

Planning and design for sustainable development in a local context 2001-2021

- 20 years of students' visions and design projects for sustainable futures



School of Architecture

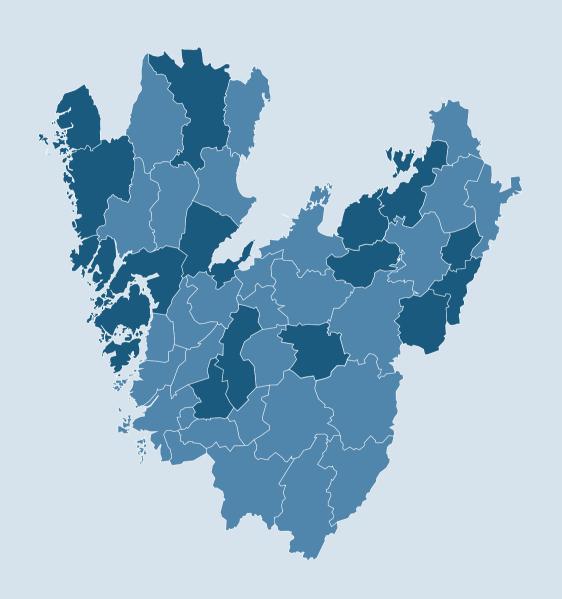
Department of Architecture and Civil Engineering

Planning and design for sustainable development in a local context 2001-2021 - 20 years of students' visons and design projects for sustainable futures Ed. IDA RÖSTLUND, NILS BJÖRLING

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Department of Architecture and Civil Engineering Urban Design and Planning Division Chalmers University of Technology 412 96 Göteborg Telefon: + 46 (0)31-772 1000

Chalmers Reproservice Göteborg 2022 Thank you to all of the students, tutors and municipalities who have been a part of the development of the course over the last 20 years.



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Introduction

The master's course Planning and Design for Sustainable Development in a Local Context started in 2001 at Chalmers School of Architecture and as such celebrated its twentieth anniversary in the autumn of 2021. To highlight the work of the students, we have compiled this publication to showcase how the course has developed over several years. This is both in relation to its pedagogy and the approach to critically discussing the importance of sustainable development and also by showing how we through architecture, urban design and planning can support a transition towards sustainable societies. The course, called Local Context on a daily basis, aims to combine profound knowledge about the local situation with a broad understanding of its different contexts. It is around this combination that the pedagogy has been developed in several steps for mapping, analysis, and design projects. A central part of the course structure is the common analysis which is based on the local situation in relation to global, regional, and local trends. From this the students then themselves identify and formulate their in-depth projects, and in many cases, the analyses and student proposals have identified new issues and given new perspectives on the opportunities for how society can develop in many new directions.

Each year, the course has sought to work with a smaller municipality since this provides very good pedagogical opportunities for studying the interplay between the built environment as form and spatial change and as societal processes. It has allowed the course to collaborate closely to practice and without this close relationship with the municipalities, residents and local stakeholders, the course would not have been possible. To work in the context of a smaller municipality also adds to the variation of settings the students encounter during their education and provides a greater range of situations to work in, such as outside cities and metropolitan regions.

The compilation of student projects that we have done for the publication are only a selection of the more than 250 projects that over 500 students have developed in collaboration with 18 municipalities in Västra Götaland over a period of 20 years. We hope that the compilation is an inspiration for continued work at both local, municipal, and regional levels.

The Development of a Design Studio for Sustainable Development

Lena Falkheden | Björn Malbert

Teachers and examiners from 2001 to 2018

The design studio *Planning and Design for Sustainable Development in a Local Context* was developed in the early 2000's as one of several studios within the master program Architecture and Planning Beyond Sustainability (MPDSD). The master program was a result of the Chalmers Environmental Initiative (CEI), a strategic investment in the environment and sustainable development made between 2000-2008. This initiative allowed the Department of Architecture to have new professors in design for sustainable development who began in 2001: Mikael Eden and Björn Malbert. These professors were given three main assignments. Firstly, to ensure that teaching and research at the Department of Architecture was developed in line with the requirements of sustainable development. Secondly to collaborate with research groups in other sections at Chalmers and thirdly to develop contacts and collaborations in the outside world. The assignment to develop the teaching also included developing proposals for a new master program in architecture which would focus on sustainable development.

The master program MPDSD was built around already ongoing research and teaching in sustainable urban development and sustainable construction at the department. In research, the ongoing programs Sustainable development and Urban Structures in the City and Mistra Sustainable Building were both important starting points. In addition to the design studio Local Context, a studio on sustainable architecture (Mikael Eden) and a competition studio (for students in architecture and civil engineering) were initially developed in collaboration with various developers and were sponsored by architect Hans Eek, they focused on resource and energy efficient construction. Furthermore, the studio Design and Planning for Social Inclusion was developed based on research collaborated with the University of Gothenburg and local actors in Hammarkullen (Jenny Stenberg), it focused on suburban challenges and development processes. Another studio was focused on remodelling and renovation (Solveig Schulz) and was carried out in collaboration with relevant property owners. Reality Studio (Maria Nyström) was originally run at the School of Architecture in Lund but moved to Chalmers in connection with the start of MPDSD. This studio worked with challenges for everyday life in informal settlements, mainly in Kenya, in collaboration with NGOs and local actors as well as UN-HABITAT.

A basic premise for the design of the master program MPDSD was that challenges and conditions for sustainable development vary significantly both within and between regions in the world. There are no single solutions that can be applied everywhere. One other basic idea was that the students would train themselves to understand and analyse different local situations and contexts, and in collaboration with local actors they would identify planning strategies and design proposals that can support sustainable development within specific situations. The intention was also that the students would learn to take on future design and planning assignments based on the current situation. Several of the courses and studios within MPDSD were also open to students with a background other than architecture, for example students with a bachelor's degree in physical planning, landscape architecture, civil engineering, and technical design. The reason for this was that sustainability issues are so complex that collaborations across disciplinary boundaries are necessary and these can be practiced during the master program.

The Local Context studio was initially developed in collaboration with the EU-funded project Stenakademin based in Sotenäs municipality in northern Bohuslän and the theoretical basis was taken from our doctoral dissertations. Lena Falkheden studied the local area as a strategy for sustainable urban development and especially the need for different types of conditions and structures to support sustainable development in the local community, e.g. through cases from Denmark¹. Björn Malbert studied the practice and involvement of planners in communicative planning processes based on their contemporary practice². Our common interest in local development in sustainability made it easy to collaborate on the design of the studio.

Other important motives for the design and structure of the studio were a desire to broaden the perspective in architectural education, as much focus in urban development projects have previously been placed on the larger cities and urban contexts. Our focus has instead been on the smaller towns, peripheral urban areas, and the countryside, where we have identified good conditions to transition to sustainable development. From a pedagogical perspective, collaboration with smaller municipalities also means that students more easily gain an understanding and an overview of how the complex processes of community building are organized. There is also a greater proximity to politicians, civil servants, and citizens.

^{1.} Falkheden, L. (1999). Lokalområdet som strategi för en hållbar stadsutveckling: fallstudier av tre danska exempel. Diss. Göteborg: Chalmers tekniska högskola institutionen för Arkitektur

^{2.} Malbert, B. (1998). *Urban planning participation: linking practice and theory*. Diss. Göteborg: Chalmers tekniska högskola institutionen för Arkitektur.

Against this background, the design studio developed around the following main elements:

The local situation. Through a week-long site visit, with study visits, lectures by local politicians and civil servants, interviews of local actors, site analyses and individual characterizations in sketchbooks and by photography, the purpose is to practice mapping, understanding and analysis of the local situation and identify local strengths and weaknesses from the perspective of sustainable development.

The broader context. Analysis at different levels; regional, national, European and global, in order to identify trends and driving forces, which in different ways can affect the local situation and create possible opportunities or highlight potential threats to sustainable development.

SWOT analysis. Group work on analysing strengths, weaknesses, opportunities, and threats from the initial elements and presenting them in a concise format which can be communicated to politicians, civil servants, and the inhabitants in the local community.

Local goals. Group work on developing local goals for sustainable development that are based on strengths which take advantage of opportunities but that also counteract weaknesses and deal with threats. Here, students gain insight into politicians' difficulties in formulating, negotiating, and agreeing on clear and communicable local goals.

