS

This thesis attempts to address two issues. Firstly, to identify and perform an approach that is suitable for this context. Secondly, it seeks to arrive at a comprehensive plan for future development that empowers the community. The two are closely related, and for this reason, it is necessary to work simultaneously on both issues. Findings relating to one of the two issues can highlight challenges or problems in the second issue and provide continuous feedback on what works and what does not. The thesis’ structure describes the participation process as it was conducted with accompanying findings, changes, and adaptations.

The first part of the thesis presents a literature review of the various theories and methods of participation. This section provides the basis for how the case study was performed.

The following three phases constitute the case study, in which the three phases have different focus areas - explore, investigate, and design Roald. A detailed review of the methods applied is included as a separate chapter in each of the phases.

Lastly, the goals and research questions are discussed.
CASE STUDY

THE PARTICIPATION APPROACH
Globalization, the refugee crisis and the movement of people within and between rural areas and city boundaries place high demands on the adaptation of both the physical and social landscape of our communities. In a world that is changing increasingly fast, the need to focus on empowering and bridging individuals to facilitate communities becomes even greater.

"Many cities suffer from inferiority complexes and try to compensate by being something they are not. Usually this leads to a loss of collective identity and authenticity and to an increase in placelessness and wasteful public consumption."

-Randolph T. Hester Jr. (Hester 1995, p.9)

Urbanization makes it more difficult for small towns to be competitive when faced with the facilities and job offers of larger cities. The result is often that financial gain increases in larger cities because they are attractive to commercial enterprises, while rural areas outside cities slowly, but inevitably, die.

The growth in urban settlements is stable in Norway (SSB, 2015b), and urbanization is putting significant stress on land that has great proximity to cities. With a high population growth within the municipality borders, Giske, a municipality with proximity to Ålesund - a city that is rapidly growing - will likely face increasingly challenging pressures to develop. The risk is that the town becomes, as the community designer Hester (1995, p.9) puts it, "something they are not." In other words, there is an urgent need for small town planning that focuses on indigenous qualities and ways of life to preserve place diversity, place attachment, and sustainability.

In 2016 the Norwegian government reduced its financial contributions in 8 out of 10 public sectors (Unio, 2015). A
strict municipal budget too often results in shifting the power in favor of private developers direction, providing them with the opportunity to develop land based on profit instead of community benefits. Even though several municipalities are dependent on the private developers’ interest, there is a growing need for them to regulate development to a greater extent, making it possible to plan for a richer social life for residents.

"Over the last fifty years, the process of community building has been lost in the process of city building.”

-Randolph T. Hester Jr. (Hester 2006)

Greater socialization, especially across generations and user groups, contributes to strengthening and increasing social capital in the community. Once the social capital is enhanced, governance will often increase with benefits in terms of the social trust, public health, and the community’s health (Freakonomics, 2016).

Representative democracy is a governmental structure based on citizens electing representatives to serve on their behalf. In order for this structure to work, the elected officials must know what the population wants. The Planning and Building Act states that municipalities, in particular, have a responsibility to ensure active participation among groups who demand special facilitation – including children and young adults (PBL, 2008). In practice, this means that elected officials must actively involve their citizens in the planning and development of their everyday environment. The challenge, however, is that “active participation” is not defined and the methods municipalities choose are not described in the law. Due to time limitations and lack of a holistic approach, municipalities are too often content with minimum participation that isn’t customized for several of the user groups, leading to multiple stakeholders being left out.
Fig. 0.5: Literature.
In the previous chapter, we outlined a reciprocal cycle adapted to the modern representative democracy. We believe that there is a need for contemporary development to correspond better with opportunities and limitations inherent in the landscape - a more sustainable development. In addition, we believe that there is a need to acknowledge people’s right to participate in the decision making that concerns their everyday environment - a more equitable planning process.

This chapter introduces a set of theories and clarifies key concepts that are essential for this thesis. Participation approaches that serve as the foundation for this thesis are presented, discussed and adapted to the context.
EQUITABLE AND SUSTAINABLE DEVELOPMENT

the theoretical basis

SUSTAINABILITY
The concept Sustainability has been central to practitioners understanding of the discipline in the field of landscape architecture. The Brundtland Commission set the concept on the world agenda with the final report Our Common Future in 1987. The central message was that the international community must “. . . make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland Commission 1987, p.16). The report uncovered the ties that exist between environmental, economic and social dimensions and highlighted the importance of balancing all three. However, since the 1980s, much importance has been attributed to the economic and environmental dimension: reduction of carbon dioxide emission, sustainable building construction, energy efficiency in the society and BNP per capita are among the topics more frequently discussed. To a certain extent, even in discussions with fellow students, this understanding of the term appears to dominate the perception. This emphasizes the importance of the idea that the social dimension must be given more space in future development and community planning.

Therefore, the research question states that we want to achieve a socially and physically sustainable development, thus underlining the social dimension. Social sustainability is understood as “the ability of a community to develop processes and structures which not only meet the needs of its current members but also support the ability of future generations to maintain a healthy community” (WebFinance Inc., 2016). By physical sustainability, we mean how all three dimensions, the social, economic and environmental, play out in the physical landscape.
Fig. 0.6: The three dimensions of sustainability. Brundtland Commission (1987).
THE LADDER OF CITIZEN PARTICIPATION

In 1969, author Sherry R. Arnstein wrote about citizen involvement in planning processes in the United States. She compared citizen participation to eating spinach: “No one is against it in principle because it is good for you” (1969, p.216). However, when the principle is advocated by have-nots, the applause is reduced to a polite handclap (Arnstein, 1969, p.216). Even though it is a simplification, the ladder of citizen participation helps to illustrate two important points that many often miss. Firstly, that there are significant gradients of citizen participation that, represented by a ladder, range from manipulation to citizen control. Secondly, that several forms of nonparticipation lurk behind the scenes and are disguised by power holders as participation, citizen power and right to decision-making. Furthermore, the model highlights that what we employ as participation in modern planning processes in reality corresponds to step 3 or 4 on the ladder, steps that Arnstein classify as tokenism - a merely symbolic effort.

This model is not only useful for determining the degree of participation. It also breaks up a complex subject into easily understood graphics that communicate with citizens of several ages, with different backgrounds and education levels. It can, therefore, play an important role in making participation as subject understandable for citizens and provide them with enough information so they can understand their opportunities and their right to participate.
Fig. 0.7: Sherry Arnstein’s (1969) Ladder of Citizen Participation.
THE EUROPEAN LANDSCAPE CONVENTION

“‘Landscape’ means an area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors”

- ELC, 2000, p.2

The European Landscape Convention, issued in 2000, has played a crucial role in two critical areas of sustainability theory and practice. Firstly, the Convention widened the definition of ‘landscape’ so that the general perception of a landscape is no longer limited to “outstanding landscapes” (ELC, 2000, p.2). Secondly, the Convention underlines the importance of the individual perspective on the landscape. It suggests that we need to look beyond the material culture and the portions that can be made more energy efficient when we are defining the landscape. Landscapes must be understood through the perspectives of the people who live in them and build their lives around them, from the utilization of the available resources in the landscape to the value the landscape holds for its inhabitants. When we recognize this, it is reasonable to acknowledge The Right to Landscape (Egoz et al. 2011).

Landscape architecture professor Shelley Egoz discusses how the ELC mirrors the Council of Europe’s ideals of democracy and human rights and cites Yi-Fu Tuan’s definition of a right to landscape: “An understanding of landscape as a concept indispensable to the probing of human nature and human well-being” (Egoz 2015, p.114). Based on the perception of the landscape as a civil right and the role it holds in shaping people’s well-being, access to landscape – and opportunity to affect landscape change – should not be limited to a few individuals, it should involve us all.
SOCIAL CAPITAL
Since the sense of community and community building is central to sustainable development, it is highly relevant to look into the theory of social capital.

The term social capital has its origin in the research of sociologists Pierre Bourdieu, Nan Lin, and James Coleman. While Lin and Bourdieu focused on how investing in social networks would give access to individual benefits, Coleman emphasized the importance of strong norms and effective sanctions to make collectives work (Wollebæk & Selle 2005, p. 221). It is, however, Robert Putnam’s interpretation of the term (1993) which has had most acceptance in academia. The author gives the term a new definition - the value of “networks, norms and trust which enables participants to act together more effectively to pursue shared objectives” (Putnam 1995, p. 664). He says that the value is both for the people who are in them, and in some instances, demonstrable effects on society as a whole (Putnam 2001, p.1). This differs from the earlier sociological interpretations in that it emphasized the collective dimensions of social capital rather than on the individual.

Putnam distinguishes between “bonding” and “bridging” social capital. Bonding social capital refers to relationships among members of a network who are similar in some form (Putnam, 2000), such as a family, close friends or members of the same groups in the community. Slagvold (2004) states that bonding social capital is inward-looking and binds people from the same communities together. This could reinforce exclusive identities and homogeneous groups.

“Bridging,” on the other hand, refers to the norms, networks, and trust that extend out to link substantial sectors of the community and span underlying social cleavages. This enhanced cooperation is likely to serve broader interests and to be widely welcomed (Putnam 1995, p. 665). This notion resembles the concept of network resilience (fig. 0.7). Paul Baran introduced this in 1964, and it would later be known as the structure of the internet. Baran found that a system was more vulnerable with centralized networks than with distributed networks where information had several routes from one place to another (Baran 1964). Transferring this idea to social capital, we argue that bridging groups and individuals will enable a resilient network of trust, reciprocity, and dependence. Thus bridging will lead to a more socially sustainable development.

Fig. 0.8: Paul Baran’s (1964) Network Models.
Yi-Fu Tuan’s topophilia is especially interesting in this context. Tuan argues that the landscape is about more than survival and adaptation. For people everywhere, the environment represents more than a resource base: it is also a “source of assurance and pleasure, objects of profound attachment and love” (Tuan 1990, p. xii). Tuan believes that it is this love for a place (topo = place, philia = love), that defines humans and awaken their desire to set a mark on the landscape, and causes humans to “grow attached to their native places, even if these should seem derelict of quality to outsiders” (Tuan, 1990, p. xii).

Landscape architects Deni Ruggeri and Michael Southworth argues that this attachment to landscape must be more considered in regards to defining place identity (2011, p. 15).

To successfully promote an equitable and sustainable development, this reciprocal bond between people and landscape must be understood and leveraged for the benefit of a project’s long-term resilience and stewardship.

“What people in advanced societies lack (and countercultural groups appear to seek) is the gentle, unselfconscious involvement with the physical world that prevailed in the past when the tempo of life was slower, and that young children still enjoy.”

- Tuan 1990, p.96
“This new definition should consider the need for memorable and imageable environments, expressions of shared social values, new forms of non-place communities, and the multiple mechanisms by which meanings are embedded and communicated in the landscape.”

- Southworth & Ruggeri (2011, p.15)
ECOLOGICAL DEMOCRACY

The previous theories are in tune with the theory of Ecological Democracy, introduced by landscape architect and community designer Randolph T. Hester in *Design for ecological democracy* (2006). Ecological democracy involves shaping our inhabited landscapes through a fair and direct government by the people, guided by the understanding of the relationships between our environments and us (Hester, 2006, p. 4).

Hester exemplifies ecological democracy through Thomas Jefferson’s vision of a farmer stewarding both the land and democracy through native ecological wisdom and direct grass root participation (p. 4). The example complies to the suggested “Reciprocity Cycle” between the community, the landscape and the power holders on page 23 in the introduction. Hester states that while the agrarian society became urban, mobile and specialized, it freed us from our dependence on local ecology. He stresses the need to reestablish this connection to our landscapes for the sake of democracy and sustainability. This could be linked to the understanding of the Right to Landscape and the need to engage communities through participation.

Hester writes that the design of our environments must be guided by three fundamental attributes that integrate democracy and ecology. He names these attributes enabling form, resilient form, and impelling form.

The *enabling form* is about designing places that enable citizens to connect with neighbors in the community. Because, Hester states, “Strong democracy cannot blossom without the forum for thoughtful and deliberative cooperation”. Enabling form is tightly connected to the ideas of bridging in Putnam’s theories about social capital (page 35). Through design for social interaction and community rituals (rather than for just individual privacy), we will facilitate a strongly connected community that can solve difficult problems. A simple bench at a centrally located post office, for example, provides an opportunity for connection and shared experiences (Hester 2006, 8).

Hester stresses that the places in the landscape that already facilitate this kind of interaction in the community’s daily life often have great value for the community’s identity and
health. Such places, named *Sacred Places* by Hester (p. 119), are important to maintain over the course of time. Because they often are quite ordinary in character, locals must be included in the process of locating them.

The term resilience is of great significance when shaping our cities. Resilience is understood as the ability to recover quickly from difficulties. Hester writes that we need to reform our landscapes and cities to be ecologically resilient and able to “withstand short-term shocks to which both are vulnerable”. He calls it a *resilient form*. A city or a community of resilient form is able to retain the essence of its form even after it has been deformed. With the rapid population growth that Giske municipality is experiencing, designing the physical structures and the community to sustain change is vital.

If we can “make a city to touch people’s hearts,” Hester argues that people will care for their landscape and their community, and take care for it by making sustainable choices. This is commonly referred to as *stewardship*. By creating joy of stewarding people will be persuaded to live sustainably instead of having to be forced to (Hester 2006, p. 279). Hester calls this *impelling from*, and it is closely related to Yi-Fu Tuan’s idea of ”love of place.” Through attachment to landscape, it is possible to create a place that people would like to care for, even in the future.

“Our habitation must enable us to know and work with our neighbors. It must be resilient enough to endure. It must impel us by its beauty to fill our hearts with gladness. All three are essential.”

- Randolph T. Hester Jr. (2006, p. 419)

By simultaneously shaping cities to gain enabling, resilient and impelling form, Hester says, we achieve healthy cities. To us, this theory helps shape our understanding of community building, with equitable and sustainable development in both physical and social structures. Now, we will look further into crafting a method that will help us achieve our goal of arriving at a comprehensive plan that empowers the community.
"The natural landscape and ecological systems can provide a framework for authenticity and sense of place and must be integrated into the built city" (Southworth & Ruggeri 2011, p. 15).
"...WHETHER THE PROFESSION’S WORKS ARE TO BE A SERVICE TO SOCIETY OR A COMMENTARY ON SOCIETY"

- Stephen Krog 1983, p. 61
METHOD

the way to go forth to best answer the research question

By “method” we mean the way which we choose to answer the research question. The choice of method will be essential to the results: It will help define the work and thereby keep the right focus, but it will possibly also be limiting the view of the assignment.

Through the first chapter we have presented some factors that the research approach must meet:

1. The approach must be able to move the process towards the top of The Ladder of Participation, meaning creating a dialogue with the community and enabling them to affect change in the community directly. We find tools like GIS and Barnetråkk too limiting for this purpose as they are a form of getting information without any dialog.
2. A significant part of building a resilient community, socially and physically, is about strengthening the networks of people. Therefore, the approach needs to have a strong focus on bridging the different individuals and groups of the community.
3. The method will lead us to design with people, bringing out the knowledge of the local community and us (representing the planner/landscape architect). In that way, we believe it is possible to arrive at a comprehensive design which at the same time highlights the identity of the place and gives a sense of ownership to the people, which we believe is vital for a place’s survival over time.

We have identified two methods that are rooted in these ideas especially interesting – The Reasonable Person Model and Hester’s 12 Steps to Community Development. They are quite similar but differ in their intended research field, as well as in structure and detail. What they mainly have in common is that both methods are not so much about the how, but about the why. This provides flexibility to tailor the chosen method to a case study. The methods are presented and compared on the following two pages.
REASONABLE PERSON MODEL (RPM)

The Reasonable Person Model (RPM) is developed by environmental psychologists Stephen and Rachel Kaplan and integrate principles from environmental, cognitive, and evolutionary psychology. RPM posits that people are more reasonable - cooperative, helpful, constructive - when the environment supports their basic informational needs (Kaplan & Kaplan 2003, p. 1485).

Positing that unreasonableness is not a human trait, but rather the result of the environment (context and circumstances), the RPM attempts to define the environments/actions that foster reasonableness, identifying three key areas that assist with this: model building, being effective, and meaningful action.

*Model building* refers to the mental models that people create and help them cope with reality and understand the world around them. Designers can use their visual representation abilities to help people envision the possibilities for their local environments.

*Meaningful Action* means that people want to know that their voices are being heard. This means the designer must find ways to communicate and share information.

*Being Effective* relates to how people handle levels of information and make effective decisions. For the designer, this means that the communication must be clear and understandable, and not overwhelming (Grese 2015).

The Kaplans write that this model relates to land use and planning in the way that outdoor spaces affect human health. Through this model, one is able to make the environment more understandable, create interesting but reassuring opportunities for exploration, provide settings that offer restorative experiences, and incorporate processes that include people in the decision-making (Kaplan & Kaplan 2003).
**HESTER’S 12 STEPS**

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**HESTER’S 12 STEPS TO COMMUNITY DEVELOPMENT**

When working with local communities, designers must understand the community’s resources and values to create designs uniquely suited to the social and environmental ecologies of a place. Author Randolph Hester suggests a 12-Step Process, distinguishing each step as contributing to a designer’s knowing and understanding a place or about “place caring” - engaging people in the act of designing and/or choosing design alternatives (Hester 1990, p. 25)

We can locate the three "areas of reasonableness" from the RPM. Hester’s steps 1-8 all have elements that help people understand the environments around them (Model Building), and at the same time step 1-6 is a meaningful action: Steps 1-3 are about enabling meaningful ways for people to share information, and steps 4-6 provide checkpoints to ensure that designers understood the information correctly (Grese 2015). Steps 9 through 12 is about making information clear and understandable through drawings, plans, charts, and diagrams. In other words - being effective.

Even though both models incorporate most of the same aspects of a design journey, we consider Hester’s 12 step process as the better-suited model for this case. It allows us to interpret each step to fit our case study, but still be a sort of checklist for us at the end of the thesis.

Now we will take a look at how The 12-Step Process has been used by introducing a case study documented in Westport, CA (Kot & Ruggeri 2005). From the experiences made there, we begin shaping the model to fit Roald.
CRAFTING WESTPORT
how one small community shaped its own future

In 2003, a team of students from the University of California, Berkeley led by Randy Hester worked on a participatory effort to create a plan for Westport, a small community of approximately 150 full-time residents at the California coast, about a four-hour drive north of San Francisco. The 12 Step Process proved to be an important tool for the designers to envision and implement a holistic, comprehensive and sustainable solution to the town’s challenges (Ruggeri 2006, p. 158).

Westport was once a vibrant town due to its position between densely wooded hills and the coast, giving it strategic importance to the lumber industry. After the relocation of the industry to nearby Fort Bragg in the 1910s, the economy was lagging. With few job opportunities in the area, many thought of tourism and real estate as the only economic prospect for the town. However, opening up for more real estate development and part-time residents would possibly weaken the local identity and force permanent residents out on a search for more affordable places to live (Kot & Ruggeri 2005, p. 108). The design team was brought in to help develop a master plan for a large land parcel next to the existing houses. The goal was to involve the entire community in developing this plan while offering residents the chance to unite and discuss the town’s future.

The 12-Step Process was used as a theoretical framework. The different steps represent design exercises and techniques going from broad and visionary to specific and practical (Ruggeri 2006, p. 155). In the reports and papers published about their experiences, Kot and Ruggeri write that even though the method was designed as a linear model with each step informing the next, the process in Westport turned out to be much more reiterative and self-adjusting (Ruggeri 2006, Kot & Ruggeri 2005). This process was given the term “crafting” due to its constant evolution while the work was going on. This meant that the designers were able to understand the uniqueness of the place by simultaneously listening, gathering information and presenting it for feedback. Later, a “setting goals” phase sought consensus in the community by outlining, discussing and ranking goals. Then they were able to transform their abstract ideas into a final plan shared by all community members.

The work provided a plan over the location of a new community center as well as a distribution of other important functions in the town. The work by the design team with the community seemed very giving for both parts. The design team learned that the final design displayed “unexpected sophistication,” which had been uncovered and adjusted due to the flexibility of the process and the establishment of the feedback loop. In return, the people of Westport became aware of what type of community they wanted to be, and gave a profile to the ideal Westport citizen - “one that is deeply connected with the place, stewards it and puts the interest of the community over its own” (Ruggeri 2006, p. 156).
Fig. 0.12: The town of Westport. Photograph: Crafting Westport (Ruggeri et.al 2004).
THE 12-STEP PROCESS

to community participation in Roald

We recognize many parallels from Westport to Roald. Roald has, like Westport, experienced a relocation of their original livelihood (the fishing industry), and is dealing with the potential conflict between new residents moving in (though the new residents are living here full-time), and preserving the local community feel - while also dealing with valuable landscapes surrounding the town.

The case study in Westport illustrated a non-linear, iterative process and since the two places are somewhat comparable, we believe that being aware of the model’s flexibility from the start will make it an advantage for us in Roald. Our interpretation of the 12-Step Model is therefore based on the experiences in Westport - a journey going back and forth between the steps during the process.

We are now going to look further into what we consider as crucial parts of each step.

---

Fig. 0.13: Illustration of The 12 Step Process. Adapted from Kot & Ruggeri (2005)
01 LISTENING
Listening might seem like an obvious place to start in community development, but too often the place knowing is left to professionals without the inclusion of residents. It is, however, imperative that opinions from the man on the street are sought after and heard when all constraints come from “the top.” By listening to all affected parts, one can reveal challenges, stop possible conflicts and get a better place understanding from the people who know and use the landscape.

Listening occurs throughout the whole process in our project, but an early incorporation of local knowledge and idiosyncracies provide both an excellent introduction to the place and a clear sign to the community that we want to work with them to find design solutions that best suit them. We organize several platforms to reach out to most people: an online survey, a Facebook page and web page with encouragement for feedback, personal interviews, interviews with representatives of different groups in the community, walking tours and workshop activities.

Listening does not only occur by asking questions, but by observing how people talk about certain topics to us and others. Facilitating for informal conversations is, therefore, essential for people to express their opinions. For that reason, our base of operation is moved to the community of Roald. Here, we can meet locals at the store, participate in local events, and organize social activities such as an open house and a barbecue for teenagers. We believe this is crucial to connect with the residents and gain their trust.

02 SETTING GOALS
It is important to have clear goals to counteract a fragmented development. The community must be made aware of their own and others’ opinion about what Roald is and what it is not, and agree on a set of common goals. This ensures that all decisions will be moving the project in the same direction, and it will be easier to agree or disagree in individual cases by checking if they are working for or against the community goals.

The objectives of the various individuals are made quite evident throughout the listening stage, but the formulation of the goals are facilitated for in the workshops.

03 MAPPING & INVENTORY
Locating valuable places and resources in the landscape is difficult when one is so used to seeing it. A view from the outside combined with local knowledge is, therefore, effective to reveal a place’s history and potential. We, as landscape architects, use our expertise at reading the landscape by looking at its natural resources, topography, morphology, and climate. Observing how people use the landscape and interact with each other help us measure social capital, and asking people to tell us about their favorite places might reveal important areas otherwise overlooked.

Mapping & inventory involves collecting data from the online survey, interviews, collecting and reading maps and area plans, and taking walks in the landscape. The findings are presented in the analysis chapter (page 83).
and transparent process, which is essential for people to participate. By introducing the community to an outsider’s understanding of the place, they will become aware of how they are perceived from the outside, recognize that their participation has been valuable, and they are provided with an opportunity to give feedback on the process and to clarify any misperceptions.

We have designed this step as a presentation and discussion at the beginning of the first public workshop, as well as a journal of our experiences at the project's website.

05 GETTING A GESTALT
A gestalt is a configuration or pattern of elements so unified as a whole that it cannot be described merely as a sum of its parts. The gestalt in this sense means finding meaning in the whole process by looking at both the social and the physical structures, and how they relate to each other. It is of importance because this is the identity that will define the people living at Roald and it will be the basis of attachment to the place.

Making sense of information in the course of a process helped to guide us towards a gestalt. Therefore, syntheses from various participation platforms are implemented throughout the thesis.

06 DRAWING ANTICIPATED ACTIVITY SETTINGS
Drawing anticipated activity settings is about suggesting a physical form that reflects the community and its goals. This is useful for the designer in the way that the goals become more concrete, which might counteract misunderstandings. For the participant, concretizing the goals is an eye-opener when it comes to the perception of scale and distance.

Many residents approached us early on in the process with suggestions for different activities and their designs. We also implement this step by having exercises directly focusing on drawing activities at the workshops with the elementary school and the community workshops. These drawings and plans serve as the basis for the final plan of Roald.
Finding what is special about a place, and letting this be the inspiration when shaping physical structures is essential for building place identity and creating a sense of belonging. Becoming aware of these idiosyncrasies will help the community direct what kind of development they will allow and what does not belong in Roald. This will help prevent a development much like the one at Valderøya, where developers have been given free rein to build what suits them best - giving it a soulless fragmented expression which could be anywhere in the world.

Idiosyncrasies are found in physical structures’ materials and form, as well as in norms of behavior in the social networks in the community. Idiosyncrasies are found through the electronic survey, interviews, meetings with groups in the community and by observing how people interact with each other and use the landscape.

Developing a conceptual yardstick is about prioritizing activities over one another, and over time. It also relates to which activities must be placed next to one another in order to function well. This gives a comprehensive framework for the total development, providing residents with the opportunity to measure if a proposed development is good or bad for the community. In this way, the conceptual yardstick makes the community comfortable with the design and in control over the landscape they call home.

Through discussions during interviews, workshops and, especially, in the final community event the residents are given the opportunity to express priorities regarding development.

Presenting the different activities and priorities in comparable plans help clarify what the different design solutions suggest and what the consequences of each plan are to the whole area.

The basis for the spectrum of plans are sketches produced by residents during workshops. Later, we process the options into a comparable format that also incorporate other participation platforms and our professional assessment of the design solutions. The plans are then presented to the community for further discussion, during a community event on November 5th, 2016.
10 EVALUATING COSTS & BENEFITS

Transparency and discussion around the costs and benefits of a particular development before construction provide the community and the municipality with a healthy eye-opener when it comes to who and what is winning and losing if a development is realized. The evaluations can bring forward a discussion about the costs of benefits related to health and well-being for the residents over short-term profit for a few developers. Insight on the actual economics of the development will provide realistic expectations of its implementation as well as an opportunity for the community to take on some responsibility regarding the development. The latter might be key to the development in Roald due to the challenging economic situation Giske municipality is experiencing.

The evaluation of costs and benefits is facilitated for in workshop settings, especially after presenting the spectrum of plans. It is, therefore, important to include as many actors of the community as possible, so that we can achieve an explicit representation of the costs and benefits for all.

11 TRANSFERRING RESPONSIBILITY

By actively involving the community throughout the entire process the chance of realization increases. Being contributors to the project will help create a sense of ownership, and so more people might take on responsibility for completion. Throughout the project, we invite several actors in the process. We ask people in interviews about their role in the community and about what responsibility they feel they have to realize their visions. Through this, we hope to create some sense of awareness that everyone can and must take part of community building, instead of disclaiming responsibility. In addition to this, the final plan must show a strategy of implementation that points out which actors should be involved.

Also, to implement the plans in the municipal area and zoning plans, we have a close relationship with the public health coordinator, Torill Valderhaug. She will gain insight into participation methods, and we will learn the processes of municipal planning. The goal is that lessons from this project will be used for further participation in Roald and elsewhere in the municipality.

12 EVALUATING AFTER CONSTRUCTION

Evaluating the project’s failures and successes after completion is crucial for the capacity to transfer lessons from this case to other cases.

As this project will not be completed by the submission of the thesis, an evaluation will remain incomplete. However, we evaluate whether or not the plan contributes to empowering the residents in the discussion (page 266).
The 12 Steps to community participation in Roald has been fitted into a strategy plan to meet the goals and be able to answer the research question within the scheduled time frame. This approach involves a triangulation of user focus areas - seeking to accommodate for the conceptions and needs for the individuals, the groups of the society and the community as a whole (fig. 0.13). We believe this is crucial to facilitate for an equitable social development.

The strategy focuses on three stages with somewhat different objectives throughout the process. Therefore, the case study is divided into these three stages - or phases.

Phase one is called Roald: Explore. The objective is to identify what the community is like, and what outcomes they need from this participation process. This is closely related to the first step of community participation - Listening. In this phase, there is a focus on identifying the needs for all parts of the triangle. The participation methods are, therefore, mixed to serve the individuals, the groups and the community.

In Phase two, Roald: Investigated, we go deeper into the identified issues, but focus more on solutions that are fitted to serve the whole community. Here, we present our understanding of the community to the community and work together to define common goals and investigate possible design solutions (incorporated specifically step 4, 2 and 6). This is conducted through a public workshop.

Phase three, Roald: Designed, is designed as a presentation of the various design solutions and a processing of the solution that most people agree on. We also incorporate next steps for the community and for the municipality to implement the plan.

The phasing diagram on the following pages (fig. 0.15) shows the intended course of the case study in Roald, organized into the three phases and their accompanying participation methods, and steps incorporated. Then, we move over to the execution of the case study, as organized in the phase diagram. Each phase is preceded by a report of the participation methods used to involve the community.
Fig. 0.14: Triangulation of user focus areas (individuals, groups, and community) and the methods applied for conducting the participation.
Fig. 0.15: The phasing diagram, as we intend to carry it out. The line weight indicates the amount of focus that will be put on the various steps.
Fig. 0.15: The phasing diagram, as we intend to carry it out. The line weight indicates the amount of focus that will be put on the various steps.

**PHASE 2**  
Roald: Investigated

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- Mjølner workshops

**PHASE 3**  
Roald: Designed

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- Presenting plans at public workshop/event

Walking tour  
Open house

Personal interviews start  
Survey opens

Group interviews start

Youth bbq

Group interviews end  
Personal interviews end

Aug. 12th - Aug. 31st  
Sept 18th - Oct. 5th  
Oct. 30th-5th
PHASE 1
ROALD:EXPLORED
INCLUDING THE COMMUNITY ANALYSIS
Fig. 1.1: Pupils at one of the workshops at Vigra elementary, writing what they like and what they don’t like.
Phase one focuses on exploring Roald community and pinpoint the needs, desires and challenges in the community.

This chapter is a description of the various participation activities conducted in this phase, and it is divided into the following categories:

- Communication channels
- Online survey
- Personal interviews
- Group interviews
- Workshops with Vigra elementary school
- The social events walking tour, open house and barbecue for teenagers
COMMUNICATION

communication channels aimed at a wide range of users

The communication strategy aimed at reaching out to as many Roald stakeholders as possible. Being full-time residents of Roald for seven weeks was a strategic and conscious choice to accomplish this.

Stopping by the local shop Joker Roald proved to be a very effective way to get in contact with local residents and learn about the community. During the first weeks, we talked to many residents and were able to book the first interviews. Through the interviews, we were given more contacts, but people also started contacting us. Word of mouth seemed to be an important communication channel. In addition to this, mass media and internet were utilized to reach out to the community. A consistent use of the project logo, the project name "Destinasjon:Roald" and design profile made the project recognizable through the different mediums.

Fig. 1.2: Newspaper article about the project and development in Roald in Øy-Blikk
Vi er to studenter fra NMBU som skal skrive masteroppgave om
innbyggjardeltaking i kommunal planleggjing.
Vi skal jobbe med Roald på Vigra og vil finne ut hva utvikling
innbyggjane ynsker for utdalen.
24. og 25. august kommer vi til Vigra barneskule for å halde idéverksteder
for 6. og 7.trinn.
Vi kommer til å halde flere arrangement for både barn og vaksne gjennom
hausten. For å få vist våre idéer til eleverne vil vi gå med på kan
de fåle prosjektet på Værekreftens lokallisjon.
Vi gler oss til å bli kjend med dykk!
Helsing Ida & Tonje

Fig. 1.3: Poster for workshop with Vigra elementary school

POSTERS & FLYERS
To advertise the participation activities posters for every event
was created and information leaflets were handed out prior to
the workshops. These were important channels to reach out to
residents and actors that were not active on social media. Posters
were displayed at key meeting places at Vigra and Valderøy, such as
Joker Roald, Joker Vikane (at the other side of the island), shops at
Valderøya, at the schools and the Town Hall.
FACEBOOK & WEB PAGE
A Facebook site and a project web page were the chosen means of communicating with Roald’s virtual community. The web page www.destinasjonroald.com was created to collect all information about the project. The web page featured text about the project in general and the participation process in Norway in addition to upcoming events and previous happenings of this project. The online interface was meant to be an open, simple and adaptable channel where one could easily find information.

The Destinasjon:Roald Facebook page was created to reach out to people living in Roald and with interests in Roald’s future. The Facebook page Vårt Giske ("Our Giske") that was created during the LAA340 Social Arena Course at NMBU in the Fall of 2015 was also used to spread information about upcoming events. Online communications proved to work differently than planned. We discovered that the Facebook page Vårt Giske was the one most people responded to as it already had many followers. People did not find it necessary to follow both pages. In general, it seemed as though most people expected to find all necessary information on Facebook, and the web page had few visits in the beginning. Some residents also ended up calling to ask why they had to sign up for events online, instead of just showing up. This unwillingness to sign up continued throughout the whole process. We simply learned to plan events with respect to this “drop by” mentality, by planning for many more attendees than those who signed up.

Fig. 1.4: Screenshot from the Facebook page Vårt Giske. Posts on this page proved most effective, compared to the Facebook page Destinasjon:Roald and the web page destinasjonroald.com
Fig. 1.5: The front page of www.destinasjonroald.com adapted its contents throughout the project.
ONLINE SURVEY

PURPOSE
The intended purpose of the electronic survey was to get a first impression of Vigra and Roald by reaching out to a large sample of residents. Both people from Vigra and people living outside of Vigra were encouraged to participate in order to get both the views of insiders and outsiders. This helped compare different views. The survey is categorized in the triangulation as mainly a group because the participants were sorted depending on their relationship to Vigra and Roald.

Survey questions covered five main topics. Firstly, participants were asked to fill out questions concerning demographics (age, gender, employments and relationship to Vigra) in order to create a basis for comparison. Secondly, the survey covered questions linked to the identity of Vigra and satisfaction with different kinds of offers. The third group of questions was related to affiliation to Vigra, such as why the participant chose to live there or not. The fourth set of questions measured social capital, the relationship to their neighbors, trust, inclusion and participation in voluntary work (dugnad). Lastly, the participants were asked questions regarding facilitation for participation by their municipality, and about their interest in participating in various kinds of activities. For complete survey guide, see attachment 1, page 286.

12 STEPS & COMMUNICATION CHANNELS
The survey was directly linked to step one (Listening) of the 12 steps. Important places and values related to the identity of the island were identified, so step 3 (Mapping & Inventory) and step 7 (Idiosyncrasies Inspire Form) are also linked to this participation method. The communication channels applied were Facebook, the web page, and posters. Facebook proved most effective (92.47% of the participants who completed the survey reported they were made aware of it through Facebook).

CONDUCTING THE EVENT
The survey was conducted using www.onlineundersokelse.com and was accessible from August 16th to September 18th and received 116 responses.
FEEDBACK & MAIN FINDINGS

Results from the online survey formed the basis for the analysis chapter and were presented in the public workshop of Phase 2 at Mjølner. But some general observations can be made for each topic:

1. DEMOGRAPHY OF PARTICIPANTS:
Out of the 116 participants, 66% were female. The average age was 42.5 years, ranging from 20 years to 73 years. The survey did not reach children and youth in middle school and high school. 73% of the participants lived at Vigra, while 20% used to live there. 4.3% lived at one of the other islands in Giske (fig. 1.6).

2. IDENTITY AND SATISFACTION WITH SERVICES:
People appreciate the rural qualities of living at Vigra, especially the closeness to nature, the view and the distance to recreational areas. The participants were most dissatisfied with job opportunities, and commercial and non-commercial services available in the community.

3. AFFILIATION TO VIGRA:
Today, most Vigra residents are happy to live there. 80.3% of the ones who participated in the survey would most likely keep living there in the future (fig. 1.7). For those who said they would not live there in the future, the reasons were loss of services, education and lack of social network.

4. SOCIAL CAPITAL:
The questions wanted to assess the quality of Roald’s social capital through statements such as “Most people can be trusted” and “I have picked up trash for others in a public place”. Both people living at Vigra and people that used to live at Vigra scored fairly high on these kinds of questions. The question “If someone a little different moves to your neighborhood, would this person be accepted by your neighbors?” (fig. 1.7), revealed a surprising 75% agreement of current residents compared to 33% of those who moved away. This could indicate that Vigringer and outsiders experienced the community differently and that social bonds are strong when they are first created. This may, however, take time.

5. FACILITATION FOR PARTICIPATION:
When asking to what degree Giske municipality values residents’ feedback in planning processes, the average score was 44 out of 100 (100 meaning in large degree). Generally, people want to participate more. 60% of the respondents were interested in taking a more active role in shaping zoning decisions in Roald.
PERSONAL INTERVIEWS

PURPOSE
Through interviews, we were able to take a deep look into the daily lives of individuals in Roald. This revealed the connection each individual had to the many sacred places, and how they felt about change. Interviews paid much attention to individual opinions, which was highly appreciated. The intention was to give all people the opportunity to be listened to, gain access to their views of development and change in the community.

12 STEPS & COMMUNICATION CHANNELS
The interviews paid particular attention to step 1 (Listening) of the 12-Step Process, but there was also a large focus on step 3 (Mapping & Inventory) and step 7 (Idiosyncrasies inspire form). Some interviews also indirectly included step 2 (Goal setting) and step 6 (Drawing anticipated activities).

In the beginning, people were encouraged to sign up through Facebook. However, they were hesitant to. It turned out to be much more efficient to be visible in the neighborhood, particularly at the local store. After seeing us around town, people started talking to us and accepted to be interviewed. Our contact information was sent to local developers, politicians, and people recommended by others to spike the number of interviewees.

CONDUCTING THE EVENT
The interviewee was invited to our house or another convenient location of their choosing. We started by informing them about the project, the interview and asked them to sign a disclosure form, which included their approval to being recorded.

The inspiration for the set of questions came from the community design process in Westport, CA (described on page 46), but customized to Roald. The questions related to three main themes. The first theme was to get to know about the interviewee’s relationship to Vigra and Roald and their daily life. For instance, questions about how they would define...
their role in the community, where they would delimit Roald geographically, how they would describe Vigra, Roald and people from Vigra and Roald were asked. This theme also included questions about their favorite places to be alone, to be with friends, to take a walk and to relax and places they would bring visitors to. These questions wanted to inquire about the values and places they cared for. For complete interview guide, see attachment 2, page 290.

The second group of questions related to development and change. Interviewees were asked if they saw a need for a new center at Vigra, and if so, where it should be located. The theme also included questions about the location of new residential dwellings and facilitation for tourism. Interviewees were asked what kind of change they would like to see in Roald and what they would not find appropriate and whether such change was truly needed. Lastly, we asked how each interviewee could contribute to making desired changes happen.

The last group of questions was more open, asking them to share some other stories or to recommend other people to interview.
FEEDBACK & MAIN FINDINGS

17 individual interviews were conducted in total. Interviewees represented different interest and user groups - for instance a retired fisherman with lots of knowledge about the local history, a retired woman with interests in Roald as a tourist destination, the Mayor, three employees of the municipal administration, two developers, two former business owners, a present day business owner, an elementary school employee, an elementary school pupil, a retired teacher, an active fisherman, a local politician and cabinetmaker, and a photographer that works with people with disabilities.

It was clear that some of the interviewees had a clear agenda - often bringing with them papers with sketches, goals or historical information. Others let us lead the conversations. Their digressions were essential for our big picture understanding and gave them a possibility to speak their mind. People were talkative. While the interviews were scheduled to take about one hour, they usually lasted between two or three.

The interviews taught us about the history of the place, the identity of the “Vigring,” sacred places and concrete proposals for development. The interviews provided a thorough introduction to the village gossip that often focused on who was responsible for “fixing” Roald. It was interesting to learn that all interviewees had good intentions but felt that the responsibility for development was with someone other than themselves.
Fig. 1.10: “En hemmelighed” (A secret) by Per Bolstad, who often visited his cousin in Roald, illustrates how village gossip travels fast. Photo of painting by Otto Herman Overvoll.
GROUP INTERVIEWS

PURPOSE
As with the personal interviews, the purpose of the group interviews was to have thorough talks with people of the community. An interview that included several interviewees or where a person represented a group was regarded as a group interview. The focus was on what interests the entire group had to the development of Roald. It was an invitation for the group to tell about what kind of work they do in Roald, but also an invitation to take on responsibility for the future development.

12 STEPS & COMMUNICATION CHANNELS
The steps included were step 1 (Listening), Step 3 (Mapping & Inventory) and Step 7 (Idiosyncrasies inspire form). As the interviews were a way to invite different actors in the community to participate, but also to take part in the project and the development, step 11 (Transferring responsibility) is also included here.

CONDUCTING THE EVENT
The group interviews started with the same procedure as the individuals, with an explanation of the project, the interview, and use of information. The conversation was loosely related to the set of questions but often went off script to get an idea of the role of the various stakeholders in the community.

FEEDBACK & MAIN FINDINGS
6 group interviews were conducted with representatives of Roald velforening (the Roald residents association), regulars at the “joint use house” (Sambruken), Vigra Sogelag (the local history association), a housing development company, a preschool employee and with several elementary school employees. As a total, 24 people participated in the group interviews.

Findings varied based on the group that was interviewed. Vigra Sogelag and the men at Sambruken contributed to the historical understanding. Roald velforening focused on social
events and maintenance work in the neighborhoods and their plans for setting up a skateboarding ramp for the youth. They also expressed a need to collaborate with more people in order to complete the work they wanted. The preschool and the elementary school provided insight into the needs of the children, especially when it came to future expansions. The housing development company informed about the procedures that one goes through when developing a piece of land, and about how they contributed to implementing local building traditions in their prefabricated houses.

"Vi er veldig mye ute. Vi bruker mange områder. Det er jo et eldorado. Og en barnehage på Roald.... Ja, det er på en måte...det er midt i smørøyet, tenker jeg; Vi har Budafjellet, flere strender, vi har et område i skogen som vi har opparbeidet."

"We spend a lot of time outdoors. We use many areas. It is a paradise. Also, a preschool on Roald.... Yeah, it is kind of... it is right smack dab in the middle, I think. We have Budafjellet, several beaches, and we have an area of a forest that we have obtained."

- From a group interview with Vigra preschool
PURPOSE

The purpose of the workshops at Vigra elementary school was to get involvement from children from the very beginning of the project. Through these workshops, they would have the opportunity to participate, be heard, and learn about participation and democracy in action. A workshop setting was appropriate because of its flexibility and activities could be varied to appeal to different preferences, such as drawing, building, using pictures, moving around, plenary presentations and group discussions.

12 STEPS & COMMUNICATION CHANNELS

The workshop activities incorporated Step 1 (Listening), Step 2 (Setting goals), Step 3 (Mapping & Inventory) and Step 6 (Drawing anticipated activities). Through discussions the children were asked how they would prioritize some choices over others and how they could make changes happen, which related to Step 8 (Developing a conceptual yardstick) and Step 11 (Transferring responsibility).

The students were given an information leaflet about the project to share with their parents, and a form about the use of personal data and photographs during the workshops, which they were to sign and return.

CONDUCTING THE EVENT

Wednesday, August 24th, and Thursday, August 25th the workshops were held in the gym of Vigra elementary school. It was designed for fifth, sixth and seventh-grade students, aged 10-13. The workshop for each grade was scheduled to last about 2.5 hours. In total, 81 pupils participated.

The workshop started with introductions about ourselves and the project. The right to participate as a part of living in a democracy was emphasized, and the pupils were urged to share their opinions about development and change at Vigra, and particularly in Roald.

“Vote with your feet,” the first activity, was meant to work as an ice-breaker, and a way to become acquainted with the pupils and their relationship to Roald. The children were
including the community

asked to form a line in the back of the gym. Various statements were read - for example “I drive my bike to school” or “I have been to Molnesfjellet in the course of the last week” - and the pupils were asked to take one step forward if the statement applied to them.

The following activity was called “Community building.” Its goal was to investigate the process of building a sense of community. The activity was based on an exercise from Community Design Primer, by Randy Hester (Hester 1990 p. 63). The purpose was to make the pupils aware of when building a sense of community it is often dependent on having a common goal, or a common enemy. The activity would also give insight into how group members followed the rules, communicated, motivated each other, felt connected and bonded around common goals.

The class was divided into two or three groups depending on size. The groups formed a circle on the floor, and two people from each group were instructed to step out of the circle. The individuals in the circle were instructed to tighten the circle and prevent the “outsiders” from getting back in. The activity was repeated twice with minor alterations. Afterward, the groups sat on the floor and talked about how it felt being a part of the circle and being on the outside. The questions

“Det var gøy fordi det følltest ut som ein leik og det var berre kjempegøy men oss lærte fortsatt noke”

“It was fun because it felt like a game and we had a blast but then we learned something too.”

- Participant from 7th grade giving feedback on “Community building”
asked were of the sort: “How did you communicate with each other in the group?” and “Can you achieve a strong sense of community without having a common enemy?”

The third activity was called “Pictogram.” Students picked photographs representing how they wanted Roald to be and not be. This was a valuable opportunity for the children to specify and visualize their desires. The exercise was constructed as a means to evaluate and rethink needs and wants, and help participants put words to feelings they may not reflect upon very often. The goal of the activity was to become aware of their own and others’ wants and needs and link these to physical locations.

The children sat in groups of 5-6 around a table. On a piece of paper they were to take a few minutes individually to write
down five things they liked and five things they did not like about Roald. Afterward, they presented their list to each other, one by one. When everybody had presented they were to agree on five common likes and dislikes as a group. The list of likes and dislikes was written on a large piece of paper. They could also use a stack of pictures that laid on the table to see if some of them were reminiscent of a place or a feeling that they associated with Roald, or something that they would like to see at Roald in the future. The pictures were added to the list as well.

Through the last activity, “The Landscape Architect,” the pupils were given the opportunity to create and design Roald. The children designed and built their “dream scenario” for the future of Roald as a group. Based on the list they had made in the previous exercise, they were asked to pretend that they were landscape architects and to draw a consensus plan that safeguarded everyone’s needs. The groups were dealt a large piece of paper, crayons, and Duplo bricks. We walked around to the various groups and asked them questions about their design decisions. After drawing for 40 minutes, each group had a plenary presentation of their design.

"Skulle ønske det ble virkelig"
"I wish it could be realized"

- Participant from 5th grade giving feedback on “The Landscape Architect"
FEEDBACK & MAIN FINDINGS

The workshops went smoothly, considering that 81 pupils attended the event over two days. Everyone had fun, and results were rewarding. There were, however, big differences in the student’s level of concentration. The schedule was very tight, and some of the activities took more time than expected. At the end of the workshops, the pupils were asked to submit a form to grade each activity from one to four (four being the best). All exercises were rated above average, but with some variations from one grade to another:

Some of the children found it difficult to find five likes and five dislikes during “The Pictogram,” but the most difficult thing was to agree on common likes and dislikes. Use of the images was partially successful because it seemed more exciting to the students. Some managed fine to tie the feelings and interests against the different pictures, while others interpreted them very specifically.

"Ingen av mine idea landa på arke"
"None of my ideas were addressed"
- Participant from 7th grade giving feedback on “Pictogram.”

It seemed as though the vast majority enjoyed “The Landscape Architect” and were able to agree on a common plan for the group. Some groups, however, did not agree and the solution was to draw on separate parts of the paper. The following presentation was very rewarding. It looked as if the children were proud of what they had produced and to show it off.

"Det var gøy å vise til de andre"
"It was fun showing the others."
- Participant from 6th grade giving feedback on “The Landscape Architect.”

The group drawings illustrated similar visions. Firstly, the children seek urban qualities, such as cafes, shops, and a cinema. Secondly, many visions included features often seen in theme parks, like amusement, a climbing wall, a trampoline, a skate park and so on. This might indicate a lack of places for activities for teens. The students suggested opening a student-governed youth house with a kitchen, game room and the opportunity of receiving help with homework. Several suggested a village park, showing that they were thinking about serving the needs of other user groups. Despite being instructed to draw connections between places, the groups mainly focused on drawing destinations. We wondered if this could relate to Giske’s car-culture and to the fact that students rarely walk in the landscape.

<table>
<thead>
<tr>
<th>Activity</th>
<th>5th grade</th>
<th>6th grade</th>
<th>7th grade</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vote with your feet</td>
<td>3.39</td>
<td>3.40</td>
<td>3.76</td>
<td>3.52</td>
</tr>
<tr>
<td>Community building</td>
<td>3.06</td>
<td>3.10</td>
<td>3.33</td>
<td>3.16</td>
</tr>
<tr>
<td>Pictogram</td>
<td>2.2</td>
<td>2.53</td>
<td>2.90</td>
<td>2.54</td>
</tr>
<tr>
<td>Landscape architect</td>
<td>3.45</td>
<td>3.62</td>
<td>3.39</td>
<td>3.48</td>
</tr>
</tbody>
</table>

Fig. 1.14: Activity rating scores by the children

While “Vote with your feet” achieved the basic purpose its implementation could have gone slightly smoother. It took longer than expected to get the children to stand up, and it was hard to count them.

During the “Community Building,” the 5th-grade students seemed to be engaged, while 6th and 7th graders seemed less committed. The following discussions mirrored this, where 5th graders were eager to discuss, but the analogy and transfer events to reality for some pupils in the other classes were challenging.

"Det var gøy men det var kaos"
"It was fun, but total chaos."
- Participant from 5th grade giving feedback on the “Community Building activity.”
Fig. 1.15-17: (From top) Likes and dislikes from “the Pictogram activity,” plenary presentation of plans, and some of the features in the plans, including a cinema, a café and wifi spots.
WALKING TOUR

PURPOSE
With the intent of having a down-to-earth way of meeting and since Roaldinger seemed to love hikes, we invited the residents to join an informal walking tour showcasing their favorite places in person, instead of talking about them.

CONDUCTING & MAIN FINDINGS
Sadly, no one came despite the more than ideal weather. Timing of the event and limited outreach may have been responsible for this failure. The walking tour was scheduled during our second week in Roald, and very few people were informed about the project at that time. We might also have reached out to broadly, instead of reaching out to specific stakeholders in the community.