Local development strategies. Group work on thematic planning and design strategies that can support the local goals and handle identified strengths, weaknesses, opportunities and threats.

In-depth project. Here, students individually and in small groups write program and spatial design projects, planning initiatives or processes based on analyses and jointly developed local goals and strategies.

Examination. All projects are presented and discussed with students, teachers and invited guests, including stakeholders from the town / municipality in question.

Exhibition and presentation. The studio ends with a large exhibition and verbal presentations on site for politicians, officials and interested residents. Throughout the studio period, we place great emphasis on developing the students' ability to present, critique, and discuss their work and results.

Of course, the studio has developed over the years based on gained experience, of which students views were an important aspect. In the beginning, before the master program was established in its current form, the teaching was carried out in Swedish. When Chalmers restructured its education programs in line with the Bologna model, three-year bachelor programs and two-year international master programs were introduced, with the latter being in English. This posed new challenges, not only for us teachers who had to change the language from Swedish to English, but it also meant extra work for the Local Context studio as the Swedish students had to translate their communication and presentation materials for the local actors. On the other hand, the participation of the international students was a very positive addition to the studio providing many new perspectives.

We are grateful that the studio has been appreciated among Swedish and international students and by the sites and municipalities we have collaborated with. We have never had to actively search for municipalities to collaborate with - in fact we have often had a queue of interested municipalities who have invited the studio. An interesting observation that we have made over the years is that in the beginning it was often civil servants with a strong interest who wanted inspiration and motivation to advocate for initiatives to support sustainable development towards the elected representatives. In recent years we have noticed a much stronger interest from politicians, as they have realized that students contribute with ideas and proposals that can be discussed with the municipal residents without prestige.

For the students, the meeting with the local actors, perhaps future clients, or employers, has been very valuable. For many of them, the studio has shown the various assignments for architects within the public sector. We have been happy to see that after completing their education, a number of students have been employed in various municipalities as planning architects and several have even moved onto positions such as city architects or head of Planning and Community Development.

For us teachers, the opportunities to get to know different local contexts have been very interesting and educational. We appreciate the hospitality and willingness to cooperate we have met over the years and hope that the presence of the design studio has set something positive in motion for sustainable development in the local communities. In those cases we are very proud and grateful to have contributed.

The Course: Planning and Design for Sustainable Development In A Local Context

The overall theme of the studio is planning and design for sustainable development with a focus on small or medium sized Swedish municipalities characterized by both urban and rural areas.

As planners and architects, we will meet the challenges of contributing to sustainable transformation in society through our profession. We have to plan, design, construct and maintain the built environment (land, water, buildings, and infrastructure) taking departure in the vision of sustainable futures, which in our part of the world means both reducing our energy- and resource use as well as our environmental impact, but also promoting a fairer distribution of resources. Furthermore, we need to develop and apply approaches which not only focus on eco-efficiency and zero-impact, but also on regeneration and a positive ecological and societal change. Another important part of our task is to plan and design for spatial structures and a built environment that supports and encourages sustainable decisions and actions in everyday life – to make sustainable choices and lifestyles easy and attractive.

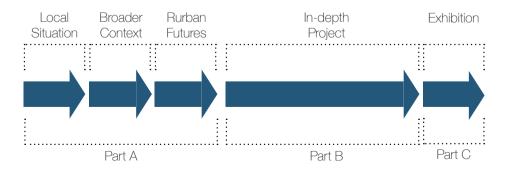
Planning for sustainable development demands a holistic approach and integrated solutions. Every task, proposal and measure has to depart from an understanding of the conditions of the specific place and situation in question. To be able to understand the local situation we need a broad knowledge that includes many different aspects but also new visions of the future. This concerns natural, physical, spatial and environmental as well as historical, social and organisational conditions and potentials. In other words, knowledge about local ways of life and cultures as well as their future needs in terms of living conditions. We also need knowledge about the broader context - regional, national, global - and contemporary development trends. Additionally, it is necessary to render, model and reflect upon and identify what the multi-dimensional and complex vision of sustainable transformation might imply in relation to the specific local situation, which also is multi-dimensional and complex in itself. Here architects and planners can combine critical perspectives on current situations with generative design thinking to formulate and develop directions, strategies, tactics and projects for transition to sustainable futures.

/ Aim

The overall aim of the design studio is therefore to increase knowledge and understanding of the planning, design and development problems as well as possibilities of small and medium sized municipalities / communities / towns in the perspective of sustainable development. Furthermore to train the ability to describe, analyse and interpret the local situation in a broad perspective, including spatial and architectural characteristics as well as environmental, social and economic aspects. We can therefore, with a point of departure in an understanding of the conditions of place in a local as well as in a broader context, work out and try visionary principles of planning and design of spatial structures and the built environment in support of positive and sustainable futures.

/ Structure

To guide this aim in a pedagogical structure the design studio is divided into three parts with different assignments. The first part of the studio is carried out in larger groups (5-6 students) and focuses on understanding and analysing the local situation in its context and the possible futures. This requires an understanding of the geographical and functional context, identifying directions for transformation and to work on planning- and design strategies and key projects in support of sustainable spatial transition. The assignments in the first part of the course consist of three different parts: a) The Local Situation, b) The Broader Context, and c) Rurban Futures. The second part of the course is carried out in smaller groups (2-4 students) and contains work on a planning- and design (in-depth) project that can support the directions and strategies developed in the first part. These projects may be carried out at different spatial levels. The last part of the course is about communicating the outcomes of the studio and contains work on a common exhibition and presentation for local- and regional stakeholders and inhabitants.



/ The local situation

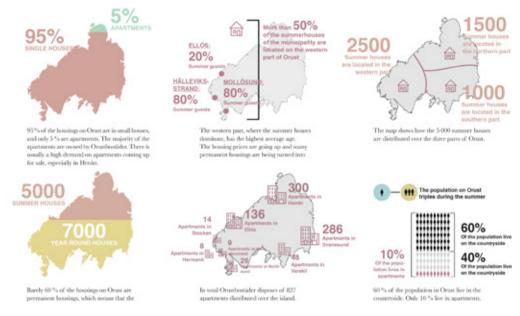
The first assignment of the first part of the course is carried out in larger groups (5-6 students) and is about meeting, exploring, describing and understanding a local situation. The assignment includes making inventories and characterisations of new sites every year. The geographical and spatial inventory includes topography, landscape, infrastructures and the built environment as well as different aspects related to everyday life in six thematic areas: To settle, To make a living, To move around/in and from, To grow up/live and grow old, To develop through history, and To survive in a long-term perspective. Together the mapping and analyses establish a knowledge base for identifying strengths and weaknesses in the local situation.

/ The broader context

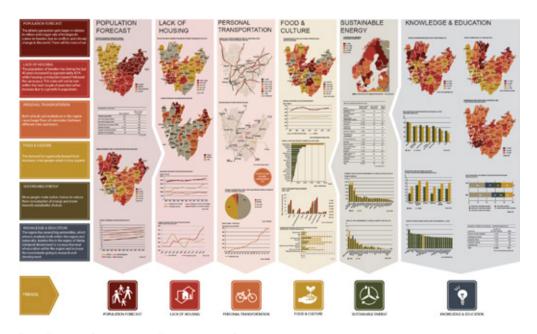
In the second assignment the students identify and reflect upon some of the trends and the driving forces behind these trends in the surrounding world, in different areas of society and at different levels. These trends and driving forces that enable or constrain changes will have impact on the future transformation of the local situation at hand. Assignment 2 is about making a context analysis of the local situation based on the municipal, regional, national, European, and global contexts. The assignment ends with a SWOT analysis where the findings from the broader context are combined with the findings from the Local Situation in order to see how opportunities and threats impact local strengths and weaknesses.

/ Rurban futures

The third assignment in the first part of the course makes use of the collected knowledge to explore the potential in different futures for the sites and municipalities at hand. Architects have always worked with different kinds of futures and architectural thinking to imply projection of new alternatives and visualization of possibilities. Visionary thinking is in this way used to test and critically discuss current conditions and potentials. Architecture and landscape affect how society is reproduced or how it can allow a transformative future of society. The future is however open for many directions and social, environmental, and economic conditions permit or constrain how the built environment and landscape could change. To elaborate on different futures, the students formulate different directions and describe their social, political, economic, environmental, and technological conditions and what spatial effects they have on architecture, settlement, and landscape.



From Local Situation Orust - To live on Orust



From Borader Context Hjo - Region Västra Götaland





In the near future

In 2025 the old tain station has been inaugurated and is a place for the local residents to meet and shop in the goorery stoes. Where residents of Fáglank have started to grow their own food and are now selling it in the shop. The rising transportation prices has resulted in local food now being cheaper than the imported goods.

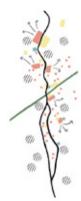
Due to lack of housing the local residents have started a conhousing project in the south part of Falgarek. The local residents are contributing the house market by building Antefallichus. small buildings, on their plots. At the same time the associations has also expanded and are in need of new spaces. The old barn is therefore transformed into a co-working area.



Sharing new norms

Due to decentralization, the population of Fáglavík has increased drastically. As a response to the population inflow more co-housing projects have emerged along Glasbrukovisgen.

The climate crisis has led to new norms. Ten years from now people are starting to feel asharred of their old habits. The desire to own and consume has dropped drastically, Sharing is the new norm and most of the population in Fáglavik are becoming self-sufficient. People no longer only invest in themselves but in society. All projects that benefit the society are therefore financed by Fáglavik AB.



Free as a bird

In 2050 the property boundaries within the society have disappeared there is no longer any land ownership. Faglank is now only limited by its contour. All land within this is tree to develop as long as it follows a sustainable spirit. The community is now developed completely independently.

Local democracy has decided that all residents should be self-sufficient. The forest that has been taken down to build new constructions has been converted into arable land.

As a result of the growing trend of farming. Fäglavik has now started to export their crops to nearby cities. Consequently, of this the train going through the area is once again stopping.





LOKAL TILLVERKNING

Genom en lokal produktionskedja tyggd på digitala verking och modular design ar det enkelt för alla att designa, tillverka och monters sitt egna hem. Standantioerade element minimerar kostnader, transport och produktionstid.



DELADE UTRYMMEN

Minimering av yta genom att dela fler utrymmen såsom gemensamma kontor, matplatter, verkstader, nutmum eller bilpooler sparar kostnader för kontoruktion, upprämming, underhåll och elektrotet.



FLEXBILITET OCH MOBILITET

Design für demonteringgör det lättare für hus och samhallen att växa och anpassas gradvis. Det möjliggör också flytt eller forsäljning när behoven förändras.



BIOLOGISKT NEDBRYTBARA MATERIAL

Delar skapade av billiga lokala råvaror såsom trå, halm och lera är biologiskt nedbytbana och kan var del i en kontrollerad biologisk cykel utan att fororena naturen.



SJÁLVFÖRSÖRJINING

Genom att utnyttja lokala råvaror och arbetskraft skapes ett mer motssåndskraftigt och oberoende samhalle och minskar kossnader för t.ex. mat och energi.

From Ruban Futures Fåglavik - Sharing Community (top) and Affordable Housing (bottom)

/ In-depth projects

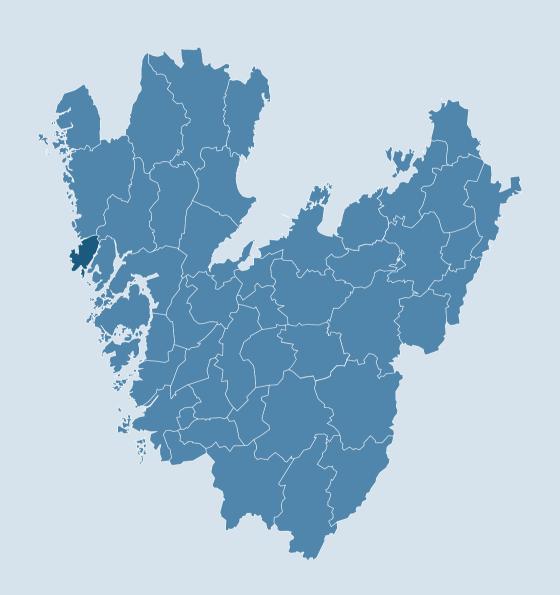
The second part of the design studio is dedicated to the development of in-depth projects. The intention with the in-depth projects is to deepen the studies of, and further explore and develop, issues concerning planning and design for sustainable transformation. The common starting point is the work done and insights gained during part A. The in-depth projects may be dealing with different topics and may concern different spatial levels, for example more in-depth analyses and concrete design proposals for development and transformation of different buildings, areas, sites, and communities. The in-depth project may also focus on local-municipal-regional relations, exploring some thematic issues – for example urban-rural linkages, housing, circular loops of resources or fair distribution of welfare service.

/ Exhibition

In the third part of the course the main task is to put together and arrange the material from the entire design studio into an exhibition and a presentation on site.



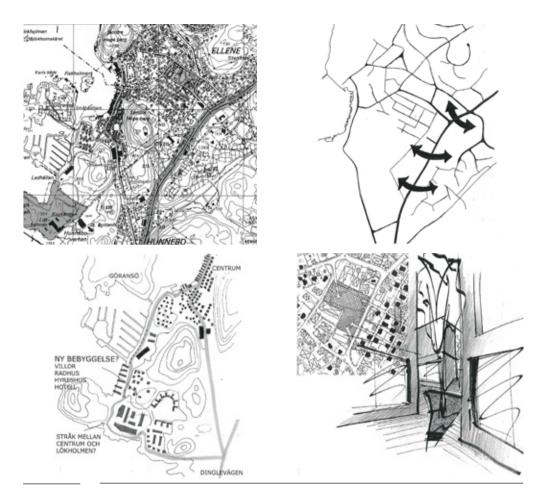
Exhibition on Orust January 2018



2001-2005 Hunnebostrand, Kungshamn, Bovallstrand, Smögen

Sotenäs Municipality

Between 2001 and 2005 the studio worked with different sites in Sotenäs municipality. The material saved from these years are limited and the examples selected are from the studio vision 2001 for Hunnebostrand and a project from 2005 Kungshamn and Smögen.

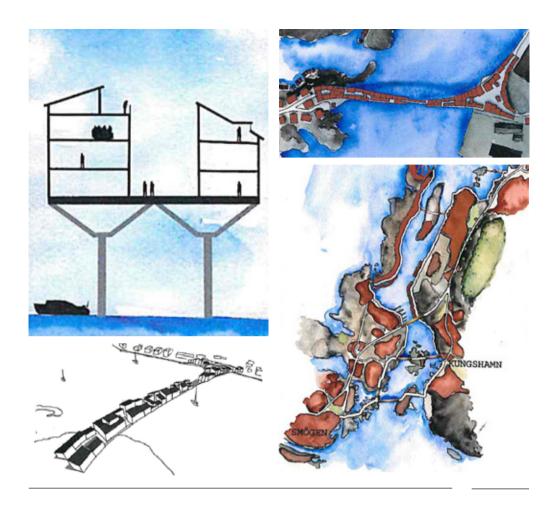


2001 - Hunnebostrand

Studio Vision

The Vision for Hunnebostrand 2021 was created by the studio as a way to present important questions for sustainable development. The vision was developed in three parts; social aspects, urban design and ecological values. Based on these, four strategies for future development of Hunnebostrand were proposed.

1. Proposed areas of exploitation 2. Connectivity of areas over barriers. 3. Concept for new housing developments and paths. 4. Revitalisation of area by the local food store.