OPEN HOUSE

PURPOSE
Since residents were hesitant about signing up for personal interviews, an “open house” was arranged to provide potential informants with a more informal interview setting.

CONDUCTING & MAIN FINDINGS
As with the walking tour, people were wary about meeting us, the “newcomers” to the village. The lack of attendance at the event strengthened the suspicion that getting to know people when first moving to Roald was hard.
YOUTH BBQ

PURPOSE
Community building is about more than just land use planning, public transit routes, and center development. The most important way to build communities is through socializing. Our interviews evidenced that teens at Vigra had very few places to meet and hang out so we invited them for a barbecue and game night at the school, hoping to get in touch with the youth, and that it would open up doors for stronger future participation.

12 STEPS & COMMUNICATION CHANNELS
The target group was middle school students from Vigra. One day, we jumped on the school busses that take middle school students from around Giske municipality to their school in Valderøya and handed out personal invitations. There was also information posted on Facebook and the web page and posters were displayed at the local store.

CONDUCTING THE EVENT
The event was held on Friday, August 26th at Vigra school. A request for help through Facebook and Torill resulted in assistance from many Vigra women. Joker Roald contributed food and equipment for the event.

The targeted user group did not show. However, several children from 5th to 7th grade that had participated in the workshops the previous days arrived quite unexpectedly to the event. The adult women who were there to assist joined in on the party games and to teams were formed. This lightened the spirit, and everyone was enjoying themselves. Following the party games, the food was served, and the attendees played board games and socialized.

FEEDBACK & MAIN FINDINGS
As a social event for children, this was very successful. However, middle school youths were difficult to reach out to. Through the entire process, they proved to be most resistant to participation.
Fig. 1.18: Analyzing housing typologies. More on this analysis, on page 115.
Through the involvement of the community, several themes naturally surfaced. These themes, along with a professional approach on how to understand the landscape, resulted in this analysis chapter. The analysis is our understanding of the Roald landscape in its entirety, physically and socially.

The chapter is divided into:
The Landscape
- foundation for life

The Rise of Roald
- as a district center for the area

Roald in Recent Time
- rapid development in a “dead end.”
- rapid residential development
- a dead village center
- decentralization of social networks

Faces of Roald

Synthesis
With its sparse clustered settlements and the comprehensive network of small roads, Vigra is the ultimate manifestation of a farming community. In order to understand the origins of the built environment we see today there is a need for a retrospect in history.

In the Pleistocene era, a glacier covered Fennoscandia with 3000 meters of thick ice. When the weight of the glacier disappeared, the land rose, leaving behind old beaches and seabeds dry (Ramberg et.al 2006). The post-glacial rebound was greater in the inland region than at the edge of the ice, but it left behind a widespread extent of thick marine deposition (fig.1.20). During this era, large parts of Vigra were completely submerged.

Vigra is part of the Norwegian Strandflat that extend along the Norwegian west coast, where fine-grained sediments mixed with larger particle sizes are commonly found. The erosion of waves and glaciers, as well as frost weathering, has been the most valuable suggestions to explain how the Strandflat has occurred.

Vigra was originally divided into seven cadastral farms (fig.1.20). Roald was the wealthiest of the seven. Much due to its thick marine deposition, it had the best conditions for agriculture.
Fig. 1.20: Sediments and the cadastral farms at Vigra. We see that a large part of the island, and Roald in particular, has a thick marine deposition, which is considered very fertile soil.
How long Vigra has been inhabited is not determined, but several local historians speak of rich findings of tumuli and settlements from the Iron Age (Haugen & Roald 2016). Several believe that Gange-Rolv (Rollo, Count of Rouen, Normandy) came from this area and some even believe that Vigra, in particular, was critical land areas that displayed Gange-Rolv’s wealth and power (Haugen 2016).

Reliable sources speak of early settlements organized in a farmyard cluster near “Kyrkjehaugen” (The Church Hill) located in Roald (Haugen 2016). This was the site of the parish all the way back to medieval age. The historical farmyard cluster morphology highlights the church as a landmark and as a structuring element in the location of new homes.

The island has long been significant for the production of food and fishing, and the settlement location was further developed in relation to the resources available. Other village centers emerged - e.g. Synes and Blindheim - and Roald center was moved further north, where conditions for building an access pier for fishing boats were better.

*Fig.1.21: The old church up on “Kyrkjehaugen” in Roald. The houses in the back were the first houses of the old farmyard cluster. Unknown painter, photo retrieved from Vigra Sogelag.*
Fig. 1.22: Topographic map of Vigra.

Molnesfjellet, 123 AMSL
Budafjellet, 60 AMSL
Roald

PHASE 1
CLIMATIC CONDITIONS

Situated on the west coast of Norway, Vigra has a maritime coastal climate with cool winters and mild and sometimes hot summers. The average temperature is at 1.3 to 13.2 degrees Celsius, and annual rainfall is 1310 mm. (SNL, 2013)

In terms of latitude, Norway has the warmest climate on Earth. This is due to the Gulf Stream that makes its way to the Norwegian coast and mixes with the coastal waters. This contributes to ice-free ports and a strong fishing tradition in communities along the coast. Figures 1.23 and 1.24 illustrate that the island is very wind exposed, and winds up to 10.2 m/s (fresh breeze) occur quite frequently. However, Roald is located on the east side of the island and is sheltered by Budafjellet and Molnesfjellet (fig. 1.22).

The area’s geology, the settlement’s location on the island, migration pattern of fish populations and the maritime coastal climate makes Roald’s location very beneficial to both farming and fishing and many families have long made a living on both.

The weather is an important part of the identity of the locals. Even the name of the village derives from its function and characteristics: Evidently, the name Roald derive from the settlement being a Ro Hald (Row break) - a place to rest before going out again to fish.

"VIGRINGER ER SÅ VANDE MED VINDEN AT DEI DETT FRAMOVER OM DET BLI STILT"

"People from Vigra are so accustomed to the wind that they fall forward if it subsides."

- Resident at Roald
THE CASE AREA

One of the questions in the interview guide focused on the delineation of the boundaries of Roald.

Most of the interviewees felt that the borders of Roald stretched to Molnesvegen and Mjølner, while others highlighted that both Molnesrema and the school are located in Roald. When it became apparent that several thought of the old cadastral farm as the main borders, the case area was defined by these.

Roald appears very green, a landscape of isolated farms or islands of residential areas linked by roads and surrounded by agricultural landscape. One nature reserve and two bird sanctuaries surround the case area.

Figure 1.25 provides an overview of the main traffic arteries, and key landmarks and points of reference found in the case area.
Vigra School & Vigrahallen (indoor sports hall)
Site of the old church, Today the Sunday school & The Historical School
Postvegen, aka “Gatå”
Molnesvegen
Mjølner community hall
Rota, outdoor soccer court
Budafjellvegen
Vigra preschool
Roald village center, feat. Joker Roald & small scale retail
Molnesfjellet
Fig. 1.25: The case area Roald, defined by the old cadastral farm border
PERCEIVED ACCESSIBILITY OF GREEN STRUCTURES

Although the visual quality of the green structure is present, there are large areas that are physically inaccessible like private gardens and farmlands. These are perceived inaccessible for several reasons. Firstly, it is not socially acceptable or permitted by law to stay on private properties without permission or invitation. Secondly, the Norwegian public right of access prohibits unauthorized persons to occupy active agricultural land during the growing season. This leaves residents with very little publicly available open green space that breaks the large inaccessible areas. Although physically inaccessible, both the agricultural and residential landscapes still hold important visual green qualities.

The areas marked with medium accessibility are primarily farmland that was once pastures or green structures on leftover spaces in the village center or next to roads. In principle, these are available to the public, but they are perceived as inaccessible because the physical accessibility is poor or because they do not appear inviting or attractive. A common challenge is that unprogrammed green structures often appear as residual area.

The Molnes nature reserve, Molnesfjellet, Budafjellet, playgrounds, school grounds, outdoor premises to the preschool, the open space around the Sunday school and the beaches are perceived as highly accessible by residents. The areas are much visited and hold an important role in the daily lives of many of Roald’s residents. The lack of a cohesive network that binds them together is the true challenge these landscapes face. Because most public green spaces are small the stress put on each of them due to overuse is very high, as illustrated by the excessive wear.

The following is a closer look at some of the landscapes that residents at Roald value the most.
Fig. 1.26: Perceived accessibility of green structures in Roald. Highly accessible open space is almost limited to Molnes nature reserve.
MOST VALUED LANDSCAPES
There are primarily four different characters of landscapes that citizens in Roald find the most valuable. While three of the categories are directly linked to the accessibility, the last one is not. However, as mentioned in the previous page, the open cultivated landscape provide a visual quality.

The online survey revealed that many recognize the rural traditions of the area although they are not personally linked to this. This is precisely why it will be important to preserve this quality in the future.
Fig. 1.27: The section shows the various landscapes from Molnes nature reserve to Roald Harbor.

**High accessibility.** Coastal heathlands with hints of trees. The area is also highly values as a play area for children.

**Low accessibility.** The open cultivated landscape, providing residents with season-changing green areas and views towards the sea.

A' - Roald harbor
INFRASTRUCTURAL NETWORK

Long distances and heavy precipitation and wind make Roald a very car-based society. Because a significant proportion of the population is employed in Ålesund or on Valderøya, the private car has become a natural means of transportation. Also, the parking in Roald center is free, and the population has become accustomed to being able to park right outside the shop when they do errands, even though many live in high proximity to the store. The road structure and the car-based society causes the car to play the lead role in the village’s infrastructure, leading to barriers and less attractive facilities for walking and biking.

The minor arterial is the old main road to Roald and ties Roald together with other villages on Vigra, and has a further connection to Valderøya and Ålesund. Since the road is the main artery into Roald it is among the busiest in the village.

The residential roads, and perhaps especially Øvregatå and Molnesvegen, are also quite busy as they serve as collecting roads for the largest housing areas. The neighborhood roads serve as access roads to houses and are less busy. However, because many of the roads are straight and not winding the speed of motorists often exceed the speed limit and creates unsafe situations, in particular for pedestrians and cyclists.

Moreover, the pedestrian and bicycle network is underdeveloped and lack connections between key functions and recreational areas. With an increased development it is crucial that the future infrastructure facilitates this mode of transportation, both in terms of health benefits and safety.

When it comes to public transport, the network of bus stops is quite decent on Roald. The challenge, however, is that the number of departures per hour is very low. This is closely related to the population number and is also affected by the high use of private cars. It is necessary that more people choose public transport over the private car for this offer to be better.
Fig. 1.28: Infrastructural network of Roald
PROPERTIES
Besides the soil quality and weather conditions, it is property boundaries that to the greatest extent has set prerequisites for how the landscape appears today.

For instance, unmistakeable signs of the land consolidation in 1873 are highly noticeable. As visible in figure 1.29 the landscape is divided into parallel allotments, from the north side of Molnesfjellet and to the shoreline on the east side of the island. “Equal for all” was the main objective of this division and every farmer was given access to the same benefits and challenges: Suitable farming land, property in terrain, cultivated and uncultivated land and a boathouse property so one could engage in both fishing and farming. Families built a house on their property, and this led to rather scattered settlements.

This, however, changed over time when farming became less common and more people were employed in the secondary and tertiary industries. Landowners began to sell plots of former agricultural land, and the settlement was densified, primarily around the center. This trend exploded with the construction of the airport when large agricultural areas were expropriated and people “became millionaires overnight” (Roald 2016). When private developers began to show interest in the development, it became even more attractive to sell the land because it was considered a way to “easily earned” money. Molnesrema is an example of this.

This development policy is still active today and in reality the municipality respond to regulation proposals from landowners who are driven by market interests and private developers desires. This results in a landscape with a development that is highly piecemeal and that to little extent relate to existing structures. Sandvika is one such example.

Though not as evident in today’s landscape Roald has been an important hub in the district.
The first houses were built in the late 19th century. Since then there has been a gradual development. The current zoning plan was enacted in 1969.

Fig. 1.29: Residential development has occurred where landowners want to sell their land, and it has resulted in a fragmented landscape with three main neighborhoods - Roald village center, Molnesrema and Sandvika (also referred to as Mallavika.)
Because of conditions that facilitated fishing and farming and Roald’s existing center-like establishment around the old church, this area became even more important from the end of the 19th century.

Several events with lasting effects occurred around this time. Firstly, the land consolidation of 1873 secured a more efficient farming by providing each farmer with coherent patches of land. This, in turn, broke up the cluster of farm buildings around the old church and concentrated the new center further north, around a row of boathouses where the soil was less suitable for agriculture (Haugen 2016).

The second impactful change was that Vigra separated from Haram municipality and became its own municipality in 1890, named Roald herred until 1919. Even so, the island kept its contact northward because the church served as the parish for the whole area. This kept residents on the northern islands coming each week and nourished the further development of the center on the north side of the island. The new Vigra church was built in 1894 at Blindheim, on the middle of the island, and was considerably larger than the old (Roald 2016). Judging by the rapid population growth on the island the first decade after the founding of Roald herred (fig. 1.31), this was a time of optimism and prosperity.

In 1905, the steamboat pier was finished. With the pier came other town-like functions along “Gatå” (“The Street,” officially called Postveien), behind the row of boathouses.
Figure 1.30: Roald Harbor in the winter of 1942. The old boathouses to the left and the first grocery store and post office to the far right. Photograph retrieved from the archives of The Norwegian Costal Administration (Kystverket).
Figure 1.31 points at important events in the history of Vigra and Roald. The shaded area and the vertical numbers show the population of the island at the time (there is no data before 1890).

There was especially three times of prosperity with great changes as well as rapid growth of population on the island. The first was in the decades after Vigra became its own municipality in 1890, and the second time was in the 1950s to the 1980s. The third time was in the last decade, starting around 2009. This was when the tunnels to Ålesund became toll-free.

The data has been collected from personal interviews, the yearbooks of Vigra Sogelag (Gjendem 2012 & Haugen 2008) and The Central Bureau of Statistics (2001, 2016a).

Fig. 1.31: A timeline of important events for the development of Roald as a village center. The shaded area shows the population.
1902: The bakery opened
1905: The steamship wharf was built on voluntary work
1930: The Sunday School building at Roald was built on the old church site
1940–42: During the first years of WWII, 200 people were brought over to Shetland and Scotland from Roald harbor.
1950–57: Opening of the new Vigra elementary school
1953: The community hall, Mjølner, was built on voluntary work
1957: Ålesund Airport Vigra opened
1980: Vigrasambandet, the mainland connection to Ålesund by car through tunnels and bridges, was built, and one could drive to Ålesund in 23 minutes
1987: Vigra merged with Giske municipality
2000: Giske municipality on the Robek list, a warning for poor economy
2009: The tunnels were paid off, making the trip to Ålesund free of charge
2016: 2061
Roald village ca. 1955 had many services, making it a vibrant village which also attracted many visitors (Gjendem 2016).

The view of the ocean, the ocean as a resource, the agricultural tradition, Gjøsund industrial area, and the history of Vigra are important for the island’s identity.

There is a widespread agreement that the ocean, both as a beautiful view and as a resource, is a part of the identity.
The 1950s are often described as Roald’s heyday, and the village had services such as a manufacturer store, a milk outlet, a general store, a store for electronic equipment and much else. An inventory provided by one of the interviewees (fig.1.32) display that there were 18 enterprises located in Roald by 1955 (Gjendem 2016). The employees at these businesses had important functions in the community, and it was even highlighted in their names: Sme-Petter (Blacksmith- Petter) worked in the forge and Bakar-Olav was the baker.

In addition, the northern and southern molos were finished, and after much needed dredging works larger fishing boats could make it ashore. This made Roald an even more important fishing harbor for the area. The ferry to the city (Ålesund) also departed from Roald. It was truly the hub of the district, but nevertheless dependent on the close contact to the northern islands and to the ocean.

The electronic survey revealed that the fishing tradition is still an important part of the community’s identity (see fig. 1.33).
DEVELOPMENT OPTIMISM BY SVERRE PEDERSEN

In 1954, the well-known architect Sverre Pedersen developed a zoning plan for Roald with his students at NTH (today NTNU) in Trondheim (fig.1.35).

First and foremost, the plan demonstrates an optimism towards Roald’s residential development by structuring an area from the north beach Tesanden southward to the community hall Mjolner in a grid structure.

In a newspaper article saved by NTNU, Pedersen writes that the development should be concentrated around the harbor and its industries (Unknown 1954). Pedersen drew fillings in the entire harbor for the development of industry and warehouse buildings (purple stripes). This underlined the important role the fishing industry had at the time. Today, however, it has only been realized to some degree.

In the newspaper article, Pedersen emphasizes that there is a scattered residential development in Roald and that there is need for a more concentrated development. He also mentions parks and a playground as important parts of the plan.

 Despite the great optimism, the development did not turn out to be as strong as Sverre Pedersen predicted. The following pages will look into what happened in Roald and the surrounding area after the 1950s, and what the consequences were.

Fig. 1.35: The zoning plan of Roald by Sverre Pedersen. Plan retrieved from the archives of the Norwegian University of Science and Technology (NTNU) library.
"Folk bor meget spredt på Roald, og reguleringen forutsetter at en skal komme fram til en mere konsentrert bebyggelse."

"People live very scattered in Roald and the zoning plan requires that one should arrive at a more concentrated settlement."

- Architect Sverre Pedersen to Sunnmøre arbeideravis newspaper about the zoning plan for Roald in 1954.
As the timeline on page 102-103 display, many changes happened in the 1950s that attracted people to live in and to visit Roald. In the following decades, however, Vigra experienced shifts in organization, infrastructure and industry and Roald’s role in the district changed from an epicenter to a dead end (fig.1.36).

In 1957 Ålesund airport was located at Vigra. This had a positive impact on the job market, and to this day, the airport is the island’s most important workplace. As a consequence, the interest in improving the infrastructure from the mainland to Vigra increased.

Then, in 1964, Vigra municipality merged with Giske municipality. Municipal positions were all moved to the Town Hall at Valderøya. Subsequently, the health services were moved to this island too.

The demand for a mainland connection was realized with the tunnels from Valderøya to Ålesund via Ellingsøy in 1987. This made the ride from Roald to Ålesund only 23 minutes by car.

As a result, Roald’s residents got easy access to urban qualities in the city and Vigra, in turn, became an increasingly popular suburb to live in. This trend increased when the tolls on the tunnels were paid off in 2009.

Moreover, the modernization of the fishing industry has made the previously essential harbor inadequate as it is too shallow for modern fishing boats. Appropriations to dredge the harbor has been promised, but in the meantime Gjøsund on the southern part of the island has already been developed for fishing purposes. To add to the challenge, the municipality wishes for Gjøsund to become a national fishing harbor.

All these forces have redefined Roald’s role. Jobs have been relocated, and the greater access to Ålesund has made shopping more attractive there. Moreover, the car is a natural choice. Roald has lost its connections northwards, as there is no longer a need or desire for a ferry between these locations. Roald has become a “dead end.” This has affected the resident’s way of life.

”Det er kommunikasjonene som styrer et samfunn.” *
“The communications control a community.”
- Resident at Roald
Fig. 1.36: Roald is no longer the geographical midpoint of the area.
Demography statistics, the online survey and personal interviews have highlighted how Roald has experienced a shift from a lively village to an insufficient suburbia.

Figure 1.37 demonstrate this matter through a scenario of a hypothetical family with young children living in Roald. Some points are worth noticing:

- Giske municipality has a younger population than the national and regional average (Strømsheim 2015). Most people live in a single family home.

- The personal car is used as the main mean of transport. The exception is school children who mainly get to school by bike. Children living more than 3 km from the school premises go by bus.

- Many people commute to work in Ålesund. This makes it simple to do the grocery shopping on the way back from work at larger and cheaper stores.

- Some people still work as farmers, but this is not a very profitable job and is therefore often combined with another job, for instance at the airport.

- Apart from organized group activities like soccer or archery, people reside mostly at home in their spare time. The parents are often actively involved in their children’s activities.

Fig. 1.37: Roald resident’s journey.
**MORNING**

- Home

**DAY**

- Work in Alesund
- Grocery store at Valderøy
- Preschool at Roald
- Excursion to Markeskogen

**AFTERNOON**

- Work at the airport

**NIGHT**

- Vigra elementary school
- Olav is the coach at Jens’ soccer team
- Morning shift at the farm

Olav is the coach at Jens’ soccer team.
THREE CONSEQUENCES IDENTIFIED
The restructuring of the society has had three main consequences for Roald.

These are:
1. Rapid housing development
2. A dead village center
3. A decentralization of social networks

Now follows a look at how they play out in the landscape.
Fig. 1.38: The three main consequences of the changes that have happened in Roald and in the area over the last decades.
There are, as mentioned, several reasons why the residential development has increased considerably on several occasions. Most people who have been involved in this project, however, point out that it is the combination of rural quality of living and proximity to Ålesund that is the most important thing.

A typical statement about why one would like to live on Vigra is:

“Naturen og at det fortsatt gir en følelse av å bo på “landet” - sammenlignet med f.eks Valderøya hvor det etter min mening har blitt bygd altfor mye de siste årene.”

“The nature and that it still provides a sense of living in” the country” - compared to e.g. Valderøya where there, in my opinion, has been built too much in recent years.”

Vigra has stunning scenery and it is easy to see why residents love the island, but it is a paradox that the qualities that make most people want to move to and live on Vigra (the closeness to nature, the ocean view and the open landscape with little traffic and noise) are qualities that are threatened by the ongoing development.

Particularly in recent years it has become evident that there is a need for a comprehensive plan that ensures important natural and recreational areas that simultaneously facilitates increased development.
“Ikke ødelegg Vigra med uvettig bygging som på Valderøya på grunn av pengeglade utbyggere.”

“Do not destroy Vigra with reckless building as on Valderøya due to greedy developers.”

- Question from the electronic survey: “Are there other places or features that you see as important for the island’s identity?” Female (40)
100 m
N
PHASE 1
Detached houses
Quad house/townhouses
Other/not dwellings

Fig 1.41: Housing typology in Roald.
DETACHED HOUSES - LOW POPULATION DENSITY
Data from Norway’s 2011 Population and Housing Census shows that 57% live in detached houses. For Roald, however, the number of single-family dwellers reach 68%. (SSB, 2011).

“A house with a big garden” seems to be today’s preferred residence. This results in extensive intervention areas and low population density. Naturally, there are several kinds of ways to build detached houses. Four different ways are typical in Roald.

- ‘The detached farmhouse’
- ‘The small “urban” village house’
- ‘The 1970s standard house’
- ‘The modern “catalog-house”’

According to Jens Bjørneboe (2000), there are primarily three demands that need to be balanced when constructing rural residential areas. These are buildings, infrastructure, and open space. The four typologies listed above solve these differently.
THE DETACHED FARMHOUSE
Farmhouses from original farmsteads belong in this category.

FIG.1.42 - BUILDING
In the late 1800s, panels became more common because they provided protection against harsh weather. In the South Norwegian coastal areas, horizontal panels were standard. The houses were simple, without eaves, with slate roof and they varied in heights between 2 and 4 floors (Trevenen, 2012). The foundations consisted of stone, and most houses were built on land with little terrain difference because they were located on the Strandflat. Where houses were situated in terrain, they accommodated this. In Roald, most residences were located on the outskirts of a property so that they were close to other settlements. Even so, the settlement was quite scattered.

FIG.1.43 - INFRASTRUCTURE
Detached farmhouses are structured along a neighborhood road, with simple carriage or gravel paths linking the dwellings to the road. It is adapted to the terrain, and occasional incline and curves are typical. The road is visible in the landscape but has little impact on its overall character.

FIG.1.44 - RESIDENTIAL OPEN SPACE
Typical farm buildings were located in the immediate vicinity of farmland. It was common for the whole family to assist in running the farms, so the fields served as accessible green areas. When farming was made more efficient, it became customary to build a small garden plot adjacent to the farmhouse for recreational purposes (Haugen, 2016).
THE SMALL “URBAN” VILLAGE HOUSE
This building typology makes up for the majority of houses in “Gatå.” The houses are built in the period 1880-1920, without any connection to agriculture or farmland.

FIG.1.45 - BUILDING
The houses bear similarities to the old farmhouses but have contemporary features like eaves, symmetrically placed windows and sparse or lightly embroidered moldings, typical of today’s commercial building materials. Some houses have full or half-hipped roofs that are quite foreign to the local building tradition. (UIS, n.d.). The houses are primarily built on flat terrain. The settlements are concentrated and linear. Houses face the street.

FIG.1.46 - INFRASTRUCTURE
Because the houses are built linearly and relate to the road, the infrastructure is relatively limited. The proportion of land dedicated to the car has increased. Many of the houses are built next to a large residential road. Other places a smaller neighborhood road has been constructed parallel to the residential road in order to facilitate the access to the houses. This is illogical, space and money intensive. In addition, each house has its own driveway.

Residential roads often occupy flat terrain. They are highly visible both because they are wider than older roads and because the houses are aligned along them, creating a continuous edge.