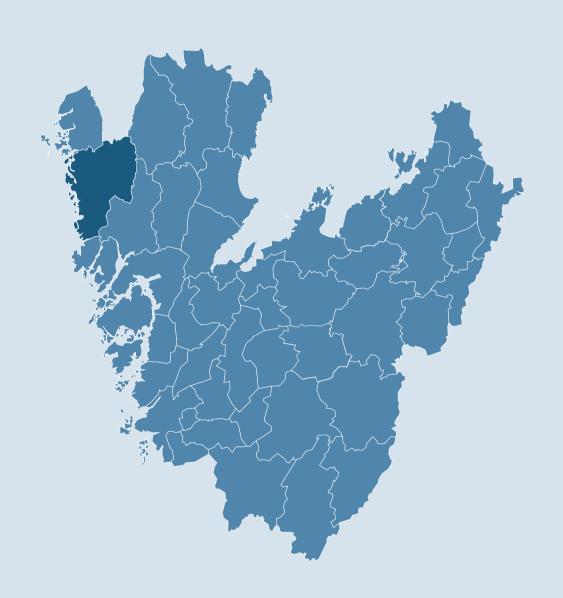


2005 - House on the Bridge

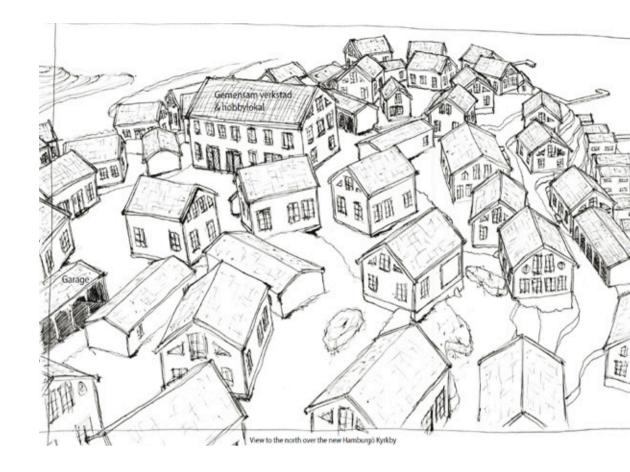
Anna Karin Fridh

By proposing a new bridge with housing and service function the project aims to strengthen the connection and cohesion between Smögen and Kungshamn. The shape of the bridge considers conditions such as accessibility by water and the characters of the proposed buildings are derived from local building tradition.

1. Section at wide part of the proposed bridge 2. Plan of bridge 3. Perspective from Smögen 4. Comprehensive plan indicating housing



2006 Hamburgsund Tanum Municipality

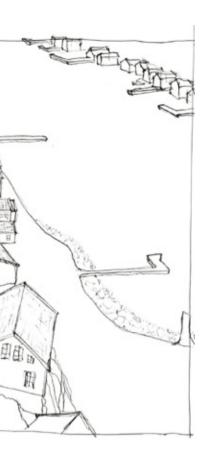


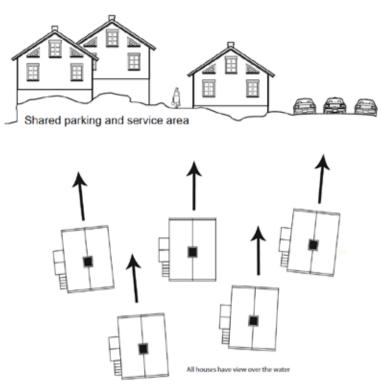
Hamburgö Kyrkby

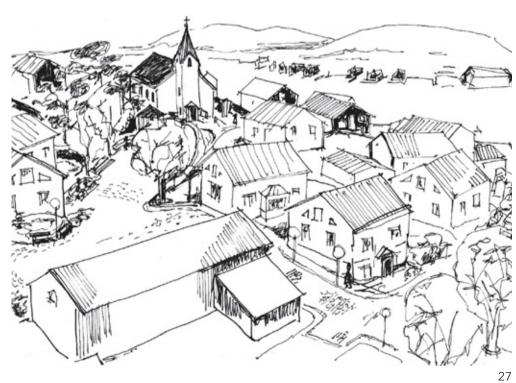
Cecilia Thelander | Lukas Memborn

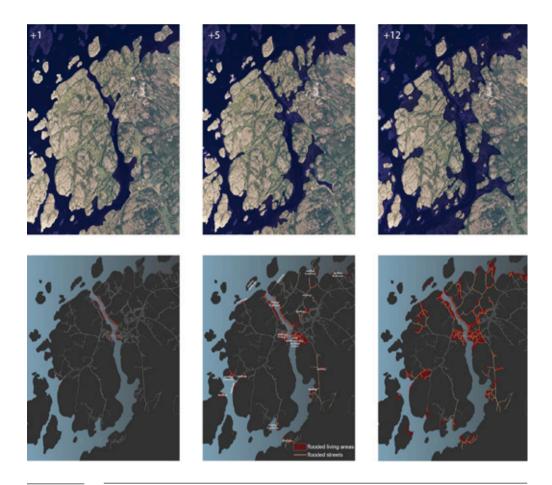
The proposal for a new Hamburgö Kyrkby was based on a thorough analysis of building tradition and qualities along the coats of Bohuslän. The strategies included building with the landscape, considering widths of buildings, creating views and narrowing streetscapes.

1. View of the proposed new residential area 2. Selection of concepts to keep within the Bohuslän building tradition. 3. View over proposed road to the church for pedestrians and cars.









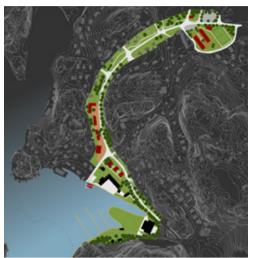
Climate Change and its Effects on Hamburgsund

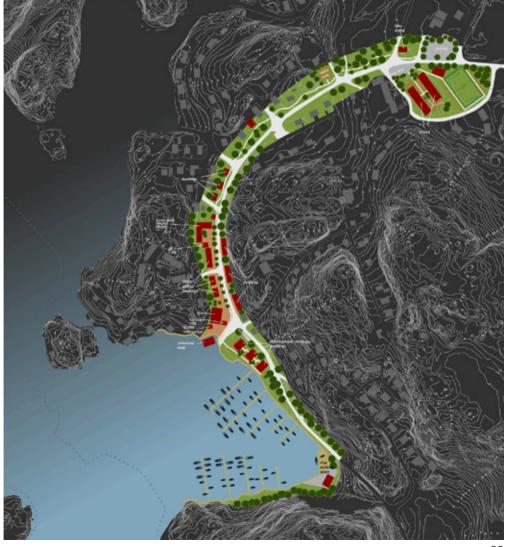
Anna Markulla

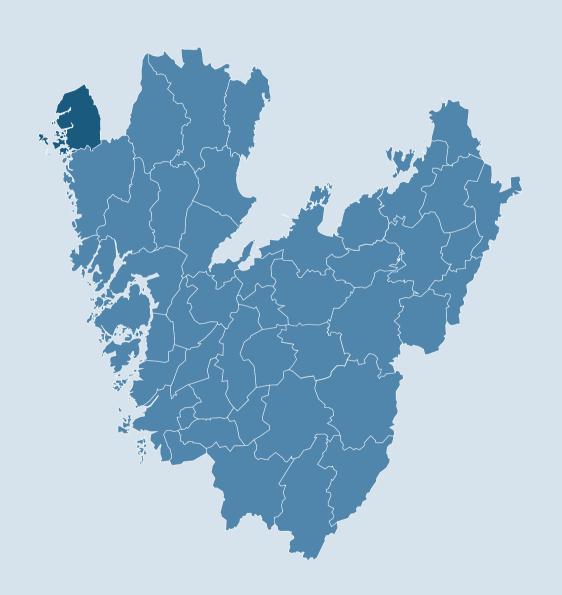
Global warming and the threat of rising sea levels were the main driver for the project. It explored how these changes could affect the coast of Hamburgsund and what necessary changes were needed in order to adapt to future conditions.

- 1. Scenarios for rising sea levels along the coast at 1m, 5m and 12m.
- 2. Proposed plan for 1m sea level rise. 3. Proposed plan for 2m sea level rise. 4. Proposed plan for 5m sea level rise.









2007 Strömstad Municipality



Possibility for All-Year Housing

John Helmfridson | Louise Kronander | Mikael Mangold

In many attractive coastal areas housing prices are rising due to seasonal residents who can buy local houses at a rate locals struggle to compete with. By exploring methods for spatial and economical organization, the project explored a process to support the local community in creating housing for permanent residents to live in the area.