FIG.1.47 - RESIDENTIAL OPEN SPACE
The houses are built on former farmland and have little impact on the overall vegetation. Size and type of private open space are obviously different from those seen in the farmhouse typology. The oldest houses in this category have quite small plots and thus less land to build a private garden. Newer houses have larger plots and larger private gardens. Since the houses are structured along the road, it is typical for them to be surrounded by buildings on each side, with only one side exposed to views of the open agricultural landscape. This landscape is inaccessible to residents as “recreational areas.”
THE 1970’S STANDARD HOUSE
The Molnesrema residential area and houses north of the harbor are typical examples of this typology. This pattern began to appear in the 1970s, and is still common today.

FIG.1.48 - BUILDING
The typical seventies house is a single story building, with a basement, entrance from ground floors and a sloping terrain. It is simple and without unnecessary decoration with large windows and a functionalist touch (Treveven, 2012). Siding panels can be both horizontal and vertical, and the foundations are built in masonry, not stone. Houses are well adapted to the terrain and consist of two floors. The masonry basement is embedded into the slope to accommodate terrain differences and to increase utilization of the area. All houses are provided with roughly equal plots, but the location of the house on the plot varies. Altogether it creates a kind of “carpet structure.”

FIG.1.49 - INFRASTRUCTURE
Detached housing units require a greater surface dedicated to roads than those visible in the other categories. In these areas the infrastructure is planned according to Bjørenebo’s principles. Neighborhood roads handle terrain differences and houses are designed on both sides of the cul-de-sacs (Bjørenebo, 2000). The difference in slope is divided equally along the road’s length, which requires grading and alteration of the original terrain. Neighborhood roads often end in cul-de-sacs. This solution is quite effective at reducing traffic. Nevertheless, this leads to poor connectivity. On Molnesrema, residents have compensated for this by creating walkways between dead-end roads.

FIG.1.50 - RESIDENTIAL OPEN SPACE
Standard houses are built partly on former agricultural land (Roald center and Molnesrema) and areas formerly occupied by a forest (Molnesrema). Although the forest was planted and not native vegetation, the residential development has drastically changed the landscape. Molnesrema is closer recreational areas, but also contributed to the loss of valuable recreational land in favor of privatized gardens. Dwellings in Roald center continues the same tendency as the small “urban” village house. Apart from private gardens, the settlements leave little room for open public space and nature access in contemporary standard home neighborhoods.
THE MODERN "CATALOGUE-HOUSE"

The houses built in the new residential area of Mallavika constitute the majority of the homes in this category. This category also includes occasional infill development on Roald.

**FIG.1.51 - BUILDING**

Today’s houses are either from a catalog, carpenter-built or prefabricated. The possibility of adjusting the house to local conditions are minimal, so instead, terrain and surrounding areas are adapted to the house. This implies significant changes to the terrain and the landscape’s overall character. In Mallavika the terrain has been terraced. Large detached houses or multi-family homes with a modern and functionalist touch are most commonly found on Roald. Straight lines and large windows are typical - an expression that is very different from other residential structure.

**FIG.1.52 - INFRASTRUCTURE**

The road system is similar to the 1970s houses, but it is often straight and regimented. This may result in higher traffic speeds. The system is efficient, if somewhat oversized, and only designed for car use. No space is set aside for sidewalks or bicycle lanes. Neighborhood roads handle the terrain and cul-de-sacs for housing are parallel to the terrain.

**FIG.1.53 - RESIDENTIAL OPEN SPACE**

Like all other settlement, these dwellings are also constructed on former farmland. As the terrain is terraced to fit the house, all original vegetation is removed and replaced with grass, as seen in fig. 1.51. The residential area in Mallavika is located in close proximity to Molnes nature reserve and according to citizens, it is too close to the shoreline. In practice, this leads to low accessibility to public recreational areas and that important recreational gems with high proximity to surrounding dwellings are perceived as private.
OVERALL LAND USE

Many of Vigra’s qualities have been strongly affected and even diminished by the construction of residential houses over the last decades. This is the case with Molnesrema residential area, where large areas of forest were removed to build residential dwellings.

The settlement bear signs of being very divided and a significant amount of agricultural land has been “locked in.” Dispersed development contaminates the open views of the former open countryside with visual noise. A dispersed residential development increases car use, traffic, and skews the residents’ perceptions with regard to distances. Scattered development of this kind contributes to distancing untouched nature from residents and depletes an important resource for residents.

This challenges us to preserve these kinds of qualities, which residents consider important for the island’s identity.
Fig 1.54: Overall land use

- **Forest**
- **Settlements**
- **Initially farmland**

200 m

- Molnesroma
- Sandvik
- Mallavika
- Roald village center
The online survey asked participants about their satisfaction with various offers on the island today. It revealed that job opportunities, retail/cafés, and public transport, was what residents found the least satisfying.

It is clear that Roald is suffering from the relocation leak of trade and employment to Valderøy and Ålesund. As a result, many of the old buildings in the village center are empty and poorly maintained (fig. 1.55 and 1.57). Lack of activity, shabby-looking buildings, and outdoor spaces appear to be most concerning to people living in Roald today.

As Roald is a historically important fishing harbor, restrictions from the Norwegian Coastal Administration (NCA) apply to the type of development that might occur there. A 1936 agreement between landowners and the NCA gave the NCA every right to control the development of the areas on both land and seaside of the harbor to promote fishing industry. In return, the NCA took over responsibility for the creation and maintenance of the molos (Tennfjord, 2016). Over the years, waterfront development focused on practical constructions rather than public access.

Today, the NCA still supports these interests; however, modern fishing boats require deeper waters, and this has limited the fishing activity in the harbor. In the absence of any development, storage units are now punctuating the waterfront areas. Future development will depend on someone taking over the responsibility to maintain the molos from the NCA. The municipality’s economy suggest they are not likely to take on such a responsibility.
Fig. 1.58: Panorama of Roald harbor. Today, most activity by the waterfront is located in the north around the marina. The Joker store is by the southern molo. There is little or no public access to the waterfront in between. The map on the bottom of this page (Fig. 1.64) illustrates how much of the area around the waterfront is made out of gray hard surfaces (gray color).

Fig. 1.59: Old boathouse by the southern molo - an idiosyncrasy of Roald.

Fig. 1.60: The “Tire hotell”. The water is inaccessible for the public today.

Fig. 1.61: Furnes boat workshop seen from the north
Fig. 1.58: Panorama of Roald harbor. Today, most activity by the waterfront is located in the north around the marina. The Joker store is by the southern molo. There is little or no public access to the waterfront in between. The map on the bottom of this page (Fig. 1.64) illustrates how much of the area around the waterfront is made out of gray hard surfaces (gray color).

Fig. 1.62: Empty gray lot next to Furnes

Fig. 1.63: Sambruken (“The Joint Use House”) is an important social hub for older men.

Fig. 1.64
Fig. 1.65: Ca. 1955

Fig. 1.66: Ca. 1980

Fig. 1.67: 2016

Fig. 1.68: Programming of Roald village center today. The commercial hub of Joker Roald, the hairdresser and the chiropodist is what is left of retail. Many buildings are abandoned. The deal with the NCA has put restrictions on the waterfront between the two molos. It is to be used for fishing industry purposes only, but in reality, it is mostly storage. Small gems from the historical Roald is however still present in “Norway’s smallest furniture workshop” and Vigramør sausage factory.
THE VILLAGE CENTER
The interviewees were asked about places they would go to be alone and with friends. Their responses clearly show that people appreciate and use the nature reserve of Molnes on many occasions but, that most of the time is spent at home.

Joker Roald (fig. 1.69), with the hairdresser and chiropodist next to it, is the only commercial attraction left at Roald today. They are, in terms of social capital, the only place left for “bridging” different parts of the community.

A village center needs places for people to meet. Stores are, however, not the only thing that contributes to life in a center. In a report compiled by Gehl Architects for Distriktssenteret, it is pointed out that there is not a basis for a diverse retail center in all small villages. Therefore, a village center must have a diversity of other kinds of experiences (Gehl 2016, p. 16). This can be achieved by incorporating functions for all user groups and by creating experiential attractive connections between them.

"LOKALBUTIKKEN, DET ER EIT LIV I BYGDA. FOR..."

Fig 1.69: The local store, Joker Roald. The previous owner could inform us that the store should have a much larger turnover judged by how many people that live here now.
"The local store is the life of the village. Because people not longer just drop by [your house unannounced]"

- Interviewee
GATÅ

Gatå (The Street), officially named Postvegen, is basically the only real street in Vigra. It was along this strip that Roald developed at the beginning of the 20th century.

One part of Gatå, the one that approaches Joker Roald from the south, has qualities that can serve as inspiration for further development (fig. 1.72). Here, housing, retail, and industry are mixed. This prolongs the time of usage throughout the day and makes the place adaptable to various uses. For instance, Vigramør AS sausage factory is located on the ground floor of a residential building (fig. 1.72). Also, the buildings are denser here than any other place in Roald, and concentrated along the street. This results in a defined street section; more human in scale and more likely to slow traffic down. The private gardens along the street have no fences, which gives the street a greener and more pleasant look.

Other parts of the street are not functioning as a village main street. Many of the open spaces that line it lack programming, and the only existing bench does not invite people to linger here (fig. 1.71). Empty buildings make it feel like a ghost town (fig. 1.70). The scale of the outdoor spaces adds to the “ghost effect.” The large distances between open spaces and functions seem to make the few pedestrians disappear.

In a village as small as Roald, there is the urgent need for proximity, density, and more humanly scaled outdoor spaces and programming.
Fig 1.72: “Gatå” in Roald. Vigramør AS sausage factory is located on the ground floor of the building to the right.

Fig 1.73: “Gatå” in Roald in red. Numbers refer to the photos. 1: The old bank building, 2: “Smi-tomta,” 3: Gatå
THE IDIOSYNCRACIES VISIBLE IN THE CENTER

Today, some of the buildings from Roald’s heyday are still standing. The yellow wooden building, known locally as "Øie-huset," is centrally located at the corner of Gatå and Øievegen, the site of a general store for 72 years (Haugen 2008, p.23-25). When the Øie family closed down their shop in 2001, it was the longest-running commercial activity in Roald. Old Roald residents still remember how the fishermen used to hang out on a bench outside of the store for news and gossip. Today, the first floor is abandoned. During our workshops, several groups suggested this as the perfect location for a café.

Other buildings worth noticing are the small wooden houses next to Øie-huset along Gatå (fig.1.75), charming examples of the typology “Small Urban Village Houses” described earlier in this chapter.

Located in a former WWII barrack, the Solheim Funiture workshop (fig.1.76) is one of Roald’s hidden gems, known for the production of the popular Solveig Chair. This little building is a good example of the typical “use what you have”-approach of the society here, and it is an excellent way of bringing parts from the past into the place identity of new areas.
Fig. 1.77: Inside Solheim furniture workshop.
DECENTRALIZATION OF SOCIAL NETWORKS

To explain the decentralization of the social network of Roald, we must take a backward glance on the theory of social capital from the introduction chapter. It is especially the dualism between bonding social capital (primarily ties to people one are already close with) and bridging social capital (ties to people of different religion, age, race, occupation, economic class, etc.) that is interesting in this context. The latter has proven to be very important for the social capital of a community and especially important in a modern society (Freakonomics 2016).

The survey revealed Roald as a community with unusually high social capital compared to others. To illustrate, over 50% of the residents were very satisfied with their social network and with their relationship to their neighbors. 55% Roald residents had longer spontaneous conversations with their neighbors more than four days a week and over 90% replied that they thought most people could be trusted.

Admittedly, many of the community’s residents show high social capital, but a deeper look into the social conditions of the community shows that different social groups lack connections and ties to one another. The historical bridging social capital of the fishing and farming community, where people of all ages and economical class worked together to fix things is absent in today’s society. It is important to emphasize that the decentralization of the social network we identified in Roald is not synonymous with low social capital. It refers to the loss of a once very high social capital and limited ‘bridging.’

The lack of bridging social capital has increased the skepticism, alienation and “us-against-the-newcomers” tendencies in the community.

"Det sosiale nettverket er andre steder"
“The social network is elsewhere.”

Question from the electronic survey: “What is the main reason for you not choosing to live at Vigra?”
- Man, 41

Fig 1.78: A local artist decorates the bus shelter close to his house. The shelter functions as a point of triangulation, where strangers can meet spontaneously and discuss this month’s decoration
THE SOCIAL HUBS IN THE COMMUNITY

Enhancing the bonds between people can enable the establishment of a resilient network of trust and a more socially sustainable society. Roald residents’ interaction across generations and user groups are limited, and the physical landscape does not facilitate this type of bridging.

Figure 1.79 illustrates key social hubs of the community - both social structures and physical locations. It is based on findings from the participatory process and general analysis, and it may not be representative of all the members of the different groups or the community. In addition to the key hubs illustrated in the figure, Molnes nature reserve is also an important social meeting place for all of Roald’s inhabitants.

Naturally, some interaction between adults and children does occur. Examples include parents volunteering as coach of the football team (the sports club) or as leaders of ”allidretten” - a multi-sports initiative. Seniors are a diverse group that interact in several places (e.g. the congregation, the boat club, the Sambruken) even though, in this generation on Roald, it is more common to interact with people of the same gender. Youth is a user group that has proven both difficult to map and involve in participation processes. Therefore, our findings may not be fully representative of Roald’s youth.

The size of the circle in figure 1.79 indicate the proportion of the user group that utilizes the offer in question.
ANALYSIS

Tourists

The Health Association, (mainly women)

Middle school

KRIK

The sports club

Local politicians

Independent congregation

Vigra Sogelag

Inspired

Sambrukshuset "joint-use"-house, (mainly men)

The boat club

Vigra preschool

Vigra elementary school

Roald velforening

The youth choir

Giske horse sports club

Vigra horse sports club

The youth choir

Joker Roald

Independent congregation

The congregation

The Marke forest

Pensioners’ Association

Roald velforening

Vigra preschool

Vigra preschool

The Marke forest

Vigra preschool

The youth choir

Joker Roald

Independent congregation

The congregation

The Health Association, (mainly women)

Middle school

KRIK

The sports club

Local politicians

Independent congregation

Vigra Sogelag

Inspired

Sambrukshuset "joint-use"-house, (mainly men)

The boat club

Vigra preschool

Vigra elementary school

Roald velforening
FACES OF ROALD

discovering hopes, challenges and sacred places

What kind of development can we hope for and what are the challenges? Which places are “sacred” and should stay just the way they are? The following people describe some of the perspectives and wishes we have encountered in the community during our stay. They pinpoint some important notions to learn from and lay the foundation for the map of Sacred Structures.

JOKER-KARI
Kari got her nickname because she used to run the local store, Joker Roald. She has long been a Roald enthusiast and has run a flower shop before establishing the grocery store in 1988. She was also a part of “Eit Levande Roald,” a project that aimed at reviving the village about five years ago.

Kari represents the wishes of long-time residents and business owners. Her main concerns for Roald are that people stop using the few services that are left. She would also like something new - a park, some benches, and refurbishment of the facades in the village center.

HILDUR
Hildur is a pupil at Vigra elementary school, and she lives in Roald. The best thing about Roald, she says, is all the people she knows and that her friends live nearby. She and her friends usually hang out at Joker. In Roald, by the marina, she would like to see a future café that young people could hang out at, and a skatepark in the village center.

Hildur represents young Roald residents, and she took part in one of the workshops at Vigra school. Other sacred places for this user group are the beaches, Molnesfjellet, the marina, Mjølner, Vigrahallen, the preschool, the forests, the playgrounds, Markeskogen, and Budafjellet.

"Altså, ka ej ønsker mej i tiden fremover... det e at folk ska bli bevisste på det som e igjen på Roald no."

"Ok, what I want in the future... is that people become aware of the few things that are left in Roald."

- Joker-Kari

Fig. 1.80: Joker-Kari
“Jeg ville tatt dem med til Joker, skolen og fjellet”

“I would take them to Joker, the school and the mountain”

“If you were visited by someone who had never been in Roald before, which places would you take them to?”

- Hildur
TORMUND
Tormund is the co-owner of Bryggen AS, a fishing enterprise with premises at the north molo in Roald. He says Roald is the place in the municipality with most potential for development. However, development must be dependent on thoughtful planning by the municipality for more residential areas, and for an extension of the school and preschool which eventually will attract more businesses.

The residents must also want a development, and invite newcomers into the community. At the same time, residents must utilize the offers that exist today. If not, these functions will disappear, Tormund says.

"SAMBRUKERNE"
We met "Sambrukeren" in Roald harbor when he wanted to show us his catch of crab.

Sambrukshuset, "The joint use house," is a building by the marina where grown men meet twice a day, every day. Many are former fishermen, and share stories about the good old days and views of the current development. Sambrukshuset is a very important meeting place for this particular user group.

When asked about their thoughts on future development, some are very clear on the one specific area for development - the harbor. They long for more civic life along the waterfront and suggest rows of boathouses as a solution to combine fishing industry with village center uses. They envision that the boathouses could contain both small-scale fishing stalls, and business and retail.

"Oss må satse no"
"We must invest [in the future] now"
- Tormund
OLAV SINDRE
Olav Sindre is a Roald enthusiast. He runs Solheim furniture workshop next to his house, and he is both engaged in Vigra Sogelag and local politics.

Like many others in Vigra Sogelag, Olav Sindre is enthusiastic about preserving historical attractions. We met him on the premises of the old school building next to the Sunday School. Vigra Sogelag recently took charge of the old school building, and they are interested in fixing it up and using it as a venue for historical exhibitions. The hill where the Sunday school is located has been an important church site for almost one thousand years. These are among the sacred places for the history lovers in the area.

SØLVI
"Roald is in a situation where we must rethink how we facilitate for newcomers," Sølvi says. "We need to show people our values and teach them about our history."

Sølvi is concerned with the preservation of historical places, nature and how this can contribute to making Roald a tourist destination. She took us for a walk around Budafjellet and pointed out different locations important for the history of Roald. Behind the small hill, we found the beautiful Molnes nature reserve, with WWII bunkers still visible on the hillside.

Sølvi says: We should build pride through the distinctiveness of our place.

"Stolthet gjennom særpreg"
“Pride through distinctiveness.”
- Sølvi
Fig. 1.86: The Sacred Structure of Roald
The sacred structures of Roald

Figure 1.86 shows the Sacred Structures of Roald - the compound of places that locals are strongly connected to. These structures have revealed themselves through the various participation methods.

Some of the sacred places have also been identified as valuable landscapes through the mapping and inventory. Other places are meaningful to some people in the community despite their seemingly ordinary character. This may be because people use these sites for specific occasions today, or that they have memories attached to them. For example, the marina is valuable to many more users than those who own a boat because this is where the community meets for the big Midsummer bonfire in June.

Preservation of the sacred places is important to prevent groups in the community from feeling alienated in the development of the future Roald.

- Molnes nature reserve
- Mallavika (Sandvika)
- Budafjellet w/WWII bunkers
- Protected shoreline
- Markeskogen (“Ugga Bugga Forest”)
- Molnesfjellet
- Rota soccer field
- Tesanden
- Sambruksbuset (“The joint use house”)
- Marina
- The molo
- Preschool
- Joker Roald

- Views towards the ocean
- Mjølner
- Roaldssanden bird sanctuary
- The “Rollo” monolith
- The Sunday School
- The old school building

- Vigrahallen sports hall
- Roaldssanden (Skolefjøra)
- Vigra elementary school
Figure 1.87 illustrates the structures that have proven powerful for influencing change in Roald - physically, economically and socially.

The most influential power on the physical landscape is exercised almost entirely by private land owners, politicians, key positions in the municipal administration and private developers. The residents lack either opportunity or knowledge to affect landscape change. The hypothesis that the community has lost the ability to directly affect their physical landscape, illustrated by the Reciprocity Cycle (p. 23), appears to be confirmed by our data. One exception is Roald velforening, which has proven influential in improving both the physical and the social conditions in the community. Strengthening Roald velforening’s role could be a way to strengthen resident’s influence on the physical landscape, and the social life of Roald in the future.

Powerful, economic players either allocates funds to physical projects or social life. The local government is an obvious influence, but due to Giske’s poor economy, there is a need for alternative players, such as national funding agencies. Small enterprises, such as Vigramør AS and Solheim Møbelverksted AS, could attract visitors and begin to promote Roald as a tourist attraction, combined with sports and nature activities.

Some key players have connections that could influence social change in the community.

Joker-Kari is both a resident and an entrepreneur, and was a part of Eit Levande Roald (page 142). The school, the preschool and local artists could also collaborate on events or installations that could be part in strengthen the community’s social capital and lead to more “bridging.”

Two areas show major missing links and will likely require additional players to emerge. These concerns the development of the village center and the harbor, where existing and future public and private actors should work together to generate development.
Fig. 1.87: Power map of Roald
SYNTHESIS

KEY FINDINGS:

THE LANDSCAPE
- Laying the foundation for life

- Good soil and flat terrain make excellent farming conditions
- Early settlements had clusters of farm buildings around a courtyard
- Farmland has great visual qualities but restricts accessibility

THE RISE OF ROALD
- Ls a district center for the area

- Roald had a central geographical position for the islands in the region
- Roald was a vibrant center with many commercial activities
- Roald village and harbor was planned with fishing industry in mind

ROALD IN RECENT TIME
- Rapid development in a "dead end"

- Less retail and jobs in Roald due to tunnel connections to Ålesund
- After merging Vigra and Giske municipality, most public services moved to Valderøya
- Roald harbor is not equipped for modern fishing industry

- Rapid residential development

- Scattered growth much due to lack of holistic residential planning
- Residential dwellings dominate. There is need for other housing typologies
- Rapid growth threatens accessibility to and preservation of public green areas

- A dead village center

- Harbor development is dependent on private initiatives
- Lack of retail and jobs in Roald, most people commute to Ålesund
- Characteristic wooden buildings in village center are worth preserving
- Outdoor spaces lack programming and are out of scale

- Decentralization of social networks

- Lack of bridging opportunities increase skepticism to new residents
- Planning must preserve sacred places
- Residents have little power to affect their landscape
- Missing links in power structure calls for initiatives for center and harbor development

Fig. 1.88: Key findings from Phase 1 and recommendations for the development of Roald
RECOMMENDATIONS:

LIMIT THE EXTENT
- Densify from center outwards to prevent sprawl and preserve farmland and valuable nature
- Plan for typologies that are more space efficient
- Preserve sacred places for the sake of attachment, place identity, and traditions

PRIDE THROUGH DISTINCTIVENESS
- Buildings should reflect local architecture. Preserve wooden buildings in the village center
- Preserve the open landscape and views to the ocean
- Combine fishing industry with other functions in the harbor
- Agree on community goals and pass this on to future residents and generations
- Enable and inspire change by cooperation between actors

COMPACT CENTER
- Facilitate for housing, offices, retail, workshops and tourism in the village center
- Outdoor spaces for multiple ages and user groups
- Events to socialize across user groups
- Ensure access to public transport by shortening the distance from residential areas to bus stops
- More residents will facilitate more commercial services

DESIGN NEIGHBORHOODS FOR SOCIAL INTERACTION AND WALKABILITY
- Public green areas within residential areas
- A network of paths leading from the mountain to the sea, and connecting key social points in between
- Design housing to promote socialization
PHASE 2
ROALD: INVESTIGATED
INCLUDING THE COMMUNITY SPECTRUM OF PLANS
Fig. 2.1: Participants at one of the two workshops at Mjølner discussing and drawing activity settings for Roald.
Phase 2 aimed to investigate alternative future visions for the development of Roald. We included residents of Roald through public workshops on Wednesday, September 28th, and Thursday 29th.

This chapter examines the reasoning behind hosting the workshops, communication channels used, the conducting of the event, and the feedback we received.
THE MJØLNER WORKSHOPS

PURPOSE
In this phase, we chose workshops as the primary participatory method because it was open and flexible and it provided residents at Roald with an opportunity to be informed about our work and simultaneously share their visions and goals for the future Roald. In a workshop setting, we could gather several age groups and user groups in discussion and thereby start the “bridging” process between them.

The location of the event was set for the community hall, located about 1 kilometer outside the village center of Roald. In Phase 1, we learned that this used to be a lively dancing hall and cinema back in the day. Hosting the workshop here would help revive this formerly important meeting place, which would appear as a “neutral ground” for people of different ages, interests, and from the many neighborhoods of the island.

Fig. 2.2: The community center was built by the community in 1953.
NYE BLOKKER VED ROALD HAVN... eller?

Det ble ikke bygget nye blokker i havna, men private utbyggere kan kjøre disse igjen i fremtiden.

Har du ideer om hvor det skal bygges? Hva skal bevares? For at Roald skal være for alle er det viktig at DU kommer!

Idéverkstedene vil være i ca. 2,5 timer og finner sted i Samfunnshuset Mjølner.

Onsdag 28 september kl. 16:00    Torsdag 29 september kl. 18:00      Lørdag 1. oktober kl. 13:00


Vi ønsker veldig gjerne deltakelse fra alle aldersgrupper. Vi gleder oss til å se deg der!

Ida Romslo, 95731819, ida.romslo@nmbu.no,
Tonje Cecilie Stordalen, 41307605, tonje.stordalen@nmbu.no

THE 12 STEPS AND COMMUNICATION CHANNELS

From a methodological standpoint, this workshop had a focus on step 2 (Setting goals), step 4 (Introducing the community to itself) and step 6 (Drawing anticipated activity settings) of the 12 steps process. In addition, this participation method indirectly included step 1 (Listening), step 4 (Getting a gestalt), step 7 (Idiosyncracies inspire form), step 8 (Developing a conceptual yardstick), step 9 (Spectrum of plans), step 10 (Evaluating costs and benefits) and step 11 (Transferring responsibility).

To reach as wide a range of users as possible, we used many different communication channels including our Facebook pages and the web page. In addition, we mailed flyers to the residents at Roald, hung posters at the local stores and people that had previously been interviewed were personally invited either by e-mail or text. Personal invitations were also sent to local politicians, municipal employees, developers, property owners, business owners, possible future business owners and community organizations.

Fig.2.3: Poster inviting people to the Mjølner workshops. The workshops were originally scheduled for three days, but due to a conflict with another community event we cancelled the Saturday workshop. The only resident that had signed up was encouraged to come to one of the other workshops.
13 people attended Wednesday’s workshop and 18 the Thursday event. We had met many of the participants before, but a few local politicians, one key developer and other residents we had yet to meet showed up to the event. The participants were encouraged to sit around the tables in groups of 4-5 people, preferably with people they did not already know.

The first activity was a 30 minutes-long powerpoint presentation synthesizing what the research team had learned about the community. Participants learned about the process so far and about the goals for the research. The presentation of our perception of the community was based on interviews, the survey, and a range of design analysis of the landscape. A central concern of our presentation were places and values that were important to the people of Roald, idiosyncrasies in their use and understanding of the landscape and today’s challenges regarding the rapid residential development, the lack of a village center and their social capital construction challenges (page 112).

Following our presentation, the workshop continued with a plenary discussion of our findings, which was intended to confirm our assumptions and correct possible misunderstandings. Participants were invited to give feedback on our presentation on a piece of paper.

The event continued with the first group activity, “The Roald Goals,” loosely based on the Nominal Group Technique (NGT) developed by Andre Delbecq, Andrew Van de Ven and David Gustafson. Each participant was asked to write down their top 5 goals for the development of Roald in order of priority. The participants presented their goals for the rest of the group but were later asked to merge them into five goals representative of the entire group’s sentiments and priorities. The groups were instructed to motivate and argue for goals that would serve the good of the community. Each group displayed their goals on the wall and presented them to the rest of the assembly. Residents then received five stickers with the opportunity to vote for the goals they personally considered most important for Roald’s future.
"Det er so forferdeleg rotat her; landbruk midt i byggefeltet!"

“It is so messy around here; farmland right in the middle of the residential area!”

- Workshop participant
The following are the goals for each group. After voting, the community agreed on The Roald Goals, displayed on the opposite page.

Team 1 goals
1. Preserve accessible shoreline, nature and recreational areas and enhance the access to these
2. Ensure a long-term and comprehensive plan for development and protection of agricultural land
3. Establish new and appropriate public transportation route
4. Enable development and establishment of new center functions
5. Facilitate pedestrian and cycling tracks, walking trails and link existing roads

Team 2 goals:
1. Vitalize harbor on land and quay. Use for new purposes. For instance housing / lodging / small scale industry / service / café.
2. Densify with combination. Residential / service/ senior housing etc.
4. Retain the beaches and access to the shore and mountains.
5. Create an environment for children and youth. Listen to them!

Team 3 goals:
1. Nature! Utilize nature conservation areas in a better way. Include nature / history trail.
2. Roald harbor! Vibrant harbor with green spaces for the enjoyment of residents and tourists. Park / guest jetty / RV parking / play area (skating / skateboarding).
3. Roald center. Reactivate with low rise building(s), blacksmith-lot, shops, café(s), guest houses, residential purposes.
4. Social meeting places (Roald harbor, Roald center, old school, old bank, etc.)
5. Retain and visualize the history

Team 4 goals:
1. The local shop - More customers, satisfactory trade offer
2. Expand existing or build new kindergarten
3. Meeting Place for everyone - children / youth / adult / elderly
4. Improve the first impression of Roald: maintenance of the common and private areas
5. A small “square” east of the old bank (blacksmith-lot)

Team 5 goals:
1. Increase capacity of school and preschool
2. Further facilitating for residential development (regulation, etc.)
3. Better infrastructure
   - Walking and bike path
   - Bus
4. Retail and center activities
5. "Rorbus" (a traditional type of seasonal house used by fishermen)

Team 6 goals:
1. Facilitate varied business and activity
2. Limit development so that nature and hiking areas are preserved
3. If there is to be arranged for population growth, we must have a kindergarten and school that is large enough and a youth club.
4. Overall plan for housing construction
5. Public transportation

Team 7 goals:
1. Plan for development of residential areas
2. New and larger school/preschool and activity areas
3. Protect recreational area from Rota to Molnes (mountain and shore)
4. Recreation areas for children and adolescents (skate park etc.)
5. Regulation of Roald center that includes business ("Rorbu," tourism, office, etc.)
THE ROALD GOALS:

1. Improve infrastructure (public transport/ bus route and walking & cycling paths)

2. A vibrant Roald Harbor

3. Reactivate Roald center, facilitate business and activity

4. Take care of nature and recreational areas and improve access to the water and the mountain

5. Make room for children at the preschool and the school, and build a youth club

6. A comprehensive plan for residential development
We introduced the last workshop activity by asking participants to think about which activities they felt were missing at Roald today, and where they should be placed. Through this question, we wanted them to become aware of how they could transform their goals into physical form, and reflect upon how the different activities were positioned relative to each other. The groups later drew out a plan of Roald based on the goals and the desired activities. They used markers and cut out floorplans of a typical residential building and drew their visions on an aerial photo printed on a large map at 1:1500 or 1:4000 scale, but used the building cutouts for scaling purposes.

An important part of this assignment was presenting the plans to the other groups. It seemed to open their eyes toward solutions other than their own.

Fig.2.7: Participants drawing anticipated activities
Fig. 2.8: Participants discussing plans
PLAN 1
Team 1 used color-coded areas to locate the village center, housing, green structures, farmland and public services.

STREETS/MOBILITY:
The team agreed to upgrade the existing street network to facilitate for walking and cycling. They also wanted a new “bus only” connection from Rota soccer field to the houses in Mallavika. This road would function as the border to the recreational area at the northern shoreline, and offer a more expedient route for the bus, shortening the walking distance from most houses to the bus stops.

VILLAGE CENTER, BUSINESS & INDUSTRY:
The team identified the area on the harbor side of Postveien as well as two houses on the opposite side of the street as the town center but did not choose functions they believed were appropriate for the center.

BLUE AND GREEN STRUCTURES:
A continuous green area links Tesanden to Mallavika, a recreational area that also provides further access to Molnes nature reserve. The team wanted to maintain farmland in the southwestern parts where the lots are considerably larger.

HOUSING:
The team suggested densifying with mixed topology within the bus route. They wanted denser buildings along Postveien near the defined center, which meant tearing down some of the existing wooden houses. This densification would spare the western farmland. Farmland in the southwestern part was chosen to be developed into housing in a 15-20 year perspective.

PUBLIC SERVICES:
The team decided that the preschool was too small and the best solution was to build a new preschool closer to the elementary school farther south of Roald center.
PLAN 2
The Team 2 vision shows a compact residential area enclosed by a bus route and activity by the harbor.

STREETS/MOBILITY:
Similarly to Team 1, this team also wanted a bus route at the edge of the town settlements connecting Rota football field and Mallavika. They also identified one walking connection from the grocery store through the field they found suitable as a housing lot for seniors.

VILLAGE CENTER, BUSINESS & INDUSTRY:
The plan shows a split center with a node around the existing community hub and one on the harbor side of Postveien. By the harbor, the hub would be concentrated around the existing industry buildings and consist of small craft workshops and shops that focused on local goods and tourism.

BLUE AND GREEN STRUCTURES:
Though not mentioned by the team, the plan shows a large continuing green belt north of the bus route. They also wanted a park area by the harbor with activities for many user groups. Most small grass patches are devoted to densification and new housing. However, in the discussions about the plan, one member of the group suggested saving one lot as a public recreational area.

HOUSING:
The white cutout rectangles show areas devoted to housing, mostly along Øvregatå.

PUBLIC SERVICES:
The team wanted to keep the existing preschool and expand it toward a plot west of the current preschool.

NON-COMMERCIAL MEETING PLACES:
The park area by the harbor would be an important non-commercial meeting place for everyone. The team also wanted an activity area by the soccer field, but the plan does not specify which activities would be most suited.
**PLAN 3**

Team 3 focused on three hubs of activity in different places.

**VILLAGE CENTER, BUSINESS & INDUSTRY:**
The team suggested a shopping street in the street in front of the local store down to the harbor. This would be the location for a café, bed & breakfast, and a youth club. The grocery store was moved to the opposite side of the street, also offering housing on the upper floors. In connection to this hub, the southernmost molo would feature a fish outlet and a building with rental opportunities for special occasions. The team also suggested a bed & breakfast farther north in the harbor.

**HOUSING:**
The team suggested a new low-rise building by the southernmost molo and a single-story residential area on the lot behind the existing store that would be aimed at seniors with services on site, a common area and a short walk to the store.

**SACRED PLACES:**
Team 3 were keen to preserve existing buildings and pointed out several important recreational areas for the community like The Ugga Bugga forest and Tesanden.

**NON-COMMERCIAL MEETING PLACES:**
The hub by the harbor is aimed at tourists entering by boat or RVs. This hub would feature a park area, a guest harbor, parking and a bed & breakfast. A new skate park between the football field and Ugga Bugga forest would be the center of the third hub.
**PLAN 4**

Team 4 focused on activity areas and expressed a determination to remove buildings that looked shabby.

**STREETS/MOBILITY:**
The team drew a cycle path along Budafjellvegen.

**VILLAGE CENTER, BUSINESS & INDUSTRY:**
The team suggested a small community hub by the southern molo, consisting of a youth club, a café, and boathouses. A new building on the lot behind the grocery store would give bigger and better facilities for commerce. There would also be room for other services here.

**HOUSING:**
The team suggested apartments on top of the new grocery store and service center. They also suggested replacing the preschool building and the building next to it and replace them with low-rise housing aimed at seniors.

**PUBLIC SERVICES:**
The team suggested a new lot for the preschool north of the existing one. They also proposed building a preschool on the southern part of the island, at Synes.

**NON-COMMERCIAL MEETING PLACES:**
The team wanted an upgrade of the existing playground. They also suggested a skate park by the harbor.

- Cycle path along Budafjellvegen
- Remove old boat hull in Tesanden
- New preschool (in addition to a new preschool at Synes)
- Upgrade playground and tear down the bus garage
- New grocery store and service center with apartments on the uppers floors.
- Skate park
- Village center with youth club, a café, and boathouses.
- Tear down the old and the existing preschool buildings and replace with senior housing.
Plan 5 had a focus on reducing traffic and increasing density and new housing.

STREETS/MOBILITY:
The team suggested relieving some of the traffic in front of the school by establishing a new road from the intersection by the school across the farmland to Molnesrema residential area. This road would continue along the foot of the mountain and connect Molnesrema and Mallavika. The bus route would also be extended to reach these areas (same as team 1 and 2 suggested).

HOUSING:
The plan suggested densifying with residential buildings in the northern part of Roald first (housing stage 1), all the way to the shoreline and to the edge of the mountain. Additional future residences could be created in the farmland between Roald and Molnesrema (housing stage 2).

PUBLIC SERVICES:
The team pressed the need for a bigger preschool and elementary school. The new road to Molnes freed some land by the existing school to build a new preschool and extend the elementary school. The team wanted these two functions to be located at the same place due to logistical reasons.
1:1500 in A1
PLAN 6
Team 6 concentrated on activities in three nodes, much like team 3. They also suggested an alternative bus route.

STREETS/MOBILITY:
The bus route would be constructed to the south of the soccer field to spare the green area to the north. The team was not quite sure where it would continue from Mallavika.

VILLAGE CENTER, BUSINESS & INDUSTRY:
The plan suggested a community hub at the intersection by the old bank building. They proposed offices for IT companies, a bakery on the corner and a park area by the entrance to the southern molo. In one of the fisheries, they envisioned a conference center. They also drew a café by the harbor, and they suggested that teenagers could run it.

BLUE AND GREEN STRUCTURES:
By locating the bus route on the south side of the soccer field, the plan could imply a green area north of this street.

HOUSING:
The plan features apartments suitable for all ages in the lot behind the existing grocery store.

NON-COMMERCIAL MEETING PLACES:
In addition to a park at the community center, the team envisioned the creation of a play area and skate park by the soccer field. They also proposed expanding the Vigra IL clubhouse to make it more adaptable to different occasions.
PLAN 7
The plan proposed residential infill of all “vacant” lots, except for a green belt in the north and some other functions in the center by the harbor.

VILLAGE CENTER, BUSINESS & INDUSTRY: The plan defined the center along the harbor and on the opposite side of Postveien. The team suggested building boathouses along the harbor and buildings with up to three floors on the other side of the street.

BLUE AND GREEN STRUCTURES: The plan suggested a thin green belt by the northern shoreline and preservation of The Ugga Bugga forest between residential areas.

HOUSING: The remaining lots south of the current village center were destined to be used for residential purposes of different kinds. In addition, the upper floors of buildings in the village center were meant to be occupied by apartments.

NON-COMMERCIAL MEETING PLACES: The plan suggested an activity area with a skate park northwest of the soccer field.
Each participant was asked to fill out a short evaluation form before leaving the workshop, scoring the three activities - Introducing the community to itself, The Roald Goals and Draw Roald of the Future - in terms of expediency on a scale from 1 to 4 and leaving a comment. Overall, participants were satisfied with an average score of 3.8, 3.7 and 3.8 on the three activities, respectively.

The workshop helped create a dialogue between the residents and us. We did, however, experience a somewhat unpleasant comment from one of the residents toward a developer at the Thursday workshop. We had hoped that the workshop would be a way of bridging all actors in Roald but did not realize that residents needed to first raise concerns and misconceptions and resolve old grudges before starting to find solutions. Other than this little confrontation, the workshops went smoothly.

Through ”Introducing the community to itself” we raised residents’ awareness about the vulnerable places that mean a lot to some community groups, and stressed their ‘sacredness’ to the identity of the community. The residents seemed pleased with our interpretation of Roald in the first activity of the workshop.

It was remarkable how similar the goals from each group, and across the two days, were. The only difference was an emphasis on infrastructure on the part of those who attended on Wednesday, while Thursday was more focused on the school and preschool. This might simply be because of the mix of people each night - several politicians and employees of the municipal administration attended Wednesday’s workshop, while on Thursday there were many young parents.

"Communicated clearly and effectively what is important to people."

- Participant on “Goals for Roald”

The last activity - Draw Roald of the Future - was very useful to both us and the participants. The participants were able to display good solutions for Roald, and the plans gave us a good foundation for developing a spectrum of plans. In return, residents appreciated this sort of activity because of its pragmatism and focus on solutions. Some participants got a wake up call about the complexity of developing plans. The plenary discussions were just as fruitful as the drawing exercise. When presenting the plans to the rest of the participants, the groups had to argue for how the plans achieved the goals. It was also very useful for us to see
Fig. 2.9: It is worth noting that those attending were all adults.

"Meget god øvelse for diskusjon."
“A very good activity for discussion”

- Participant on “Draw Roald of the future”

how some plans focused on how the different activity settings related to each other. For instance, in plan 3 where the team put much emphasis on where activities should be located in order to maximize interaction between different user groups.

We learned a great deal about the organization of workshops. Despite asking the participants to sit with people they did not already know, some participants were unwilling to do so. The resulting plans clearly revealed that some of the groups had engaged in too much talking and too little drawing. The other point worth noting was the lack of teens and children at the workshops. The event was open to all, but the youngest participants were around age 30. It led us to consider other communication channels and types of events for the next phase in order to attract a more diverse audience.
Fig. 2.10: Further development of the plans from Mjølner workshops. Sketching out a spectrum of plans.
The visions that emerged during the Mjølner workshops and the participation activities during Phase 1 led us to develop four scenarios for the development of Roald. The scenarios would give residents and other actors comparable, yet different, visions to discuss further.

This chapter addresses the issues that remained unresolved vis-a-vis the development of the spectrum of plans for Roald, followed by a presentation of each scenario.
THE FUTURE OF ROALD

addressing unresolved issues

The following points present issues that needed to be addressed to develop a realistic spectrum of plans.

1. There seemed to be a general agreement that the village center should be placed close to the existing community hub by Joker Roald and the old bank building. However, how far the center should extend was not as clear. In some of the plans, the center included the harbor, in other plans, these were two different areas of activity. These diverging views of the village center borders (and its services) might stem from the teams having different desires for the future of the community. This was also evident in that some of the plans were preserving the old wooden houses and open spaces in the center while others indicated demolition of houses in favor of higher and denser buildings.

Plans would have to be clear on what kind of residential development would be necessary for the village center development, and within what time frame the plan could be realized.

Fig.2.11: The various suggestions for the boundaries of the village center.
2. Access to and preservation of green areas was implemented in most plans by setting aside a green area along the shoreline from Tesanden to Mallavika. The width of this shoreline varied and in some solutions, it also incorporated the soccer field and Markeskogen (Ugga Bugga forest). Several plans also identified green parks in the village center and by the harbor.

Securing coherent public green areas was considered vital to the creation of a livable village in the future. The plans needed to show a higher degree of overall planning with green corridors and programming for different uses.

3. Most teams focused on a new bus route with greater coverage. This was clearly a hot topic amongst politicians and administrators attending the workshops, who drew the already proposed “ring route” in the outer edge of the village by the foot of Molnesfjellet. Some other plans suggested alternatives to this route that would connect to existing streets, as well as a few suggestions of new paths and sidewalks.

It was evident that the plans from the workshops lacked a long-term vision of a functioning system of walkable streets and paths. The spectrum of plans needed to show a coherent streetscape that was easy to navigate and alternative solutions for a potential bus route.
4. Even though most people in Roald live in single family homes, residents predicted a need for other types of housing in the future. The plans generally focused on densifying in the village center, in the northern part of Roald, and southwards to Molnesvegen. 6 out of 7 groups mentioned apartments specifically as a housing typology in the village center, and 5 out of 7 specified that the apartments should be adapted to seniors, with services in the building and facilities such as common living areas and hobby rooms. The lot behind the Joker store was identified as the ideal location for such apartments, in addition to the existing preschool, the old preschool, and the harbor.

The plans failed to show any kind of scale in other residential areas. Future plans and activities should look into the *scale and position of buildings* relative to the street and to each other.

5. Many plans showed several nodes of activity, but Roald residents wished for a vibrant village center that was used by many user groups throughout the day. The presence of people attract other people, and there would be a need to concentrate activities that drew a diverging audience. The workshop from Phase 1 with the elementary school also showed a need for meeting places and activities for the youth.

The plans needed to convey that new residents only generate a certain amount of social life and that concentrating activities would have ripple effects, such as increased economic and social capital. In addition to that, outdoor spaces needed *specific programming* to avoid becoming just another green lot.
6. Many workshop participants stressed the need for expansion of the elementary school and the preschool. They all agreed that expansion of the school at its current site would be the most reasonable solution, while the location of the preschool had several proposed solutions. Some argued that the convenience of walking from their house to pick up their children or grandchildren was most important. They suggested expanding the preschool in the lot to the west or building an additional preschool at Synes (at the southern part of the Island). The preschool administration informed us in an interview that this was their preferred solution since this meant they could walk the children to nearby play areas. Others argued that having a preschool that close to the village center was a traffic issue and that a more reasonable move would be to place it next to the elementary school and Vigrahallen, so they could drop their children off by car on their way to work.

The plans needed to illustrate what repercussions moving the preschool would have for the community in terms of walkability and quality play areas.

7. 6 out of the 7 plans from the workshops assigned a role for the harbor area that was different from the role it has today. Some plans incorporated the harbor entirely or partly as the village center area, and others gave it a more defined role - often as a more small scale tourism based hub, with boathouses and a guest marina.

As the objective of The Norwegian Costal Administration (NCA) was a little vague, the spectrum of plans needed to illustrate alternative uses of the harbor, combining social activities with fishing industry. The preferred alternative would be useful in future conversations with the NCA about the harbor’s future.
All the plans sought to accommodate The Roald Goals, and they related to the issues to be resolved in different ways. However, it is important to emphasize that each plan was carefully assessed so that functions, infrastructure, public green spaces, social hubs, etc. were all accounted for so that each plan would be a good suggestion despite fewer residents and functions. Admittedly, the plans were largely the result of the participation performed, but we did some assessments and changes to create more comprehensive plans for Roald.

The plans were based on population projections from The Central Bureau of Statistics (SSB, 2016b) for the coming 50 years (the year 2066) for low national growth, the main alternative, and high domestic growth (fig. 2.18). Giske municipality is currently experiencing a very rapid growth (from 2005-2015 it was 20.2%, compared to the national growth of 12.1%).

The projections from SSB only exist for entire municipalities and the maximum time frame is currently up to the year 2040. Therefore, we did calculations based on the average annual population growth for each alternative and specified how this growth could take place at Roald. The first option relates to a low national growth projection, with Roald accommodating for 20% of this increase. This implied that Roald would continue to have a weak role in a municipal context.

The following two alternatives were based on the main alternative projection, with 35% of the growth in Roald. This would make Roald a much more significant player in the municipality. The reason for the greater share of growth in Roald was to make these plans more realistic as Giske is experiencing such rapid growth.

The last alternative sought to examine what we considered a vibrant center development and what population growth would support that. It was based on a high national growth projection, also with 35% of this increase in Roald. Even though the percentage was the same, it would accommodate several more residents, and by extension, functions.

The number of residential units was based on the average number of people in each household in Giske municipality, in 2016; 2.52.

**SCENARIO 1**
- **+1965 by 2040**
  - Low national growth projection for Giske municipality
- **+2889 by 2066**
  - Based on yearly growth of 57 people for Giske municipality
- **+590 in Roald by 2066**
  - If 20% of growth happened in Roald
- **+234 housing units**
  - With 2.52 people in each household

**SCENARIO 2 + 3**
- **+2897 by 2040**
  - Main alternative projection for Giske municipality
- **+4260 by 2066**
  - Based on yearly growth of 85 people for Giske municipality
- **+1530 in Roald by 2066**
  - If 35% of growth happened in Roald
- **+607 housing units**
  - With 2.52 people in each household

**SCENARIO 4**
- **+4168 by 2040**
  - High national growth projection for Giske municipality
- **+6129 by 2066**
  - Based on yearly growth of 122 people for Giske municipality
- **+2145 in Roald by 2066**
  - If 35% of growth happened in Roald
- **+851 housing units**
  - With 2.52 people in each household
Fig. 2.18: The figures show the ratio of the total population in Giske that would live in Roald in the different scenarios. The rows of people represent the population in Giske municipality today, and projections in 50 years with a low national growth, the main alternative and for high national growth (SSB). Each person in the rows represents 500 people, and the yellow people represent the amount of the population living in Roald.
FUTURE HOUSING TYPOLOGIES

Roald’s housing typologies and principles

It has become clear that foreign housing expressions are a concern of many residents. The housing typologies are drafted with this in mind and are chosen with a particular focus on promoting the idiosyncrasies of Roald.

THE DETACHED HOUSE

Single detached dwellings are the most popular housing typology in Roald. This typology preserves the open and green spaces with ample space between houses. If planned holistically, views can be maintained for the vast majority of houses.

Each unit emerges as an independent part of the whole area, so preservation of unique qualities is, therefore, essential to its identity. Gabled roofs (preferably covered in slate), high foundation walls and horizontal siding panels in light colors are examples of stylistic expressions that have long been a part of residential buildings on Roald.

The house’s placement on each plot is significant for both social life in the neighborhood as well as for the overall physical expression of the area. The house should be embedded into the terrain to avoid high walls from the garden to the street in a steep plot. Local vegetation should be preserved, views from houses should not be blocked, and closer spaced houses can lead to more neighboring activities. Placing the house closer to the street rather than in the middle of the plot allows better utilization of the garden and gives the impression of a narrower street, which will prevent cars from speeding and result in safer streets.

Fig. 2.19. Example: Horizontal siding panels and slate-covered roofs on older residential building present at Roald.

Fig. 2.20: Principle for structuring detached residential dwellings.
MULTIPLEX HOUSES
Multiplex houses of two to four units appear, like the detached house, as points of buildings in the landscape. Here, too, views for most residents can easily be maintained.

The multiplex housing differs from the detached housing in that the residential units within the building are smaller. This type of dwelling is therefore well suited for both small families and singles.

The outdoor areas are half-private and appear to be a part of the overall green structure. Placing the residences on the edge of the site will provide a larger and safer living space for residents and the community at the heart of each plot.

Fig. 2.21. Example: Rosendal, a residential area in Trondheim with several multiplex houses. Houses are structured along the street with half-private green spaces protected by the surrounding buildings.

Fig. 2.22: Principle for multiplex houses.
TOWNHOUSES AND LINKED HOUSES

The townhouse is an area-saving alternative to detached houses. By clustering or attaching homes, the impact on the landscape is reduced making it possible to plan infrastructure such as roads, water, and sewage more efficiently.

The townhouse appears as a denser building structure than detached houses, but a similar structure can be found in the old boathouses. The new houses - shape and color - should strive to reflect the vernacular of the place. By varying the width and height of the units, it is possible to ensure sight lines to the sea.