1. Site plan over Filjestad which was used as test bed. 2. Focus area for local housing association.



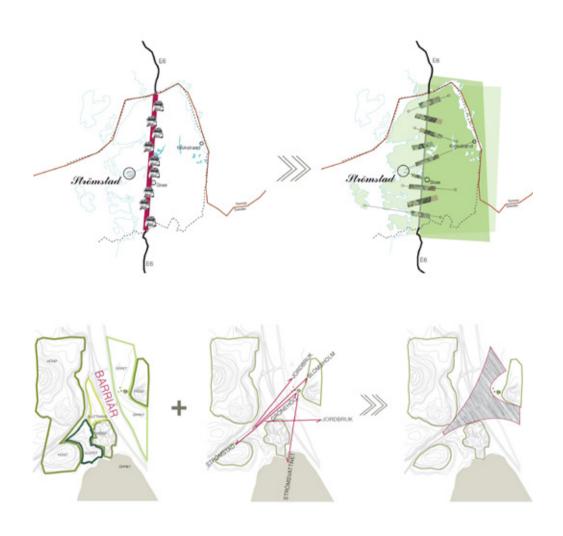


Eco-Duct

Ylva Offerman | Caroline Valen | Linnea Hedlund

A multi-functional eco-duct for humans and animals was proposed to cross the barrier caused by the E6 highway. The proposal also included strategies to support the municipality in regards to renewable energy sources in the form of bio-fuel and solar power as well as supporting local biodiversity.

1. Conceptual visualisation of the eco-duct. 2. Project concept of bridging the highway barrier 3. Design strategies for the site. 3. Section of eco-duct outlining materials and vegetation.





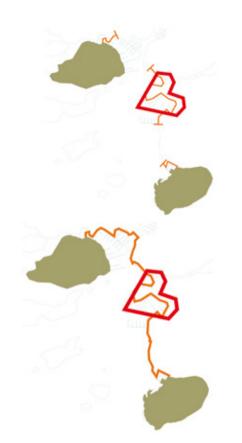


Att angöra en brygga

Maja Ivarsson | Lina Melldén | Amanda Werger

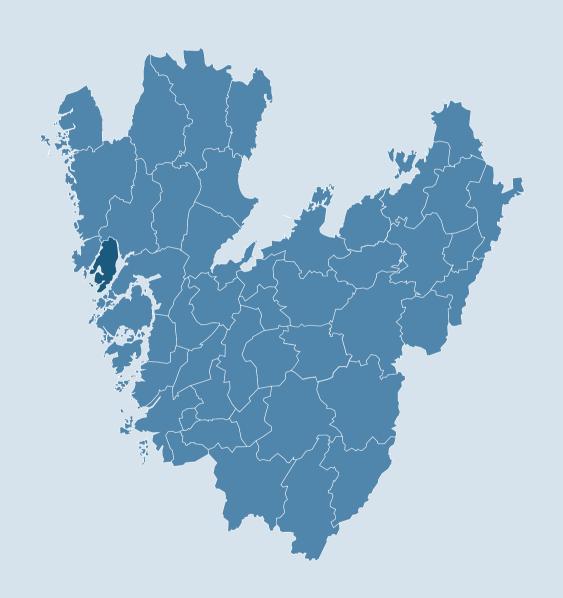
The project aimed to connect the two urban green areas by strengthening the path by the shoreline through small interventions such as street lighting and temporary functions as well as different forms of jetties allowing interaction with the water.

- 1. Visualisation of a contemporary interpretation of traditional relationship of "bryggan, båten, boden" (jetty, boat and cabin). 2. Concept to connect the two lungs of the town through the central heart. 3. Proposed plan.
- 4. Sketch of new recycling box.









2008 Lysekil Municipality



A Vibrant Neighborhood

- Vision for the north harbour

Charlotte Lartigue | Nadine Eklöf

The aim of the project was to propose a new development for the north harbour. It contained housing and varied functions such as service, hotel and strengthened connection to the sea for residents and tourists.

1. Perspective of residential area (c) 2. Plan of the proposal for the north harbour development 3. Perspective of hotel (9).4. Perspective of water connection (7)







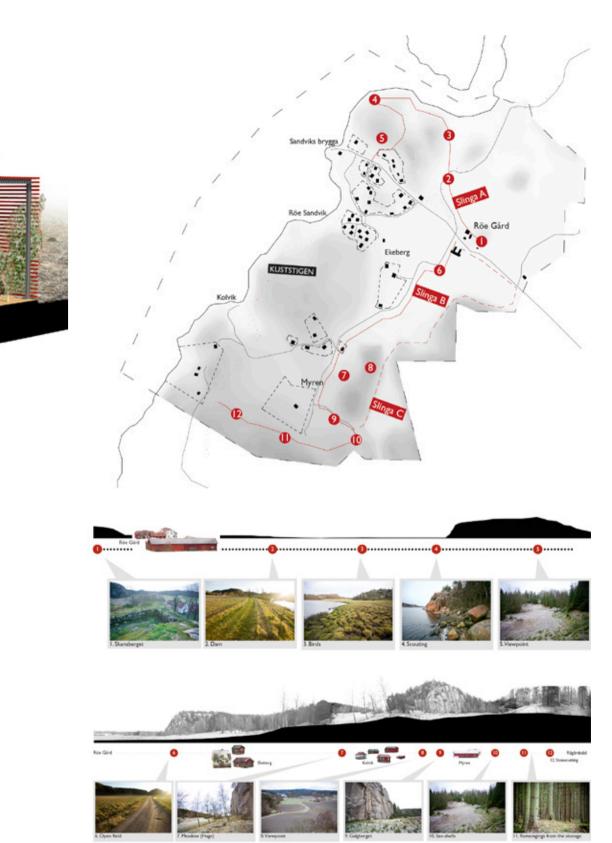


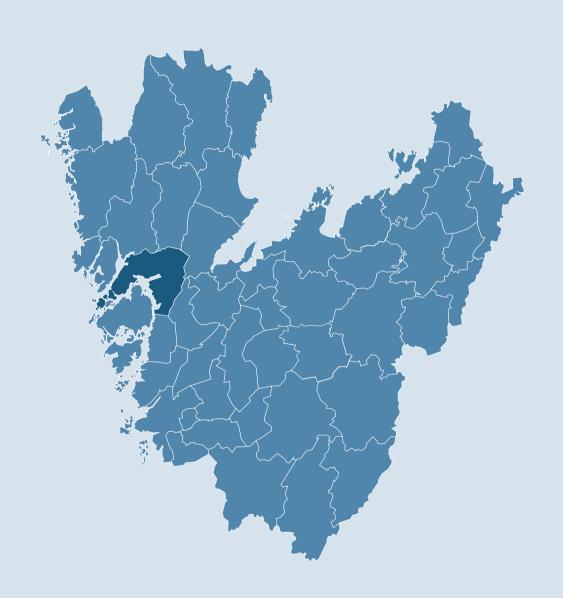
When the Tourist came to the Village

Per Nadén

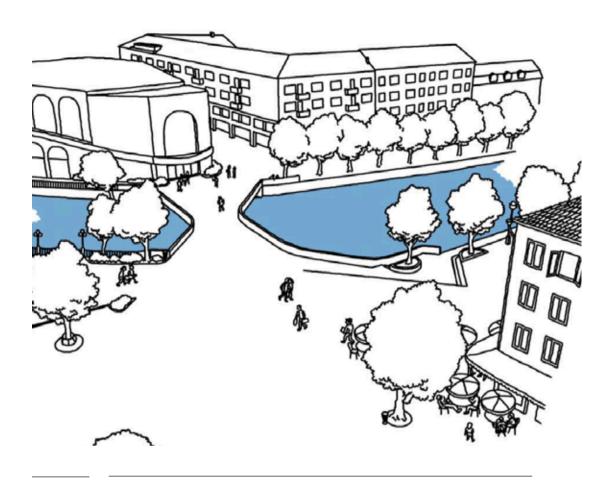
Two strategies were proposed in the project to strengthen the connection between tourism and agriculture. The large scale includes a concept for how tourism can be developed and is exemplified in the proposal for a solution at Röe farm in Brodalen.

1. Visualisation of tourist point at the farm 2. Proposed path connections in the surrounding area. 3. Section and character through landscape at path A. 4. Section and character through landscape at path B and C.