The townhouses also allow defining small private outdoor areas for each residential unit in addition to semi-public areas for the community. The housing typology enables a continuous public green structure between the rows of houses that will function as a safe pedestrian trail system.

Fig.2.23. Example: Appleträdgården, Gothenburg by White Architects. A clear private zone out towards the garden. Gables roofs on each housing unit breaks up the otherwise strict structure of the townhouses.

Fig.2.24: Principle for linked and townhouses.
THE OPEN ATRIUM
These are dense, but low building units (up to four stories) that are gathered in small clusters along a major axis. The typology is inspired by the traditional cluster of farms that was located by today’s Sunday school. This open atrium is a modern interpretation of this structure and provides public spaces between the clusters, and private and semi-private outdoor spaces for residents in their respective “yards.”

Area utilization is relatively high, compared to the current housing typologies. Moreover, it is flexible in terms of acreage and building heights. This makes it possible to let some sun through, while screening and motion lines on each plot are retained.

This cluster development could easily fit the lay of the land close to the center and could be appealing to both young and old singles or couples.
THE LOW-RISE BUILDING
The low-rise building is up to five stories high and provides maximum space utilization compared to other typologies. It is best suited for the area near the village center and on plots that are "locked in."

Private areas are planned as affiliated balconies or roofs, and the street level is publicly accessible.

Low-rise buildings are suitable for people who want to live close to the village center, in smaller residential units without sole responsibility for management of large garden areas.

The ocean view from Gatå can be maintained by constructing several small units with a lower base area. The buildings will appear less massive by varying the heights. Gabled roofs reflect the local architectural style and create coherence with the boathouses.

Fig.2.27: Principle for low-rise buildings.
Fig. 2.28. Example: Slippen, Mandal. Reiulf Ramstad architects. 
Low-rise buildings that reflect local architectural style with gabled roofs and wooden cladding.
This plan improved existing structures, so they functioned best possible for as many as possible while still preserving large agricultural areas.

1. THE VILLAGE CENTER
The village center was divided into two sites. Because this plan focused on existing structures, the business-based center boundary would be quite similar to that of today. A recreational area was located near the harbor to activate this area. The two hubs were connected by roads and paths, similar to what team 2 suggested.

2. PRESERVATION OF GREEN STRUCTURES AND RECREATIONAL AREAS
It was primarily the area from Tesanden, via Mallavika and up to Molnes nature reserve that was preserved in this plan. Two green spaces were designed in proximity to the town center. This reflected an attempt to respond to the desire for public green spaces near the village center and safe walkways.

3. INFRASTRUCTURE
Infrastructure was improved, and pedestrian crossings and sidewalks were introduced where necessary. The public transit route was the same as today, a suggestion from our side to determine whether this could be a possible solution in the future. A walkway was created to increase access to Molnes nature reserve. The extension of existing roads helped organize the location of new housing units.

4. HOUSING TYPOLOGY
Detached houses and multiplex houses are the types of housing primarily present at Roald today. To increase the proportion of people living in the village center, atrium and a low-rise building near the commercial center was introduced. Denser building in these areas was explicitly proposed by teams 3, 4, and 6.

5. ACTIVITIES AND FUNCTIONS
Limited population growth offered a more limited opportunity to grow commerce. The old bank was suggested as a new youth house with café on select days. Skating elements were incorporated in the public square on the opposite side of the road of the old bank building.

6. ELEMENTARY SCHOOL & PRESCHOOL
The school might have needed to be expanded, but then within school grounds. The preschool was suggested to be expanded to include the old preschool building and the associated outdoor areas. In addition, it was realistic to think that a new preschool needed to be built on Synes as team 4 suggested.

7. ROALD HARBOR
Except for a guest marina and a public jetty on the industrial waterfront that connected the village center and the recreational area, the harbor would appear quite similar to the existing conditions. The focus was on making the harbor more accessible from the village center and use benches, and green infrastructure to make it more attractive, as wished by nearly all of the participants.
SPECTRUM OF PLANS

195

originally presented
as a1-boards

AGRICULTURE

PUBLIC OPEN

SPACE

RESIDENTIAL

DWELLINGS

ROAD

PEDESTRIAN/

BICYCLE PATH

CENTER

BOUNDARY

Molnesfjellet

Budafjellet

Molnes nature reserve

Recreational area / Access from Rota and Tesanden

Residential dwellings (detached and multiplex houses)

The preschool was expanded north towards the old preschool

RV parking

Recreational area with a guest marina

Premises for rent/courses in kiting and sea kayaking. WC facilities for visiting tourists/kilters

Public jetty

Public square with skate elements

Youth house with café on selected days

Modifications of the design on "Gatå". Public transit route kept as today

Elementary school. Eventual expansion within school grounds

Residential dwellings (detached and multiplex houses)

Fig. 2.29: Scenario 1: Today + 200 m N
Fig. 2.30: The plan supported to a limited extent new functions and activities but tried to centralize these as much as possible.

Fig. 2.31: Primarily detached houses and multiplex houses were incorporated into this plan. An atrium and a low-rise building were located in proximity to the village center.
Fig. 2.32: The plan focused on improving existing infrastructures. The new pedestrian and bicycle paths would increase access to recreational areas.

Fig. 2.33: Large proportions of agricultural land would be preserved in this plan. Large contiguous areas would be private green structure, but the plan tried to facilitate a green corridor between Molnesrema, Roald, and Molnes nature reserve.
This plan combined residential structure typical for the area and a comprehensive network of pedestrian and bicycle paths with green recreational areas.

1. THE VILLAGE CENTER
   In this plan, the village center would be extended along the waterfront from the tourist hub just south of the business center and north to the steamship pier. This was a synthesis of the team 1, 3, 6, and 7 proposals.

2. PRESERVATION OF GREEN STRUCTURES AND RECREATIONAL AREAS
   In addition to the areas mentioned in the previous plan, this plan featured several new green recreational areas over the whole Roald. Green structures surrounded several walking and bicycle paths.

3. INFRASTRUCTURE
   This plan was extensive in new infrastructure network. In addition to containing many new residential roads and neighborhood roads this plan established an extensive network of walking and bicycle paths. The public transit would cover a larger geographical area than today, combining several of the suggestions and inputs we received.

4. HOUSING TYPOLOGY
   The largest share of the new dwellings were detached houses, but there were also a lot of townhouses and multiplex houses. Higher density buildings were centered near the commercial center.

5. ACTIVITIES AND FUNCTIONS
   Although the plan and the population growth facilitated additional services and activities, there was a greater geographical spread of these in this plan. The skate park was, for instance, placed next to Mjølner. This could result in a weaker commercial center with less activity. Some of the locations of the functions and activities were directly linked to the workshop proposals, like the youth club and guest house, while others were strategically positioned by us to increase interaction and cohesion among residents living in different areas in this suburban community, like the skate park.

6. ELEMENTARY SCHOOL & PRESCHOOL
   The school was enlarged, and the outdoor areas were extended to the south and east. After careful consideration, we decided not to move the preschool to the school premises but rather relocate it to new facilities south of today’s location. This could be seen as a kind of compromise, but more importantly, the kindergarten’s preferred outdoor areas and sacred places would still be within walking distances.

7. ROALD HARBOR
   In this plan, the harbor still functioned as a small-scale fishing port, but office space and a small café were added in proximity to the steamship pier. A guest marina was suggested near the southern molo, and a public jetty made the waterfront accessible. A tourist office was located south of the commercial center. This plan truly merged and balanced all of the workshop visions without privileging one over the others.
Recreational area. Access from Rota and Tesanden
Townhouse area
Residential dwellings (detached houses)
Skating area by Mjølner
New elementary school
Residential dwellings (detached houses)
Townhouse area
Row of modern boathouses with offices and café
Public jetty
Guest houses in the old Øie-house/seasonal restaurant
Guest marina
Premises for rent/courses in kiting and sea kayaking
New and larger preschool south of current location

The store would remain in current location but expand the premises for fresh produce to the opposite side of “Gatå”
Row of modern boathouses with offices and café
Public jetty
Guest houses in the old Øie-house/seasonal restaurant
Guest marina
Premises for rent/courses in kiting and sea kayaking
New and larger preschool south of current location

Fig. 2.34: Scenario 2: Pedersen’s Road
Fig. 2.35: This plan featured slightly more functions and activities in total, but because of a greater geographic coverage, the correlation between the structures was lower.

Fig. 2.36: Detached houses still represented the largest share of new dwellings. There were also many townhouse and multiplex houses.
Fig. 2.37: The plan included an extensive network of roads. New roads were linked to existing, and the diagram closely resembled the grid structure Sverre Pedersen designed in 1954. However, it emphasized walkability in a greater extent.

Fig. 2.38: Little agricultural land would be preserved and vast areas were privatized. Still, the plan provided green corridors and access to recreational areas.
SCENARIO 3: RURBANITY

*medium population growth, denser center*

This plan sought to secure the open agricultural landscape while adding meeting area and public green spaces in a pedestrian friendly environment.

1. THE VILLAGE CENTER
The village center consisted of two main hubs interwoven and connected through a green corridor and a street with an urban feeling - a development of the proposals by teams 1, 2, 3, and 6. The commercial center was extended from today’s location to the other side of Gatå where retail was established and onwards to the southern molo where a fish outlet was envisioned.

2. PRESERVATION OF GREEN STRUCTURES AND RECREATIONAL AREAS
The settlement extension of Sandvika was located somewhat farther north towards the shoreline than in other plans. This resulted in a smaller proportion of open space in connection to Molnes nature reserve, but in return larger, public green corridors were planned within the townhouse areas, and pedestrian and bicycle paths were designed to be greener.

3. INFRASTRUCTURE
The infrastructure was very similar to that of “Pedersen’s Roald”, but with more pedestrian and bicycle paths than roads. New roads related to the existing road structure and walking and bicycle paths supplemented the road network. The public transit route in this plan included the northern molo, Rota, and Sandvika before continuing to Molnesrema, a suggestion that was supported by participants at the workshops.

4. HOUSING TYPOLOGY
Multiplex houses represented the largest proportion of new dwellings, but the plan also envisioned the location of atrium buildings and low-rise buildings near the commercial center. Fewer detached houses were featured as a result of this choice.

5. ACTIVITIES AND FUNCTIONS
A denser village center would increase the basis for business and industry. The new activities and services were centered around the two downtown hubs except for the community garden that was located in proximity to Mjølner and agricultural land. This could help restore Mjølner as an important social hub in the community.

6. ELEMENTARY SCHOOL & PRESCHOOL
Like the previous plan, this plan also emphasized the expansion of the school and a relocation of the preschool to the south of today’s location.

7. ROALD HARBOR
The harbor played a significant role in this plan. The tourist office, office buildings, cafe, skate park, guest marina, public jetty and green patios were placed in high proximity to the steamship pier. This design addressed the goal of a vibrant Roald harbor but did so in a slightly different way than proposed by the residents. It combined activities that residents kept isolated, like for instance green patios and skate park, with commerce boathouses and fishing industry.
Residential dwellings
Recreational area. Access from Rota and Tesanden
Townhouse area
Rollo park
New elementary school
New and larger preschool south of current location
Public transit route to Rota and Sandvika
Row of modern boathouses with offices and café, tourist office with courses in sea kayaking and kiting and small-scale workshops
Skating area
Guest marina
Public jetty
Youth club
The store would remain in current location but expand the premises for fresh produce to the premises of today's chiropodist or to the premises across the square
Fishing industry and fish outlet on southern molo
Retail on both sides of "Gata"
Fig. 2.39: Scenario 3: Rurbanity
Fig. 2.40: A centering of functions and activities could result in a stronger village center. The community garden at Mjølner could restore this area as an important meeting place and provide Mjølner with a more visible role in the community again.

Fig. 2.41: Higher percentage of multiplex houses, atrium buildings, and low-rise buildings would increase the population density in the village center.
Fig. 2.43: The plan secured larger agricultural areas while facilitating coherent public green areas and private green space.

Fig. 2.42: Infrastructurally this plan favored pedestrians and cyclists. New roads were linked to the existing grid structure.
SCENARIO 4: CENTEREDNESS

*high population growth, land-preservation*

This plan attempted to be area-efficient and cover a high population growth. Through “centeredness,” the plan sought to maximize the basis for business and industry.

1. THE VILLAGE CENTER
The village center covered the entire waterfront from the current commercial center to the northern molo. The majority of the retail offer was located in the southern part of the village center, but some specialty shops and tourist-based industry were situated farther north towards the harbor. This was similar to what teams 6 and 7 proposed.

2. PRESERVATION OF GREEN STRUCTURES AND RECREATIONAL AREAS
In this plan large agricultural areas were preserved. The center was presented as green because the idea was that this would be easily accessible green spaces that were available to all - even those with mobility difficulties - as suggested by one very active participant. Molnes nature reserve and the open space east of Mallavika were retained *sacred structures*.

3. INFRASTRUCTURE
The network of roads was slightly larger in this plan than in the former. The public transit route did not reach the northern molo and Rota but provided a loop to Mallavika. This change protected the green areas north of Rota and enlarged the geographical coverage of the route.

4. HOUSING TYPOLOGY
Since this plan wanted to conserve land, detached houses were kept to a minimum, while the majority of the population would be residing in multiplex houses and atrium buildings. Low-rise buildings were located on the sea side of Gatå.

5. ACTIVITIES AND FUNCTIONS
Population growth and a dense center supported more activities and functions. In this plan, these were centered, but since the village center was geographically larger than in the previous plan, walking distances became longer. Yet, the desire for an active village center and an active harbor were well catered for in this plan.

6. ELEMENTARY SCHOOL & PRESCHOOL
This plan envisioned the extension of the school to the south and east of today’s location. The preschool was relocated to new and bigger premises as suggested by team 4.

7. ROALD HARBOUR
In addition to all the functions and activities mentioned in “Rurbanity,” the youth center would also be relocated to the harbor in this plan. The harbor would be multifunctional and vibrant, accommodating for both fishing, tourism, non-commercial activities and specialty shops.
Fig. 2.45: Additional functions and activities as well as a centering thereof.

Fig. 2.46: More residential units within the atrium buildings and multiplex houses.
Fig. 2.47: Infrastructure that to a greater extent facilitated access to recreational areas and the network of pedestrian and bicycle paths.

Fig. 2.48: Preservation of agricultural land and planned green corridors through the privatized green.
PHASE 3
ROALD:DEVELOPED

INCLUDING THE COMMUNITY
ROALD:2066
Fig. 3.1: Welcoming the residents of Roald to the event Bygdepuls.
The involvement of the community in Phase 3 was carried out through a participatory event we called Bygdepuls (direct translation Rural Pulse) which aimed to gather a wide range of Roald’s residents.

This chapter examines the purpose of the event, preparatory work and conduction as well as the outcomes. Bygdepuls was held Saturday, November 5th in the boathouse ”Bryggen AS” at the northern molo in Roald harbor from 12 to 4 pm, and it drew a group of 72 participants.
Our understanding of a decentralized social community shaped the idea of Bygdepuls. We wanted Roald’s residents to be able to attend an event where they could interact with other social groups than they normally interacted with. Moreover, we wanted to show residents that Roald has a lot to offer, and that it is possible to be attractive for both residents and visitors by highlighting some of the idiosyncrasies present at Roald. We wanted to display the pulse and the vibe of the village, hence the title.

Tormund and Geir Asle are two property developers who saw the potential in the harbor and wanted to build up the fishing industry in the area. Because the Law of Jante\(^1\) is strong in the society, they had received a lot of negative feedback. The negative publicity was primarily due to ignorance, but we suspected that many did not want to lose face and therefore appeared negative when they really were curious about Tormund and Geir Asle’s work. Arranging Bygdepuls in their boathouse was therefore the beginning of a bridging process, breaking down the negative barriers between Bryggen AS and the community in general.

After working in the community for two months, it became apparent that many residents yearned for a café or a common social arena. Our intention was to give Bygdepuls content that could be alluring for different user groups. Bygdepuls was therefore planned as a public meeting where alternative community center scenarios were presented, a mini concert with a musical performance from a student from the elementary school, a casual cafe with homemade cakes and “Brendsnut” (a local soup), and a photo exhibition of

\(^1\) The Law of Jante, origionally called Janteloven, is the description of a pattern of group behaviour towards individuals within Scandinavian communities that negatively portrays and criticises individual success and achievement as unworthy and inappropriate. It was created as a concept by the Dano-Norwegian author Aksel Sandemose, who, in his novel A Fugitive Crosses His Tracks (En flyktning krysser sitt spor, 1933), identified the Law of Jante as ten rules. (Sandemose, 1933)
historical photos from Vigra Sogelag’s collection. Altogether, these activities were meant to increase the proportion of participants and be a pleasant happening for the whole population of Roald.

**THE 12 STEPS AND COMMUNICATION CHANNELS**

This event focused on step 5 (Getting a gestalt), step 8 (Developing a conceptual yardstick) and step 10 (Evaluating costs & benefits) of our intended process. In addition, this participation method also indirectly included step 1 (Listening), step 4 (Introducing the community to itself), step 7 (Idiosyncracies inspire form) and step 11 (Transferring responsibility).

We utilized Facebook and informational leaflets, which had proven to be quite effective to advertise the event. In addition, we placed posters at the local stores and visited the 5th to 7th graders to promote it. Word-of-mouth was used widely to spread the word and contributed largely in the dissemination of information about the event.
CONDUCTING THE EVENT

The event was scheduled for Saturday November 5th in the boathouse Bryggen AS at the northern molo in Roald harbor. Tormund and Geir Asle lent us the boathouse free of charge.

72 people participated throughout the event and several people stopped by the boathouse to check out the different scenarios, the pop-up café and the boathouse in general. A diverse group, from infants to senior citizens, with a wide range of interests, attended.

Public health coordinator Torill Valderhaug opened the event by welcoming residents and presenting the purpose of the event before Ellinor from fifth grade, Vigra school, performed a musical performance. Prior to the presentation of the spectrum of plans, we held a brief summary of the main points of the involvement, goals from the workshop on Mjølner and the map of sacred places on Roald. Population projections for Giske municipality and Roald were put forward to give a picture of what the future growth would imply for the village.

To make voting over the scenarios more comprehensible, we created a “ballot” (fig.3.2) where elements that often have been mentioned as important were examined systematically. This gave citizens the opportunity to vote on solutions rather than entire scenarios. The ballot also included an option for the participants to weigh the subjective importance of each individual topic, by grading them from 1 to 5. This way we were able to assess whether the participant thought each topic mattered a lot or not at all.

The ballots proved to be excellent for the discussion and while the café opened and Tormund showed those interested around the bouthouse, the various solutions were discussed and weighed against each other. Originally, we had envisaged that the vote would take place at the event, but after feedback from several individuals we decided to display the scenarios at Joker, the local store, and extend the voting time by one week. The ballotts were collected November 12th.

"Det er ikkje så lett å vite kva ein vil ha, men når ein ser det framstillt slik er det i hvert fall enklare å seie kva ein ikkje vil ha.”

"It is not so easy to know what you want, but when seeing it portrayed like this is it easier to say what we do not want.”

- Resident at Roald, present at the event.
Hvilken plan mener du har løst følgende tema best?

- Befolkningsvekst
- Boligutforming (enebolig/rekkehus osv)
- Plassering av bolig
- Ta vare på stedsøge kvaliteter
  - 1. Jordbrukslandskapet
  - 2. Offentlige frirområder
  - 3. Stedets særuttrykk
- Plassering av barnehagen
- Plassering av skateparken
- Utforming av veistruktur
  - 1. Kollektivtrasé
  - 2. Bilvei
  - 3. Gang- og sykkelsti
  - 4. Grønne korridorer
- Sentrumsavgrensning
- Mer liv i sentrum
- Blåse liv i havna
- Legge til rette for turisme
- Legge til rette for allment tilgjengelig offentlig grøntareal

På en skala fra én (1) til fem (5), hvor viktig er dette for deg?

1 2 3 4 5


Huk tak i oss om du lurer på noe!

STEMMEROBBET

Fig. 3.3: The “ballot” for the spectrum of plans. It addressed everything from the location of the preschool to the network of pedestrian and bicycle paths, roads and access to the Molnes mountains and the shores.
Fig. 3.4: Many residents decided to take part in the event. The reactions to the authentic venue were overwhelmingly positive and people had a good time despite uninsulated walls and floors with open holes to the sea for water drainage.
FEEDBACK & MAIN FINDINGS

Unlike the workshops we held at Mjølner, we did not have an evaluation form for this event. This was a deliberate choice because we wanted to keep the focus on the ballot. Therefore, we received no concrete figures on how well this event worked but nevertheless we got a lot of positive feedback from several of the participants. Among other things, many found it amusing that a public meeting was held in such unconventional surroundings, and several of those attending said that they appreciated the various scenario proposals and that it helped them understand the context of planning.

“Ej he ikkje vore her før. Her var fint. Skikkeleg typisk Roald.”
“I have not been here before. It looks great. Typical Roald.”
- Participant at Bygdepuls, discussing the location.

After the ballots were examined it became clear that scenario 3 - “Rurbanity” and 4 - “Centeredness” were those most people though would be adequate for the future Roald:

Overall, what plan do you like the best?
Scenario 1: — 6,5%
Scenario 2: 0%
Scenario 3: 51,6%
Scenario 4: 41,9%

A common denominator that both winning scenarios shared was the provision of increased services as a result of more residents and a denser inhabited center. This seemed to be appealing to many. Even those who initially did not want higher buildings anywhere on Roald.

“Komprimere og vekse. Våg å bygge oppover ikkje berre bortover.”

“Densify and grow. Dear to build higher instead of in continuing the sprawl.”
- Participant at Bygdepuls

Although all the issues listed on the ballots were discussed, some issues were rated with high importance from many on the “subjective grading” option on the ballot (fig. 3.3 page 217). Issues relating to the village center, life in the harbor, public green spaces, the network of infrastructure and location of the preschool stood out as the most important. People were also keen on utilizing tourism and arrange for comfy visits and activity opportunities.

Though the curiosity and interest was great among those who participated, only half of them voted. This number also includes the ballots that were collected at Joker Roald the following week.
Fig. 3.5: Torill shows of the spectrum of plans displayed at the local store, Joker Roald.
Fig. 3.6: Temporary park in the harbor, a community project that can be conducted early on in the implementation process. More on page 238.
The ballots from the event Bygdepuls presented useful feedback, but also many unresolved issues.

This chapter addresses the voting from the participants at Bygdepuls and presents a consensus plan based on the community feedback.

For a growth to be sustainable, development needs to happen in the right order, and with support of the community. The implementation plan secures development which matures with the community by empowering residents and promoting stewardship.
Figure 3.6 is a representation of the votes from the plans at Bygdepuls. It displays the number of votes per scenario but also renders the subjective importance of the various topics. The different colors of lines represent the different scenarios.

The dotted lines specify the number of votes each scenario received in the different topics. As illustrated, scenario 3 and 4 were superior to scenario 1 and 2.

The solid lines illustrate the subjective importance of each topic within each plan. It is based on the grading option on the ballot, where participants could rate how important they felt each design solution was on their preferred scenario, rewarding it with a maximum of 5 points.

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**Subjective importance of topics**

**Number of votes per scenario**

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**Fig. 3.7:** A graph showing the votes for each subject on the ballots from Bygdepuls. The colored lines indicate the scenarios. The dotted lines specify the number of votes each scenario received in the different topics. Each ballot gave one vote to one scenario within one topic. As illustrated, scenario 3 and 4 were superior to scenario 1 and 2. The solid lines indicate how many “points of importance” each element for the respected scenario received. Each topic could be given from 1 to 5 points.
Scenario 3 and 4 were clearly preferred over 1 and 2. Scenario 3 received most votes in total when adding up the points for each topic (see dotted green line). It was therefore our starting point when designing the final plan. However, Scenario 4 was preferred when it came to certain topics - “design of residential dwellings,” “location of preschool,” “green corridors,” as well as life in the village center and in the harbor. Also, when looking at the solid lines, some design solutions in Scenario 4 were weighted with high relative importance.

This is evident also in the topics “vibrant village life” and “an active harbor.” This proved that an assessment of several of the topics was necessary.

The topics that needed to be assessed are indicated by the circled numbers in the figure and discussed on the following page.
DESIGN OF RESIDENTIAL DWELLINGS
There was no big difference between Scenario 3 and 4 in relation to the design of residential dwellings, but they differed in that Scenario 4 received more votes while the design of dwellings in Scenario 3 was considered to be more important for more people. Further assessment of the housing typologies was necessary.

PRESERVATION OF INDIGENOUS QUALITIES
This point was closely related to the previous and next point in the list of unresolved issues. Scenario 3 scored both the highest number of votes and importance of preserving indigenous qualities, but when reassessing the design of residential dwellings and public recreational areas, this point was a natural topic to reconsider since both changes would have great influence on the qualities of the landscape.

PUBLIC RECREATIONAL AREAS
Scenario 3 received more votes, and Scenario 4 was considered to be more important relating to this topic. While the recreational areas in Scenario 3 were directed more in a north-south direction, the green areas in scenario 4 were placed in a west-east direction. The final plan needed to attempt to combine these two and to facilitate better distributed public recreational areas for the whole of Roald.