2009 Uddevalla Municipality



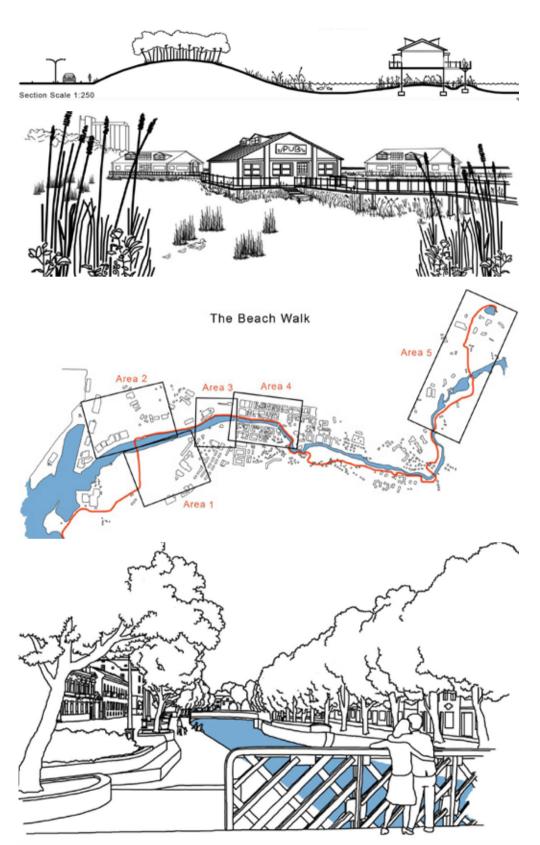
Bäveån

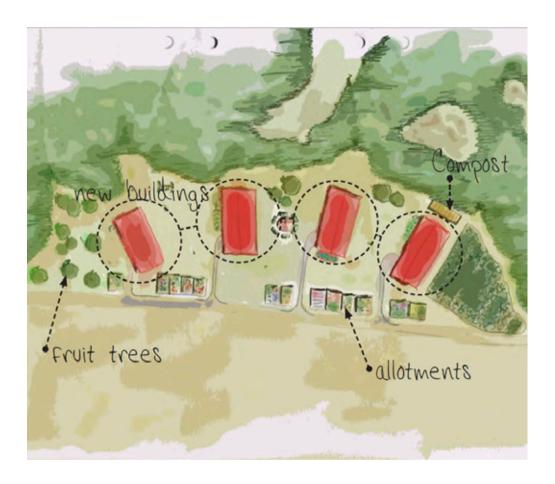
- Streams can come through

Maryam Sepehr | Jon Sjöholm | Matti Örjefelt

The project proposed a pedestrian path alongside Bäveån from the ocean up to the Shell bank museum. The aim was to investigate how areas by the river bank could be adapted to handle flooding events, strengthen the town identity and contribute to revitalization of the town centre.

1. Visualisation of the cultural path leading down to the river. 2. Section and visualisation of wetland area close to the harbour. 3. Plan with focus areas. 4. Visualisation of proposed green path along the river.





Bokenäs(et)

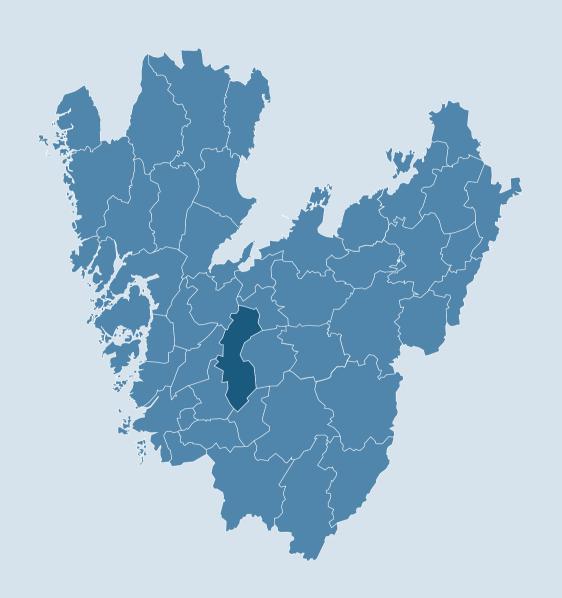
Simon Lundholm

In this project a step-by-step strategy for the development of Bokenäset was explored. The aim was to strengthen the rural identity, support a transition to less car dependence and revitalise the area with self-sufficient households in regards to food.

1. Plan of proposed housing (4) 2. Comprehensive plan of Bokenäs with proposed additions. 3. Plan of eco-hostel (5)







2010 Alingsås Municipality



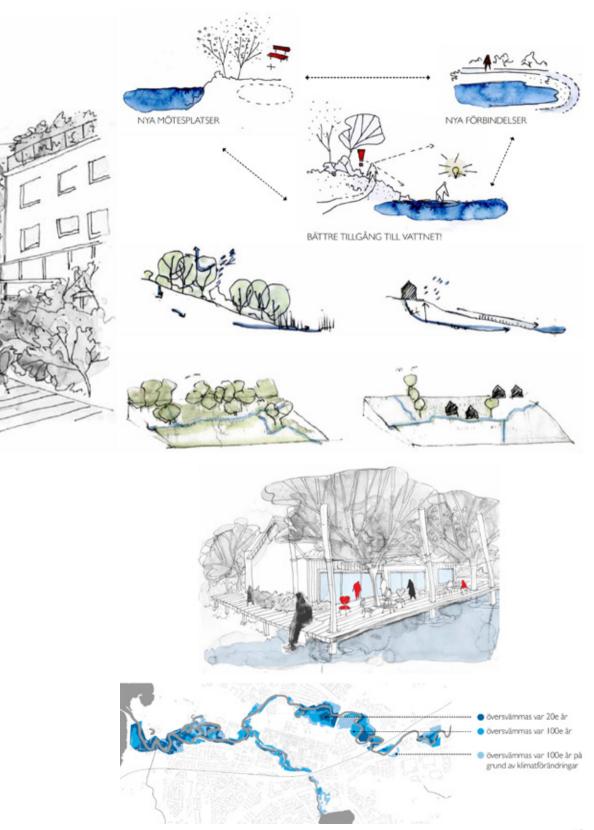
Vattenkontakt

- Water in Alingsås

Helena Bråtegren | Johanna Eckerdal

The project worked with the local rivers and three urban layers which connect them; risk of flooding, accessibility and densification. These were explored from a range of XL-S scale, from the rivers' catchment area to detailed adaptations in the town centre.

1. Visualisation of street scape in town centre 2. Concept to strengthen accessibility in the town and to the water. 3. Concept for water management to prevent flooding downriver. 4. Visualisation of central water connection. 5. Map showcasing flood zones at different storm events.





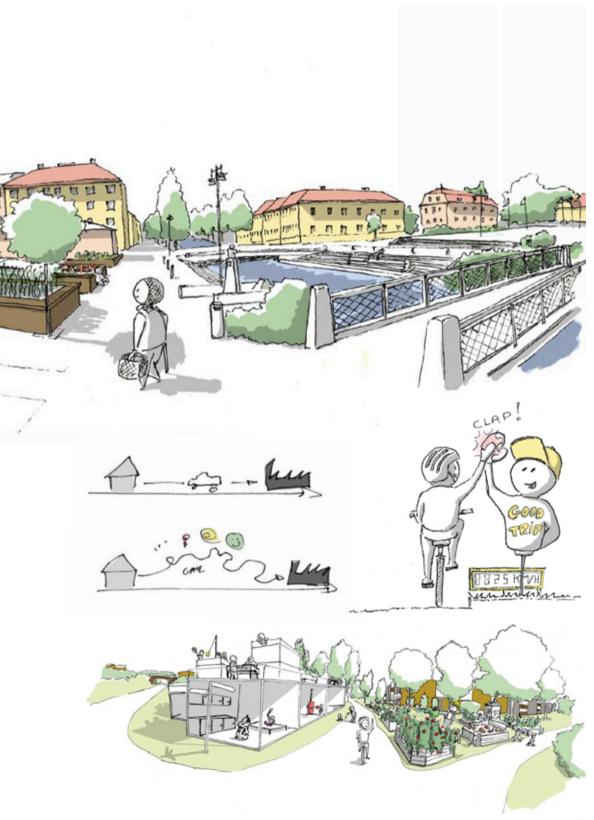
Urban Games

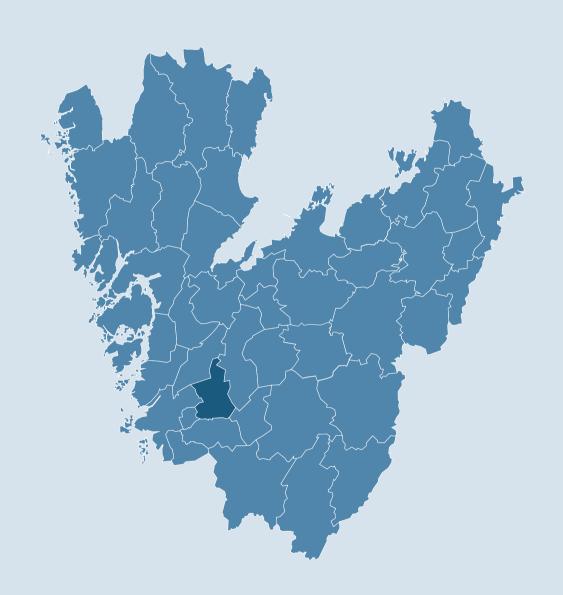
- How to connect with the city

Martin Rigo | Michael Wicke

The point of departure for this project was to enable residents' social interaction and engagement with their local environment. The projects aimed to encourage a playful and fun connection with the urban space. This was proposed to be achieved by the introduction of new social and spatial interventions.