LOCATION OF PRESCHOOL
In Scenario 3 the preschool was located slightly south of the village center, but the location in Scenario 4 was the one that most people liked the best. There would, therefore, be need for restructuring of some housing and green areas if we decided to move the preschool.

INFRASTRUCTURAL DESIGN
This was initially not a topic with considerable disagreement, but if changes were made in some of the other topics, it would be necessary to reconsider the infrastructural network. This applied in particular to a possible new localization of the preschool and pedestrian and bicycle paths between this and important open areas and green spaces.

PUBLIC TRANSIT ROUTE
Since there were many opinions on where the public transit route should go, the topic was addressed again as a quality check to ensure that the geographical coverage was the best it could possibly be. If features such as the preschool were moved, the route might have to be slightly changed.
7 GREEN CORRIDORS
The green corridors in Scenario 4 scored higher than the corridors of Scenario 3 in both the number of votes and in importance. This seemed a bit strange because there were more green corridors in Scenario 3 than in Scenario 4. It might have been due to better access to Molnes nature reserve in Scenario 4. This proved a need to attempt combining the two proposals in the final plan.

8 BOUNDARY OF VILLAGE CENTER
This point was directly related to the next two points. The boundary of the village center needed to be defined by what features were added to both the village center and the harbor. Although the limit would not initially govern how Roald would become, it would say something about what one should expect of development over time.

9 VIBRANT VILLAGE LIFE
It is likely that Scenario 4 scored highest at this topic because an increased population would support multiple services, additional features, and increased activity. It would not be sustainable to combine the functions and village life in Scenario 4 with the population growth and residential structure in Scenario 3, but to facilitate a plan that safeguard both could be possible. This was considered more carefully.

10 AN ACTIVE HARBOR
What is mentioned in the previous point for the village center also applied to this point. The scenarios were designed to contain functions and activities the various population growths could sustain. Combining form and function from two different plans could prove difficult, but by changing the design of residential dwellings or population growth, it might be possible to facilitate additional activities and functions in the harbor.

MJØLNER
Although not listed in the graph, Mjølner was an important topic, and it was an independent question on the ballot (page 217). None of the scenarios gave Mjølner a central role in the community, unless including the community garden by Mjølner in Scenario 3. However, over 90% wanted Mjølner to have a more central role. It was an important signal and the final plan needed to have a clear idea of what Mjølner should be in the future.
Roald: 2066 is based on Scenario 3, with increased focus on adaptation to local housing typology and green structures from the mountain through the neighborhoods to the sea.

The final plan supports a population growth of 1714 people, which represents 73 more housing units than Scenario 3. The main physical changes from plan three are described below and on the following pages.

**RESIDENTIAL DWELLINGS THAT ENHANCE RURAL IDIOSYNCRASIES**
- Responds to issues: 1 (Design of residential dwellings) and 2 (Preservation of indigenous qualities).

The residential dwellings of the final plan are located within the same area as Scenario 3, but the townhouse typology has been replaced with attached and semi-detached houses with few links to blend in with the existing fabric. This was changed after conversations with residents at Bygdepuls who said the townhouse was a foreign element in Roald - too emphasized on the direction parallel to the contours of the terrain and therefore in danger of blocking the views to the sea. The “open landscape” quality much appreciated at Roald has proven to be equally applicable to the view from home as it is an appreciation of the farmland landscape. Furthermore, it seems like people are keen on the idea of an open atrium typology that resembles the farmyard cluster. After moving some functions, the atriums have been slightly adjusted to resemble the clusters further by splitting them up into smaller units with fewer floors. To account for this, the low-rise buildings at the docks stretch all the way up to Sambrukshuset. Here, people not seem to mind denser buildings.

*Fig.3.8: Transforming townhouse areas to linked houses with two to four units gives a less rigid expression and views over the sea for more people.*
Fig. 3.9: Roald:2066

Main path to Molnes nature reserve

Recreational area. Access from Rota and Tesanden

New preschool location

Community garden by Mjølner

Rollo park

Main path to Molnes nature reserve

Public transit route with a roundtrip to Mallavika

Row of modern boathouses with specialty shops, offices and tourist-oriented business

Residential/offices

Youth house

Public park with skating elements

Guest marina

Fishing industry, public wharf

New facilities for the grocery store. Housing on upper floors

Accommodation/premises for rental

Fishing industry and fish outlet on southern molo

Retail and business on both sides of Gatå

 Retail and business on both sides of Gatå
A VARYING RADIUS OF ACTION

A review of research related to walking distances shows that within a community, and to public transportation nodes, it is acceptable to walk up to 5 to 10 minutes to target points. This represents about one kilometer for an adult and is therefore applied as a mean measure within spatial planning (Vegdirektoratet 2012, 65). In reality, children and seniors move much shorter distances in 10 minutes. Figure 3.10 demonstrates the differences in this radius of action for the various users (Vegdirektoratet, 2012, p.97). The level of activity for seniors and children are closely related to the public green areas in proximity to their homes. This is particularly important to take into account when planning for socially and physically sustainable development and outdoor spaces in a community (Direktoratet for Naturforvaltning, 1994).

The design of the final plan accounts for the various action radiiuses by limiting the sprawl of residential areas and densifying in, and around, the village center. With a network of pedestrian paths, access and proximity to public open space, bus stops, activities and businesses, the plan is consistent with the national goal of active participation and full equality for all users. A 200-meter radius is an acceptable walking distance for most groups. The coverage of public green and bus stops within this radius from residential areas has been accounted for in the plan.
RELOCATING THE PRESCHOOL TO A SITE WITH GREEN CONNECTIONS IN ALL DIRECTIONS
- Responds to issues: 3 (Public recreational areas), 4 (Location of preschool), 5 (Infrastructural design) and 7 (Green corridors).

In the reviews of the ballots, we discovered that the green structures oriented in east-west direction were too weak. The final plan has emphasized the existing crossings over the farmland and the connections to these. Also, a new green pathway has been added to connect Molnesrema with the residential area in Roald.

The location of the preschool in Scenario 4 received most votes on the ballots. After a review of the overall consequences of placing it in this location, we decided it could still be a good solution. The preschool will have a central position between the village center and Rota. Moreover, it becomes a central part of the public green areas. Secured green corridors to recreational areas and the harbor as well as to the different neighborhoods increase the overall walkability.

DETERMINING THE PUBLIC TRANSIT ROUTE BY ROTA
- Responds to issue 6 (Public transit route)

Evaluating the public transit route depended on the result of the voting, but also on the concentration of housing as well as pedestrian safety. Most people voted on the solution in Scenario 3, and housing areas were almost identical in plan 3 and 4. Both solutions suggested that the transit route should loop to Mallavika, which therefore seemed to be very important to the residents.

Even though it is not conventional to plan bus transits in the outer edge of a populated area, the final route accounts for the resident’s wishes and shortens the distance to bus stops for people in Mallavika with a few hundred meters.
STRENGTHENING GATÅ AS THE VILLAGE CENTER STRIP
- Responds to issues: 8 (Boundary of village center), 9 (Vibrant village life) and 10 (An active harbor)

The final plan supports only slightly more residents than plan 3 (about 185). This implies that one cannot get as many features in the center as in Scenario 4, although it is what most people want. However, with denser buildings with mixed purposes, one can justify some extra functions. In order to facilitate for public life in both the harbor and the village center, all center functions are concentrated along Gatå (as it was historically). This includes offices, retail, tourism and some fishing industry, and a relocation of the grocery store to larger venues across the street from today. Several clear paths from the neighborhood to this new “strip” and to the waterfront will further enhance accessibility and activity in the center.

MJØLNER
Although we considered Mjølner’s location as too far from the village center to be a part of the walkable center, Mjølner still means a lot to the residents and should continue to have a part in Roalds’ future. Although largely dependent on private initiatives, by strengthening the connections between Mjølner and the village center one could anticipate more usage of the venue, thus keeping its position. We also suggest a patch of community gardens outside Mjølner to strengthen its position as well as keeping farming traditions alive.
Fig. 3.15: Envisioned harvest party at Mjølner community garden.
Today, a common way of conducting and implementing participation in Scandinavia in land planning processes is a variation of a "board model." This is a governance structure initiated and led by a board leader that in many cases is hired by the municipality to assist in making decisions about development processes. The leader takes on the responsibility to assemble representatives from groups in the community to speak and make decisions on behalf of the residents. The model is often referred to as councils, negotiations, or project groups (Kommunal- og moderniseringsdepartementet 2014, p. 40).

Such a board model has already been initiated in Roald. In 2010, the municipality brought together developers, business owners, and politicians in the project Eit Levande Roald (mentioned on page 142). The group spent two years collecting input from residents about development in the village center and handed over the findings to the municipality. Remaining members of the project group revealed that they considered their work finished and believed the actual implementation was up to the municipality. Some were disappointed that no visible signs of their work had yet been incorporated into the municipality’s plans.

This highlights the vulnerability of such a model. A hierarchy structure is strongly dependent on the board leader. He must be able to locate the right board members, coordinate assignments, make sure that everyone’s needs are accounted for, and secure project implementation. Should the leader or members of the board fail to follow through, the whole project could be shelved. Few people might be up for such a task. Incorporating personal agendas would also be easier in a group this small. Moreover, the model does not promote stewardship and a
profound sense of ownership as the board makes decisions on behalf of the community, causing a distance between the project in question and the community. The board could become synonymous with the project, and the community would feel less responsible for carrying it out. Furthermore, these boards are often project-based, meaning that the role of board members end when the project is handed over to someone else. As it has been the case with the project Eit levande Roald, the project might not be realized - either because the succeeding decision-makers have not been part of the project from the start or because no plan for further implementation exists. Such a model is not sustainable because its structure is fragile, and it prevents collective decision-making and continuity.

There is a need for alternative governance and implementation models that are resilient enough to last over time. Our suggested

"Bridging Model" promotes active participation from the community, who, with local wisdom and care, can develop a sense of attachment and stewardship.

The Bridging Model builds on seeing the value of participation for the individual, the community, and the landscape. The individual will experience strengthened social bonds, new acquaintances and develop new skills. Reconnecting with each other will increase social capital in the community. Moreover, by reconnecting with each other and seeing change, the individual will reconnect with the landscape and want to steward it.

Instead of becoming weaker as time evolves, more people will see the value in stewarding and strengthening their community networks. This makes The Bridging Model a more sustainable model because it will gain strength over time as more people see the benefits of joining.

"The rewards of stewardship are great to the community, the landscape, and the individual."

- Randolph T. Hester 2006, p. 364

Fig. 3.17: An alternative Bridging Model. Stewardship evolves by initiating social platforms for bridging, involving the whole community. By learning from each other and achieving results together, stewardship is accomplished, and, over time, more people will see value in participating.
IT BEGINS WITH YOU

The Bridging Model requires individual action and a step towards implementation is to encourage each resident to participate.

The Roald Resident Leaflet (fig. 3.18) could move the community in the right direction. The leaflet could be sent out to every household with the headline “what kind of Roald resident am I?” With information about The Roald Goals, illustrations for inspiration and the map of Sacred Structures, it would create an understanding of the community’s identity and awaken a desire to contribute to change.

The leaflet could also be altered to function as a way of welcoming future residents to Roald by informing them about the various associations and clubs and make them familiar with the expectations from the community to take part in stewarding Roald.

The leaflet is meant as a way of self-contemplation to find ways that everyone could contribute in the community. The intention is not a written response, but a thought-provoking initiative that mobilizes the skills that each resident possess. When having thought through one’s skills, it is easier to talk about change and turn conversations of development into action.
Fig. 3.18: The Roald Resident Leaflet - a way for each resident to think of the skills they possess to contribute to achieving the Goals for Roald. The leaflet would also work as an introduction to the community for new residents.
THE FIRST THREE YEARS
After locating the resources in the community through the Roald Resident Leaflet, conditions would be mature for executing parts of the plan.

Implementation through The Bridging Model could unfold similarly to the figure 3.19. It focuses on facilitating bridging social capital opportunities to mobilize resources in the community that emerged during the Bygdepuls event.

In the beginning, the primary focus should be on social activities (gray color). Existing traditions, like the annual lighting of the Christmas tree in Roald, “Christmas in Roald,” illustrate the type of community-building resources that will likely promote this kind of bridging. A hypothetical “Buddy” arrangement between the preschool and members of Vigra Sogelag illustrates another possible bridging opportunity, whereby preschool children visit the community’s historical sites with members of the history club and discover a collective attachment to these sacred landscapes. Simultaneously, the municipality must incorporate the physical plan into the land-use plan.

Then, to give immediate effects, interconnected groups can go together and implement “lowest hanging fruits,” like the activation of temporary venues for a youth house, a harbor park (fig. 3.6) or another project they see fit. These projects will engage many user groups and inspire more participation.

Revitalisation of Mjølner through the community garden (fig 3.15) is an opportunity for both physical change, education, bridging and socializing.

The Bridging Model is a complex system that is dependent on all individuals in the community. However, as change is instantly rewarded, and since no one person has to sit with all responsibility, it is a much stronger system than the board model. Over time, with strengthened networks and trust, residents will seek to assemble in participatory workshops to address complex challenges, such as more time-consuming housing projects - for instance, the first steps of senior and mixed housing in the village center.
Fig. 3.19: A hypothetical situation the three first years of implementing The Bridging Model. Focus is on facilitation for bridging opportunities through both social events, and events related to planning, building and stewarding the landscape. By tackling “simple” tasks that give instant effects, people will realize the value of participating. Later, more wicked problems can be solved.
The physical structures, three years after implementation, could look similar to the diagrams below.

**HOUSING 2019**

Fig. 3.20: Housing projects that already have been planned are built, and residential development starts with apartments in the open atrium (senior housing) and low rise building near the village center.

**PROGRAMMING 2019**

Fig. 3.21: The old bank building is used as a temporary youth club. Through voluntary work between the school, local artists, the Velforening and other residents, a temporary park by the harbor is built. Establishing a community garden by Mjølner.
GREEN STRUCTURES 2019

Fig. 3.22: Trees along the main streets are planted, and important green corridors between neighborhoods are secured to public access to form a green infrastructure.

MOBILITY 2019

Fig. 3.23: The local public transit route remains as it is. One could start to connect streets near village center and establish pedestrian paths along green corridors and the shoreline.
MEMORIES IN THE MAKING...

Any attempt at a rigidly plan for a continuation of The Bridging Model over 50 years would only be speculative. However, our implementation diagram gives an indication of how bridging could continue over the years as new residents arrive.

Continuation of this projects’ Phase 3 is shown in red. This phase focuses on “the lowest hanging fruit” (page 239). After three years, larger and longer-lasting projects from the plan should be implemented (see Phase 4). This will likely increase the influx as a result of Roald becoming attractive for new residents (Phase 5). Phase 6 and 7 will complete the plan for physical development while continuing the bridging process with new activities.

The diagrams on the following pages show how the physical landscape could evolve. Reassessment of the plan will be necessary from time to time to adapt to coming needs.
Fig 3.24: A speculative diagram over how The Bridging Model could work in Roald for the next 50 years.
The physical structures, 12 years after implementation, could look similar to the diagrams below.

**HOUSING 2028**

*Fig. 3.25: By 2028, development should begin in Roald, starting with mixed housing and the integration of new functions in the harbor area, meeting the demand for growth in the community. Later on, housing should be in the form of infill near the village center and northward toward Mallavika.*

**PROGRAMMING 2028**

*Fig. 3.26: This period will be characterized by the addition of many added functions. A new preschool and expansion of the elementary school. The goal is to densify the area and add mixed functions along Gatå in the harbor: offices, tourism, housing, a youth club, a café and a new grocery store.*
GREEN STRUCTURES 2028

Fig. 3.27: Green corridors and public green areas are secured between the new residential areas. The harbor park contributes to a more comprehensive green network.

MOBILITY 2028

Fig. 3.28: Development begins to move northward, the public transit route is moved to the route as indicated in the Roald:2066 plan (page 229). Paths follow green corridors between houses.
The physical structures, 25 years after implementation, could look similar to the diagrams below.

**HOUSING 2041**
*Fig. 3.29: Housing develops towards Mjølner.*

**PROGRAMMING 2041**
*Fig. 3.30: Added functions are introduced on the southern molo - a fish outlet and a one room hotel on the outermost tip.*
GREEN STRUCTURES 2041

Fig. 3.31: The new linked houses and quad houses offer green spaces in between, and corridors from the village center to Mjølner and from the shoreline to Molnesfjellet.

MOBILITY 2041

Fig. 3.32: Streets and paths connect to existing network.
The physical structures, 50 years after implementation, could look similar to the diagrams below.

**HOUSING 2066**

*Fig. 3.33: The complete built-out of the housing in the final plan. A mix of residential dwellings, Quad houses and linked houses connect Mjølner to the residential area.*

**PROGRAMMING 2066**

*Fig. 3.34: No new functions are added compared to the previous diagram.*
GREEN STRUCTURES 2066

Fig. 3.35: With the last residential houses, the green network now offers safe, car-free paths all the way to Mjølner.

MOBILITY 2066

Fig. 3.36: The final infrastructural network offers a high degree of connectivity and provides safe paths for pedestrians to the central nodes in the community.
Fig. 3.37: Roald harbor park, established in Phase 4 - “Jump of junctions” - ca. the year 2023.
DISCUSSION

ROALD:VIA BLE

LESSONS TO BE LEARNED
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Fig. 4.1: Olav Sindre in his workshop, discussing his business and role in the community.
This chapter addresses the goals and research question.

Achievement of Goal 1 - Identify and perform an approach that is suited to the context of Roald - is related to the evaluation of the participation methods and the approach.

Goal 2 - Arrive at a comprehensive plan for future development that empowers the community - seeks to answer whether the plan and its implementation model help empower the community.

Finally, we conclude by revisiting our research question - How can community participation facilitate a physically and socially sustainable development of Roald?
By reflecting on the work done in Roald over the course of the past four months, we can begin to assess the successes and failures of each participation method individually and the overall process as a whole. Success should be understood as the degree to which the method in question fulfilled its intended purpose and facilitated community building, and a potentially sustainable development, physically and socially. In addition, it is useful to assess the extent to which the method fitted the context, the diversity of the attendees and the time consumption in planning the methods in order to make it easier for communities to decide on a future participation approach. The explanation of the participation is included in the chapters named “Including the community” at the beginning of each phase (page 61, 155 and 213).

The following text looks at each participation platform followed by an assessment of the fit of The 12-Step Process as an approach for community redevelopment in the context of a Norwegian small town.
GOAL 1:
Identify and perform an approach that is suited to the context of Roald
Fig. 4.2: A table synthesizing the evaluation of the methods used. The colors indicate the extent to which each method achieved to affect the various categories that will be discussed on the following pages. The table can serve as a reference for communities that wish to perform participation in the future.

Although some of the activities ultimately scored better than others, the rating for the entire participation process was good. Success is understood as the degree to which the method in question fulfilled its intended purpose and facilitated community building, and a potentially sustainable development, physically and socially.
ONLINE SURVEY
With a total of 116 participants (of which 84 from Vigra, and 57 from Roald) the survey could have engaged more people. Nevertheless, it provided information to form a comprehensive first impression of the case study. In this sense, the platform fulfilled its purpose, even though the number of participants was lower than desired.

The method facilitated the gathering of information and the uncovering of the identity of Roald, essential to begin the process. To a lesser extent, our process also helped generate greater social capital in the community. The number of people reached (2470), the number of likes (17) and shares of the Facebook posts (14) by several participants in the process, and the more frequent discussions on topics addressed in the survey by costumers at the local store can be seen as informal indicators of success. Even though the platform did not address physical sustainability, the emphasis on social capital led several of the residents to begin to reconsider their role in the community.

While the survey was a low threshold method that was easy to initiate compared to the number of participants it was extended to, it failed to engage children and teens. In addition, the online survey platform was designed to obtain information, not to create a dialogue. Predetermined choices provided too little room for participants to express personal thoughts, values, and perceptions with regard to the future of Roald.

The communication channel used in disseminating knowledge created through our community participation also proved to be inadequate. The municipality is extremely active on Facebook, making it possible and easy to reach many residents. However, the constant feed of information through Facebook sometimes causes important issues to be overshadowed by less important issues. Our team found that the municipality should make a more diverse use of communication channels, restricting the number of posts and finding a way to highlight them by order of importance.

PERSONAL AND GROUP INTERVIEWS
For the most part, the interviews fulfilled their intended purpose, but we underrated the time needed to recruit informants. This resulted in fewer interviews than expected spread over a greater period of time. Nevertheless, the richness that emerged from each interview was remarkable, providing us with invaluable insight into the community and a deeper understanding of the challenge of building community.

Interviews largely contributed to the understanding of the social network and power structure of Roald, but did not fully perform a community-building function. They did, however, help identify key people and resulted in the mapping of sacred places. In that sense, the interviews facilitated for both physical and social sustainability.

Although the interviews were a unique possibility to invite the community to reflect and take on responsibility, most interviewees had a hard time picturing what their role in the development strategy would be. On more than one instance, we noticed a tendency to push responsibility for implementing change on other groups or the municipality. In retrospect, stressing the need for individual responsibility, even more, would have been useful. Nevertheless, almost all interviewees
continued to be engaged in the rest of the participation process. The time spent to go off script was, in that sense, an investment in the further engagement of residents.

The interviews were vital to understanding the complexity of the social structures in the community. However, the lack of interviewees, skepticism towards outsiders like us, and the doubts that residents had about the relevance of their knowledge required the input of additional time and energy. One lesson learned in Roald is that successful participation requires persistence and perseverance.

WORKSHOPS AT VIGRA ELEMENTARY
Children were included in the project from its early stages through the workshops at Vigra elementary school. However, it was difficult to keep this user group engaged. In the future, more focus should be placed on the time span and repeated inclusion of the children.

The degree to which the method facilitated community building is another important finding. The children who attended seemed open minded in their perception of the community and were willing to learn. While potential for this participation method to build community was high, the results were mixed. This was undeniably associated with the lack of repeated inclusion of the children later in the process. Nonetheless, the students’ workshops resulted in original ideas with regard to programming and overall vision of a future community center, such as a self-run youth club. Roald children also provided valuable insight into their perceptions of the physical landscape. They revealed the importance of establishing safe and attractive pedestrian and cycle paths to facilitate physical and social sustainability.

Shyness and lack of trust inhibited some of the children from participating in our process. Because the workshops were held during school hours, participation may have seemed ‘mandatory,’ and this may have alienated some of the students. A future participatory process should strive for an involvement and participation that is entirely voluntary.

Considering the lack of mutual trust, our ‘outsideness’ and the unfamiliarity to the children, this platform was in some extent fitting in its context. The presence of teachers at the workshop was an important resource. However, a more thorough briefing explaining their role ahead of the workshops would have helped them move from observers to participants.

YOUTH BBQ
The BBQ also failed to attract the audience of younger residents. The low turnout prompted the women who were called to help organize the event to join as participants. This spontaneous opportunity for bridging social capital gave adults and children who did not already know each other a chance to do something together.

How one should go about engaging the youths on Vigra is still an open question. When repeated attempts to contact them was fruitless, the Youth Council in Giske proposed using social media to spread the word about our participation process. Facebook is no longer the social media of choice for young people. Therefore, future similar efforts should carefully select the necessary social media and outreach platforms.

THE MJØLNER WORKSHOPS
The Mjølner workshops attracted a variety of user groups, but showed little diversity.
in terms of generations. Adults and seniors participated, resulting in another potential failure to engage youths and children, and bridge user and age groups.

With regard to community building, the workshops sparked unexpected and unprecedented confrontations and reactions. Despite the discomfort, the conflict that emerged during Thursday’s workshop (page 178) deepened the dialogue and ultimately helped residents understand that there are always two sides to one story. Residents became aware of each other’s feelings and ideas, and were united around the possibility of future collaboration, thus achieving greater community building and social sustainability.

We regarded political support for the project as very important to increase its credibility and chance of realization. However, participation by politicians on the workshops proved somewhat problematic. Most workshop attendees were influenced by the opinions of the present politicians, as their opinions trumped discussion on issues that were already “decided.” The survey had revealed that the confidence in the municipality and its politicians was weak. Letting the workshops be yet another political arena would not be for the best of the community. Therefore, community workshops should focus on the residents of the community at the beginning of a project. Later on, when the community have decided on the best solutions, politicians should be invited to participate.

The politician’s presence at the workshops turned the focus towards empowering the residents and reinforcing the message that their contribution was important in shaping both the landscape and community.

A few adjustments to the process would greatly enhance its effectiveness. For instance, an event focusing on mapping and addressing the misconceptions and old grudges could have preceded our workshop activities in order to clear the table before moving forward. In addition, more emphasis should have been placed on attracting several generations, for the benefit of Roald’s social capital.

**BYGDEPULS**

Of all the activities, the event Bygdepuls was the most successful in achieving its intended purpose. The single most evident reason for its success was the broad involvement of the community that led to a wider sense of ownership and citizens’ empowerment.

The focus of the activities on building greater community pride and distinctiveness proved to be very appealing to those who participated. By opening the workshop to a broader range of user groups we were able to facilitate community building and social capital.