- 1. Visualisation of the new square with seating and gardening opportunities.
- 2. Concept to create life in the spaces between our everyday destinations.
- 3. Concept to encourage bike mobility. 4. Visualisation of flexible functions.





2011 Gråbo Lerum Municipality



Growing Up

- Story about local food

Eva Pirri | Francesca Finotti | Josua Gustafsson

The project aimed to encourage self-sufficiency regarding local food and reduce the distance between consumer and producer. This was created by telling a story about a future scenario where locals had engaged in local urban farming through a series of spatial and organisational interventions.

1. Visualisation of book and tool library. 2. Plan of neighbourhood garden areas. 3. Visualisation of the interior of the greenhouse









In the Steps of Children

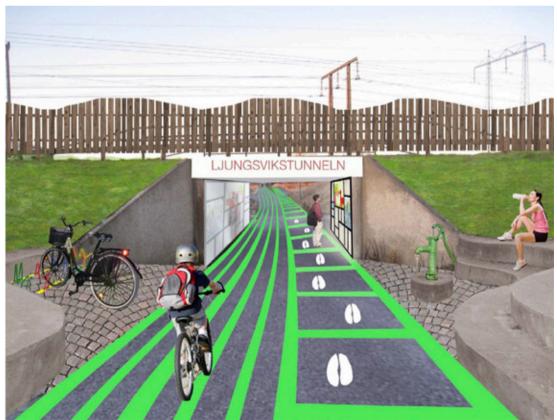
- Road to sustainability

Annika Danielsson | Erika Lundén | Philip Odino

This project explored a process and visions for how three schools could be connected through spatial interventions based on participation from the local children. The proposal included bike and pedestrian paths with additional functions and space for recreational activities.

1. Collage of path proposal outside one of the schools. 2. Collage of path with additional spaces to support local associations. 3. Collage of the Ljungviks tunnel.







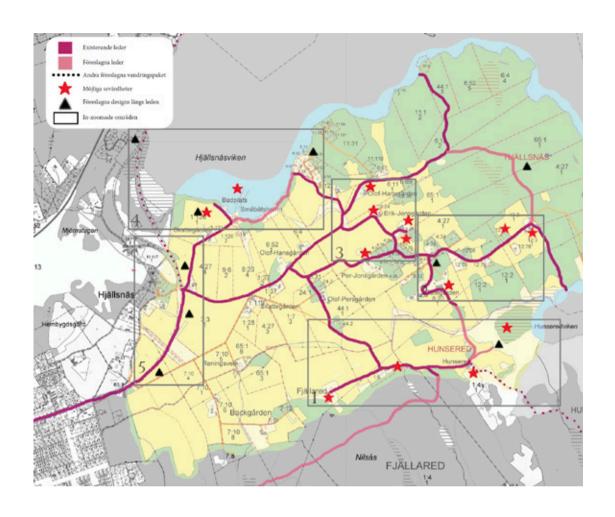
Destination Gråbo

- New centre for eco-tourism in the Gothenburg region

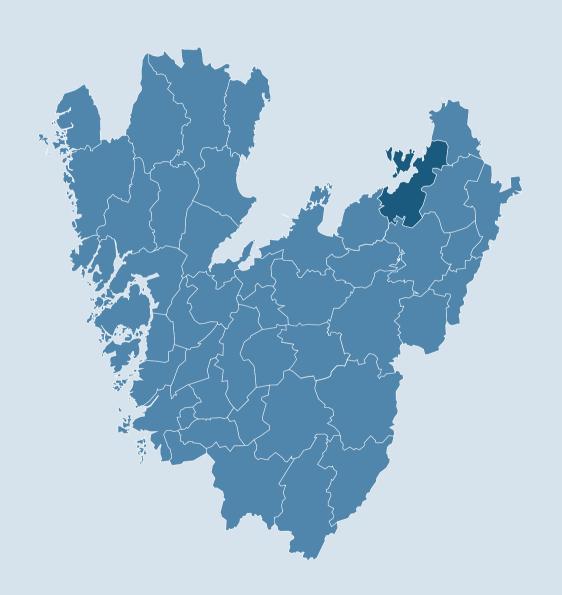
Anna Sofia Wannerskog | Mahsa Mojtahedi | Joshua Wanga

The aim of the project was to showcase the potential for eco-tourism in the Gothenburg region. This was explored through a series of small to medium scale interventions to connect the centre of Gråbo with the local landscape.

1. Concept to frame views in the landscape. 2. Comprehensive plan of recreational area with focus areas. 3. Concept for bird watching structure







2012 Mariestad Municipality



How to Grow

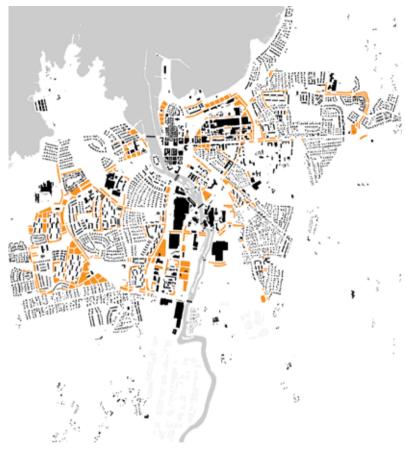
- Planning strategies for sustainable development

Martin Allik | Nathalie Mair | Patrik Magnusson | Anna Esbjörnsson

This project created a vision for Mariestad by considering the notion of densification of an urban form with spaces that support a sustainable lifestyle, public functions and recreation. The proposal also considered ways to support sustainable mobility such as bike and pedestrian paths to support connectivity between urban spaces.

1. Visualisation of bike lane along Marieforsleden. 2. Comprehensive plan of potential areas for exploitation. 3. Concepts for movement, building structures, public spaces and people. 4. Visualisation of development of Ekudden.





rörelse

bebyggelse

offentliga rum

människor



























Många bäckar små / Small Streams

Helene Flink | Katarina Rosengren | Anna Arvidsson

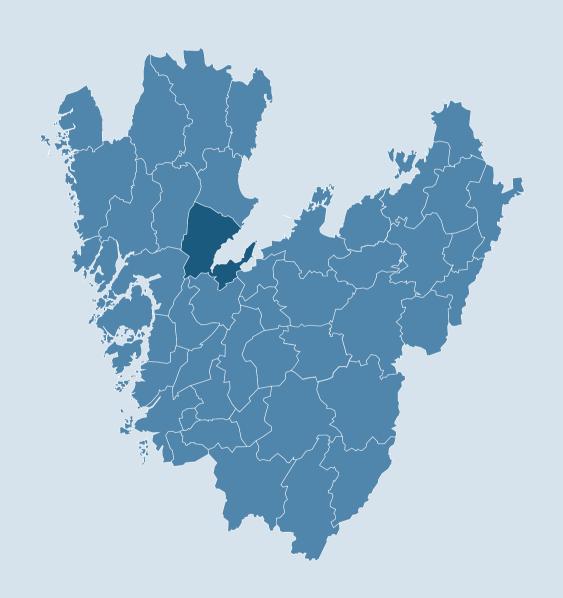
The project took departure in how increased water levels could affect Mariestad in the future, from small changes to potential extreme events. Against this and the local geographical, political and social context a few focus areas were chosen where design of urban situations were explored. It was important to find ways that could create synergy solutions between water management and spatial needs in the town.