It was apparent that citizens who had not previously been involved in our participation process lacked a holistic understanding of the physical landscape. It was, therefore, satisfying to see participants that had previously participated explain to the new participants the intention of the various design solutions. This turned into a way of transferring knowledge about the landscape to the rest of the village residents and empowering the ones who had been participating for some time.

By including local players and showing of the distinctiveness of Roald, the method was unique to its context. It was the method that best facilitated bridging social capital, and it proved to be diverse, rich and engaging.
Fig. 4.3: A graphical representation of how the various platforms end up in the strategy of triangulation. It is the sum of all the platforms that together facilitate a participatory process that includes several user groups and makes an approach suitable for a context. It is, therefore, important to identify which platforms that address the different user groups in the community.
AN APPROACH SUITABLE FOR THE CONTEXT
Even though the individual activities did not always achieve their intended goals, overall they facilitated a participatory process that to a considerable extent engaged several interest groups (fig.4.2) and created invaluable opportunities for bridging across many users. In this sense, the process was a success. This might not have been the case if The 12 Steps to Community Participation had not provided a basis for shaping a place-specific approach. Steps 5 and 8 (Getting a gestalt and Developing a conceptual yardstick) provided invaluable insight into the community and its needs, while Step 4 (Introducing the community to itself) provided vital feedback on the process.

Although The 12-Step Process facilitated extensive and thorough participation, it is debatable whether any participatory approach can be a perfect match to a community that is not already familiar with extensive participation. This process has made it clear that knowledge and understanding why and how one should take part in a participatory process is vital to a design process' success. Moreover, our process revealed that it is necessary for all individuals in a community - citizens, politicians, and private developers - to possess all the necessary information in order to make good decisions. In Giske, all three groups seem to lack understanding of why extensive participation is key for a viable community, making it challenging to identify one approach that is a perfect fit. For this to be possible, such understanding and knowledge need to mature over time, and a replication of The 12 Steps to Community Participation could help ensure that.

Because of its comprehensiveness and its focus on stewardship, The 12 Steps to Community Participation could function not only as a participatory approach but also as an educational framework that aims to raise awareness about the importance of community participation in the life of a community struggling with weakened social capital and identity. It could also be helpful in making sure things are implemented over time with the contribution of all individuals in the community. Considering its adaptability, it possesses the opportunity to transform into an approach that is tailored to and suitable for its context. This, however, requires introducing the community to the importance of working together, monitoring and adjustment. In Roald, our project’s phasing diagram had to be changed along the way to fit the context (fig. 4.4).
DISCUSSION

ON SITE

Individual oriented participation

Group oriented participation

Community oriented participation

STEPS

Listening

Setting Goals

Mapping & Inventory

Introducing the Community to Itself

Getting a Gestalt

Drawing anticipated Activity Settings

Idiosyncrasies Inspire Form

Developing a Conceptual Yardstick

Spectrum of Plans

Evaluating Costs & Benefits

Transferring Responsibility

Evaluation after Construction

PHASE 0

ON SITE

Personal interviews start

Group interviews start

Survey opens

W.32

Aug. 12th - Aug. 31st

Group interviews end

Survey closes

PHASE 1

Roald: Explored

Personal interviews end

Group interviews end

Workshops Vigra elementary

W.33 W.34 W.35 W.36 W.37

Interview with private developer

Sept 18th - Oct. 5th
Fig. 4.4: The 12 Step Community Participation process has proven to be very flexible and resulted in several changes and adaptations in the implementation of the steps. This phasing diagram displays how the process was carried out. The original diagram found at page 56-57 describes how the approach was intended to be carried out.
GOAL 2

The final plan (Roald:2066) addresses the physical design of the future village of Roald, while the implementation plan focuses primarily on how such development could empower the community.

Empowering a community is a matter of recognition and acceptance of the residents’ views, ideas, and needs. The success of this goal is therefore measured by 1) the extent to which the final plan reflects findings from the participatory process and 2) the extent to which the implementation plan facilitates empowerment of residents.
GOAL 2:
Arrive at a comprehensive plan for future development that empowers the community
REFLECTING FINDINGS FROM THE PARTICIPATION IN THE FINAL PLAN

The following pages summarize the proposals that were incorporated into the final plan. The circles indicate the participatory activities where they originated.

Survey I Interviews E Workshop elementary school M Mjølner workshops B Bygdepuls

Although several of the proposals emerged during various phases of the process, the Mjølner workshops focused on shaping the physical landscape of Roald and contributed the most information regarding the qualities that a village would display. It therefore had the most significant impact on the final plan. However, these workshops were only the last activity before voting over the spectrum of plans, and almost all participants in earlier phases also attended the Bygdepuls event, which acted as a synthesis of all the overall feelings toward a new town center design for Roald. Thus it is possible to conclude that the process has empowered residents in the community to participate and speak their mind. Should the final plan be implemented, it will further increase the degree of empowerment. It will, however, be necessary to revisit the final plan every 10-12 years to assess whether it still meets citizens’ wishes, values, and needs.

INCLUDED AS SUGGESTED

SKATEPARK S I E M B
- by the harbor

GUEST MARINA I M B
- next to the steamship pier

PREMISES FOR RENT M B
- the shed at the tip of the southern molo

SENIOR HOUSING S I M B
- in the village center

ELEMENTARY SCHOOL S I E M B
- larger premises at today’s location

PRESERVE SHORELINES S I B M B
- preserved and made accessible through paths and public jetties
PUBLIC TRANSIT ROUTE - the route is slightly changed to protect Markeskogen and ensure larger coherent recreational areas

YOUTH HOUSE - the Youth House is included but will eventually move from the old bank building to the harbor

LARGER STORE FACILITIES - the location is changed but the feature is kept

IMPROVED PATHWAYS - altered into green corridors that facilitate bicycling and walking and green spaces with high proximity

PRESCHOOL - larger premises with safe connections to key outdoor areas. Final location suggested by one group at the Mjølner workshops.

RECREATIONAL AREA ROTA-TESANDEN-MOLNES - same location, a larger area than suggested by residents is set aside

PRESERVE VIEWS FROM HOUSES - accommodated as far as possible but not for all the dwellings because high density might take precedence

PRESERVE THE OPEN LANDSCAPE - denser construction of residential dwellings preserve open landscape

INCLUDED BUT SLIGHTLY CHANGED

A VIBRANT ROALD HARBOR - multiple functions and activities by the harbor; retail, leisure, industry etc.

FISH OUTLET - unspecified premises

MJØLNER - a more central role, not specified what

RESIDENTIAL DWELLINGS - character of the dwellings and local building traditions are maintained through suggestions of material, heights, and sizes of buildings

MORE ACTIVITIES AND FUNCTIONS - some activities and functions should be maximized without specifying what and where they should be. The final plan centered most of the functions and activities in the village center

PARK - several residents wished for public parks and open green spaces in close proximity to the homes. In the final plan, there is a network of green structures and several parks

FACILITATE TOURISM - primarily focused on the kiters and potential hikers. A tourist office by the redesigned harbor, comprehensive network of trails and village center that focuses on idiosyncrasies makes Roald a more attractive destination

SMALLER RESIDENTIAL UNITS - smaller residential units for singles and smaller families, location not specified

INCLUDED ACTIVITY/FACILITY WITH UNSPECIFIED DESIGN/LOCATION

LESSONS TO BE LEARNED 269
EMPOWERING RESIDENTS THROUGH THE IMPLEMENTATION PLAN

As discussed in goal 1, The 12 Steps to Community Participation provides a valuable starting point to bridging various interest and user groups. However, there is a need for continued bridging initiatives to achieve a sustainable development in the long run. The Bridging Model could, to a larger extent than a standard board model, encourage stewardship and increased participation in the community. However, even the participation process of this project - where the primary focus was to increase involvement and social responsibility among residents - bear some resemblances to a board governance model. Although the implementation strategy indicates which stakeholders that should contribute in different steps, it is hard to say if the transfer of the responsibility for future development to Roald’s inhabitants will be affecting. The continual referencing by residents to the project as “Ida and Tonje’s project” is a clear sign of this.

The process we started in Roald alone cannot help move a community from a standard board model to The Bridging Model. As the implementation plan illustrates, empowerment of residents is entirely dependent on local initiatives, but it is, nevertheless, worth noting that through major and minor events the possibility of bridging stakeholders that normally would not interact increases. Furthermore, it is important to emphasize the importance of continuity in both bridging and bonding social capital since both are needed. Bonding social capital requires less effort. It could simply be achieved by including and introducing new residents to one another. Bridging social capital can only be achieved by fostering a sense of community and belonging. The process is never ending which is taken into account in the implementation plan.

When looked through the lens of Sherry Arnstein’s Ladder of Citizen Participation (fig.4.5), this project has reached the step of Partnership (the lowest step of citizen power) while most participation in municipal contexts reaches Informing or Consultation (step 3 & 4). At the beginning of our project, most residents were reluctant to move up the ladder, but some of them eventually pushed for better participation as time went on and their trust in the process solidified. It became evident that in order to make residents climb the ladder, participation facilitators must be patient, tolerant, and work their way up the ladder together with citizens, slowly. Through continuous bonding and bridging, Roald has the potential to climb it to the upper part. It will, however, take both time and effort to get there and stay there, seeing as the steps of the ladder are not static conditions.
Fig. 4.5: Destination: Roald seen in the context of Sherry Arnstein’s (1969) Ladder of Citizen Participation. Through continuous participation, the community of Roald could climb the ladder to the top.
Identity, sense of belonging, and landscape stewardship have been steadily decreasing in the community of Roald. The research question, which derived from the “Reciprocity Cycle” illustrated on page 23, aimed to reconnect Roald to its landscape. Through the cycle, it became evident that a development that was both physically and socially sustainable was needed.
RESEARCH QUESTION:
How can community participation facilitate a physically and socially sustainable development of Roald?
FACILITATING A PHYSICALLY AND SOCIALLY SUSTAINABLE DEVELOPMENT THROUGH THE RECIPROCITY CYCLE

In the final stage of the Reciprocity Cycle the community, powerholders, and landscape exist as units with equal influence on each other. However, through our participation process, it has become evident that the structures in the cycle become more intertwined when community participation is introduced (fig. 4.6).

In the online survey, 70% of resident newcomers stated that they were active members of an organization or an association. This indicates that Roald’s inhabitants can rely on bonding social capital. However, as explained on page 138 in the decentralization of social network, the community lacks bridging between the various groups. Applying The 12-Steps Approach will help construct stronger bridging social capital, while a consistent use of The Bridging Model will maintain the stronger bonds in the future. Continuous bridging of various stakeholders through different communal activities - e.g. the “Buddy” arrangement, community garden by Mjølner, etc. - will reduce the perceived distance between old and new residents and enable cohesiveness in the community. Naturally, this bridging also includes municipal officials, local politicians, private landowners, and private developers.

Through an iterative process, the various community groups will be able to converge and eventually find that despite the different roles, they could arrive at common goals and desires for their community.

The result will be a tight-knit community, more diverse social networks, and a greater number of connections across groups and individuals.

Bridging across networks offers great opportunities for education about the value of their landscape, its history, opportunities, and limitations. Furthermore, it would facilitate socializing in public space, knowing what the Sacred Places are, and even creating new ones. The gap between the community and the landscape could decrease and result in a desire to care for, and steward the landscape.

The result will be a community that, through community building, has gained knowledge and an understanding of their landscape and of itself. It will enable them to make decisions about future development with the landscape and communities best interests in mind.
The final step of the Reciprocity Cycle as it was presented in the introduction.

A tighter vowed and more sustainable community through a continuous use of The Bridging Model.

When the residents share knowledge and educate each other, the gap between the community and the landscape can be sealed.

A community with invaluable insight and knowledge of opportunities and limitations, with a profound love for their community and landscape, has the opportunity to facilitate a more physically and socially sustainable development.

Fig. 4.6: Further development of the “Reciprocity Cycle”. Through community participation it is possible to facilitate for a more physically and socially sustainable development.
The process has illustrated that by conducting community participation the likelihood that future development can become more physically and socially sustainable increases. But whether this works in practice is largely dependent on the local population’s commitment and willingness to participate. Nevertheless, this commitment and willingness can be stimulated. Through this process, two main findings have distinguished themselves as essential in order to achieve this:

1. The approach has to be tailored to its context and
2. There is a need to empower residents

We believe that by focusing on a continuous process and empowerment citizens’ desire to participate will increase. Municipalities who want to engage in future community participation should, therefore, emphasize this.

**RECAP AND CONCLUDING REMARKS**

**APPROACH**

- organize repeated inclusion of all user groups
- persistence and perseverance - time is of the essence
- aim for a diverse use of communication channels, restrict number of posts and highlight them based on importance
- strive to make participation entirely voluntary
- include community first, invite politicians later
- map and address misconceptions and grudges before moving forward together
- transfer the knowledge continuously
- work by a realistic time frame, community building takes time and effort
- learn of coincidences with beneficial impacts
- dare to adapt the approach; it is not static
EMPOWERMENT

- strive to move from board governance to “The Bridging Model”
- facilitate for continuous bonding and bridging
- bridge stakeholders that normally would not interact
- be patient and tolerant - climb the ladder slowly
- level stakeholders and power holders - reinforce the message that resident’s contribution is important in shaping both the landscape and community
- start with the lowest hanging fruit to gain trust and confidence from individuals involved in the process
- educate and be educated - all wisdom is essential to achieve a viable community
- encourage residents to empower and engage others
"You can lead a horse to water, but you can’t make it drink."

- Proverb
BIBLIOGRAPHY


PBL. *Lov om planlegging og byggesaksbehandling (plan- og bygningsloven).*


**LIST OF FIGURES**

Unless otherwise noted, photographies, illustrations or figures are photographed or created by the students.

Fig. 0.3: *Fisherman from Vigra* (n.d.). Copyright Vigra Sogelag

Fig. 0.6: Brundtland Commission. (1987). *The three dimensions of sustainability.*

Fig. 0.7: Arnstein, S. (1969). *Ladder of Citizen Participation.*

Fig. 0.8: Baran, P. (1964). *On distributed Communications: 1. Introduction to Distributed Communication Network.*

Fig. 0.11: Comparison of the Reasonable Person Model and Hester’s 12 Steps. Table adapted from Grese (2015).

Fig. 0.12: Ruggeri et. al (2004). *The town of Westport.* Permission granted.

Fig. 0.13: Illustration of The 12 Step Process. Adapted from Kot & Ruggeri (2005).


Fig. 1.10: Photo by Bolstad, P. Painting by Overvoll, O.H. (n.d.) *En hemmelighed.* Retrieved from Sevrin Haugen, Vigra Sogelag.

Fig. 1.19: Flatmo, A. (2008). *The main marine shoreline.*

Fig.1.23: eKlima. (2016). *Wind rose, Vigra, winter time.* Available at: http://sharki.oslo.dnmi.no/portal/page?_pageid=73,39035,73_39049&_dad=portal&_schema=PORTAL&6009_BATCHORDER_3197941 (Accessed: September 10th 2016).


Figure 1.30: Unknown (1942). *Roald harbor in the winter of 1942.* Photograph from the archives of The Norwegian Costal Administration (Kystverket)


Fig. 1.35: Unknown (1954). *The zoning plan of Roald by Sverre Pedersen.* Plan retrieved from the archives of the NTNU library.


Fig. 2.28. Reiulf Ramstad Architects (n.d.). *Slippen*. Available at: https://www.behance.net/gallery/21974525/Slippen-Mandal (Accessed: November 3rd 2016)
ATTACHMENT 1

Question from the online survey.

THEME 1 - DEMOGRAPHICS.
1. What is your age?
2. What is your gender?
   a) Woman
   b) Man
   c) S/he
   d) Do not wish to answer.
3. What is your current situation of employment?
   a) Student
   b) Full-time employed
   c) Part-time employee (without being a student)
   d) Homemaker
   e) Leave of absence
   f) Unemployed
   g) Retired
   h) I do not wish to answer this question.
4. Domicile-wise, what is your connection to Vigra?
   a) I live on Vigra
   b) I live in one of the other islands in Giske municipality
   c) I live in Ålesund, but travel occasionally to visit Vigra
   d) I used to live at Vigra or one of the other islands
   e) I have visited the area in the past, but have never lived in the area
   f) Domicile-wise, I have no affiliation to Vigra
   g) I used to live at Vigra, but now I live on one of the other islands in Giske municipality
   h) I have previously lived at Vigra, but do not live in the immediate area now
   i) None of the above options match
5. How long have you lived at Vigra coherent? Please state the number of years.

THEME 2 - SATISFACTION AND IDENTITY
6. Are you satisfied with the offer of the following on Vigra? [Options: offer is satisfactory - the offer is not satisfactory - I do not use this offer - I do not know]
   a) Job opportunities
   b) Cafés and shops
   c) Non-commercial venues
   d) Sports fields
   e) Roads
   f) Pedestrian and cycle paths
   g) School facilities
   h) Opportunities for outings
   i) Public transport
7. To what extent do you perceive the following locations on Vigra as important for the island’s identity? [Options: In no extent - to a limited extent - neutral - to some extent - to a large extent - I do not know].
   a) Blimssanden
   b) The nature reserve around Rørvikvatnet
   c) The hiking areas around Molnesfjellet
   d) Joker Vikane
   e) Joker Roald
   f) The airport
   g) The agricultural landscape
8. To what extent do you see the following features on Vigra as important for the island’s identity? [Options: In no extent - to a limited extent - neutral - to some extent - to a large extent - I do not know].
a) Views of the ocean  
b) The sea as a resource (fishing, recreation)  
c) The agricultural tradition  
d) The industrial site at Gjøsund  
e) Vigra’s history

9. Are there other places or features that you see as important for the island’s identity?

THEME 3 - AFFILIATION  
10. How would you describe Vigra and Vigringer to a person who has never been here before?

11. How likely is it that you move to Vigra in the future? 
   a) Not likely  
   b) Unlikely  
   c) Neutral  
   d) Somewhat likely  
   e) Very likely

12. What is the reason you want to or do not want to move to Vigra? 

13. How likely is it that you will continue to live at Vigra in many years to come?

14. Where at Vigra do you live? / Where at Vigra did you use to live? 
   a) Blindheim  
   b) Blindheimsvik  
   c) Gjøsund  
   d) Molnes  
   e) Roald  
   f) Rørvika  
   g) Røysva  
   h) Røysa  
   i) Synes

THEME 4 - SOCIAL CAPITAL 
15. Are you an active member of a local organization or club (sports, arts, social organization)? / Were you an active member of a local organization or club? 
   a) Yes  
   b) No

16. Have you attended an event in the local community during the last 6 months (e.g. Church, school concert, craft exhibition football match)? / Did you attend an event in the local community at least once every 6 months? 
   a) Yes  
   b) No

17. To what extent are you satisfied with your social network? / To what extent were you satisfied with your social network?  
   a) Not satisfied  
   b) Slightly satisfied  
   c) Neutral  
   d) Somewhat satisfied  
   f) I do not know

18. To what extent are you satisfied with the relationship to your neighbors? / To what extent were you satisfied with the relationship to your neighbors? 
   a) Not satisfied
b) Slightly satisfied
c) Neutral
d) Somewhat satisfied
e) Quite satisfies
f) I do not know
19. How many days last week did you hold a longer conversation with one or more of your neighbors? / How many days in an average week did you hold a longer conversation with one or more of your neighbors?
a) 0
b) 1
c) 2
d) 3
e) 4
f) 5
g) 6
h) 7
20. Please rate the following statements by how well you think they match you and your community. / Please rate the following statements by how well you think they matched you and your community when you lived at Vigra. [Options: disagree - slightly disagree - neutral - somewhat agree - agree - I do not know].
a) My local community feels like home
b) I feel valued in my community
c) I can name all who live on my street
d) The neighborhood attend dugnads
e) I attend dugnads
f) My neighbors would stand up for me if I was sick and needed help for a period
g) I’ve picked up trash for others in a public place
h) It is safe to walk down my street when it is dark outside
i) Most people can be trusted
j) I get help from friends when I need it
k) I often bump into friends and acquaintances when I shop at the local store
l) I enjoy living around people with different lifestyles
m) It’s natural for me to say so if I disagree with something “all others” agree on

21. A stranger experience engine failure outside your house. Would you have invited him / her in to use the phone and wait for help?
a) Yes
b) No
c) Depends on the person

22. You are responsible for a young child in your house but are required to run some errands. Would you ask a neighbor to look after the child?
a) Yes
b) No
c) This doesn’t apply to me. I am a child.

23. A stranger who seems very different moves into your neighborhood. Would this person be accepted by your neighbors?
a) Yes
b) No

THEME 5 - PARTICIPATION IN MUNICIPAL PLANNING PROCESSES
24. To what extent do you think Giske municipality facilitate participation so that you can express your personal needs? / To what extent do you think Giske municipality facilitated participation so that you could
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express your personal needs? [Graph ranging from 0 to 100. 0 = to no extent, 100 = to a large extent]

25. To what extent do you think Giske municipality takes your needs seriously in municipal planning processes? / To what extent do you think Giske municipality took your needs seriously in municipal planning processes? [Graph ranging from 0 to 100. 0 = to no extent, 100 = to a large extent]

26. Now follows some allegations of participation in municipal planning processes. Please tick for the value you think is most appropriate [Options: disagree - slightly disagree - neutral - somewhat agree - agree - I do not know].
   a) Participation is time-consuming
   b) Participation is boring
   c) It’s hard to know where I should go to participate
   d) Participation creates a stronger local community
   e) Participation is only a formality that does not give citizens any real power
   f) Participation gives me the power to influence changes in my community

27. Are you interest in taking part in participation dealing with a new area regulation of Roald?
   a) Yes
   b) No
   c) I do not know

28. How much interest do you have of these activities? [Options: no interest - little interest - neutral - some interest - great interest - I am not familiar with this activity]
   a) Workshops in the evening (weekdays)
   b) Workshops during the weekends
   c) Personal interviews
   d) Group interviews
   e) Walking tours or hiking in nearby areas
   f) Social events (barbecue, krabbelag etc.)

29. Could the following activities increase your interest in taking part in participation dealing with a new area regulation of Roald? [Options: yes - no - I do not know.]
   a) Workshops in the evening (weekdays)
   b) Workshops during the weekends
   c) Personal interviews
   d) Group interviews
   e) Walking tours or hiking in nearby areas
   f) Social events (barbecue, krabbelag, etc.)

30. How did you hear about this survey?
   a) Through Facebook
   b) Through your web page
   c) My child is a student at Vigra Skule. I got information of the contact teacher.
   d) I received the information from an acquaintance.
   e) Other.
ATTACHMENT 2

Interview guide for residents.

THEME 1 - THE INTERVIEWEES
RELATIONSHIP TO VIGRA AND ROALD
1. For residents.
   a. How long have you lived on Vigra?
   b. On what part of the island you live?

2. If they live somewhere other than Roald:
   a. Do you ever visit Roald?
   b. If yes, what do you usually do there?
   c. How often do you go there?
   d. What is it that make you visit other places?
   e. What would it take for Roald to become a place you would like to visit more often?

3. Can you tell us a little about yourself and your interests and how you see yourself in the community? Do you have an active role in your community?
   a. What keeps you here at Vigra? Why do you choose to continue to live here?
   b. Do you envision yourself living on Vigra for a long time?

4. How would you describe people from Vigra?
5. How do you think others would describe people from Vigra?
6. How would you describe people that live in Roald?

7. What do you like the most about Vigra? In your opinion, what is the "soul of Vigra"?

8. Places:
   Where do you like to go to be alone?
   Where do you like to go with your friends?
   Where is your favorite place to walk?
   Where is your favorite place to relax?

9. If you had visitors who had never previously been to Vigra what places would you take them?

10. If you had visitors who had previously never been to Roald what places would you show them?

11. Habits of transportation.
   a. What mode of transportation do you typically use if you are going to Ålesund?
   b. What mode of transportation do you typically use if you are going to Valderøya, Giske or Godøy?
   c. What mode of transportation do you typically use within Vigra?
   d. What is the reason for choosing means of transportation?

THEME 2 - DEVELOPMENT AND CHANGE
12. Village center.
   a. Do you think Vigra should have a more defined center?
   b. What activities and functions do you think such a center should hold?
   c. Where do you think is the most natural location of such a center and why?
   d. (If the interviewee answer another place than Roald) Could Roald be a suitable place for a center for the whole of Vigra?

13. Housing:
   a. What do you think about the possibilities of building residential dwellings at Vigra?
b. Where do you think the housing should be located? Why there?

c. What do you think about the possibility of building residential dwellings on Roald?

d. What properties would you like to be developed for this purpose?

e. Where should one avoid to build residential dwellings?

14. What do you think about the possibilities of tourism on Vigra?

15. Is there anywhere you would want to preserve just as it is?

16. What type of change would you like to see at Vigra the next 10-20 years?

17. What changes do you think could harm Vigra?

18. Could you please define what you think are the borders of Roald?

19. What changes do you think would be good for Roald?

20. Do you think it is necessary with a growth to bring about these changes?

21. What kind of growth or change do you think could harm Roald?

22. How do you think that you as an individual can help bring about these changes that you have talked about in your community?

THEME 3 - OPEN QUESTIONS

23. Is there anything else you think we should know about or do you have some stories you want to share?

24. Is there anyone else you think we should talk to?

25. Do you have any suggestions for activities you think could fit as part of the participation approach?

26. Did you participate in the online survey?