1. View of a bio channel. 2. Proposed comprehensive plan with focus areas. 3. Visualisation of educational water park at the Sjöhaga park









Tidaholm Municipality



Framtidan

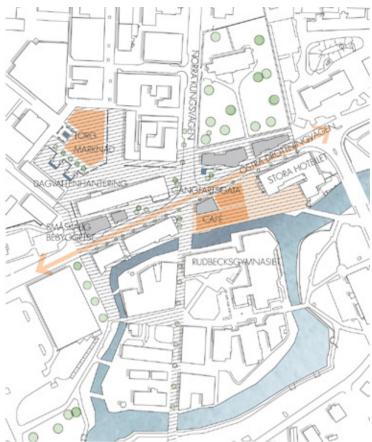
- Tidan as the point of departure for a sustainable Tidaholm

Stina Hillinge | Clara Ellborg

The project aimed to make the river Tidan more accessible to the residents in Tidaholm. It proposed engaging points along the river that enabled different forms of interaction with the water in a seasonal perspective. The project also considered the value of biodiversity and residents to feeling safe.

1. Visualisation of Naturrum. 2. Plan of development of the town centre. 3. Visualisations of proposals at Madängsholmen













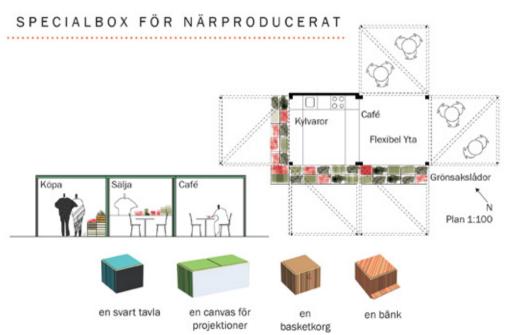
Room for Market

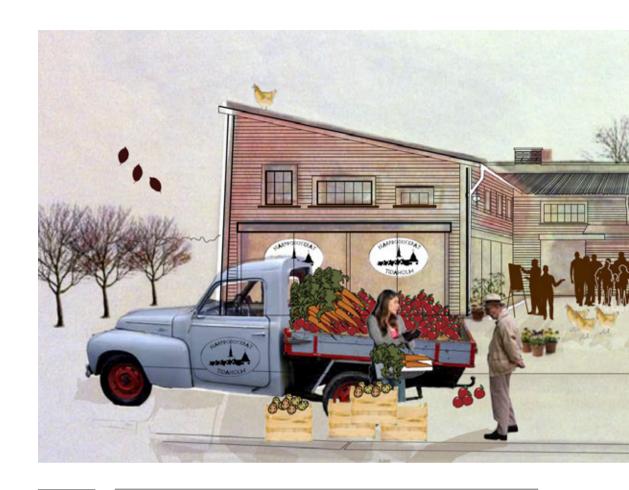
Charlotte Farrouch | Lisa Kihlström

By the introduction of flexible market structures at the main square the project aimed to strengthen the connection between local food producers and consumers. Through the adaptive design of what the project called market boxes the structures could support other functions at the square on non market days.

1. Visualisation of box structure used as local food market. 2. Plan of the square at different times showcasing scenarios 3. Conceptual section and plan for box structure. 4. Facade covers for the boxes.







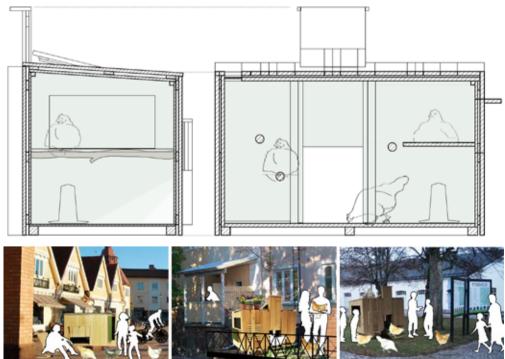
Taste the Garden

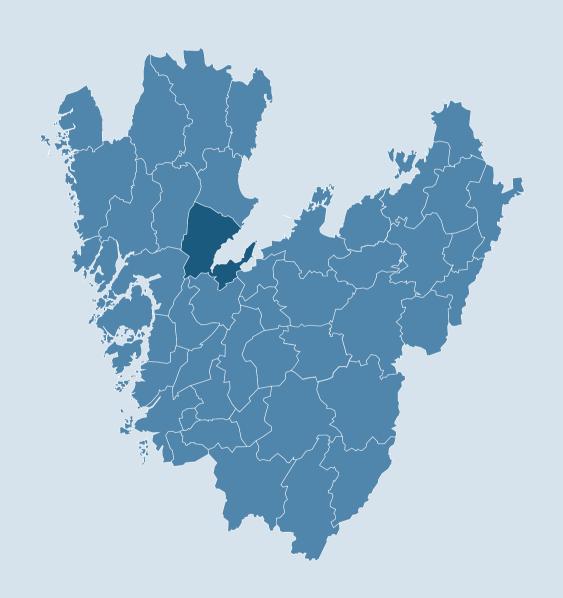
Josef Abrahamsson | Johan Marklund | Karianne Rydström | Johanna Saleryd

The project was divided into two parts to support local food production. Firstly Tidaholm food festival, a temporary and flexible structure which is used for both growing of food and for the harvest celebration. The second part is the chickens of Tidaholm, with the implementation of chicken nests around the city. Both proposals aimed to encourage a stronger connection to food systems.

1. Collage to represent local food market 2. Section of chicken nest. 3. Visualisation of chicken nests in the town.







2014 Vänersborg Municipality



Re-Think!

- Holmängen eco-cycling park

Hampus Larsson | Maja Lindstedt

The work is based on a municipal decision to build a Eco-Recycling Park in Vänersborg. In the project, the goal was to reduce the ecological footprint of the inhabitants and for Vänersborg to be an actor for sustainability and to raise awareness of these issues by encouraging recycling and reuse.

1. Visualisation of the eco-park. 2. Situation plan for the proposed eco-park. 3. Diagram over users and stakeholder













Next Stop Öxnared

Karin Backlund | Lina Jonsdotter | Hannah Larqvist | Sofia Park

The project took departure in the station house in Öxnared that a local association had acquired. The station area and its buildings were used to visualise how the station could be developed as a node in a vibrant rural society with new functions and housing.

1. Sections over station area. 2. Collage visualising square development. 3. Plan of new function in the station house 4. Collage of new housing area by the station





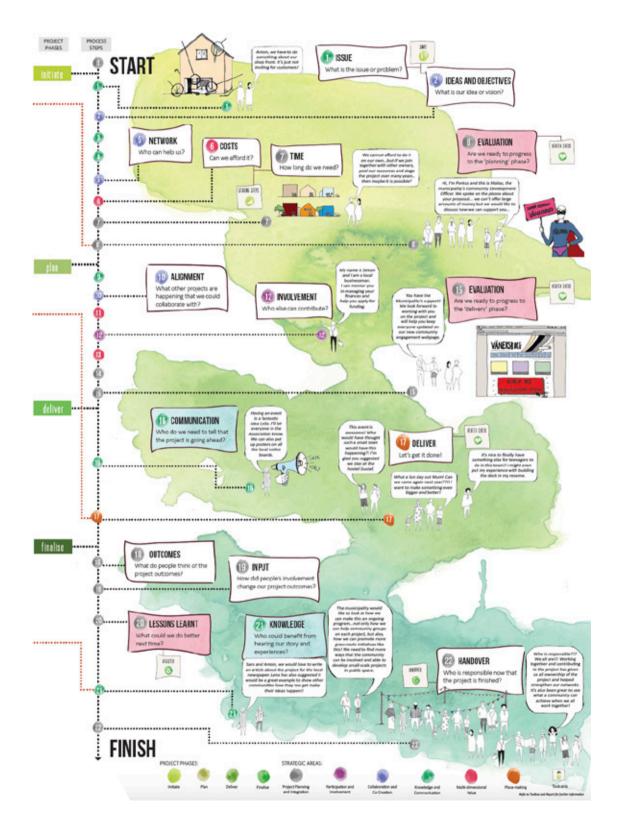


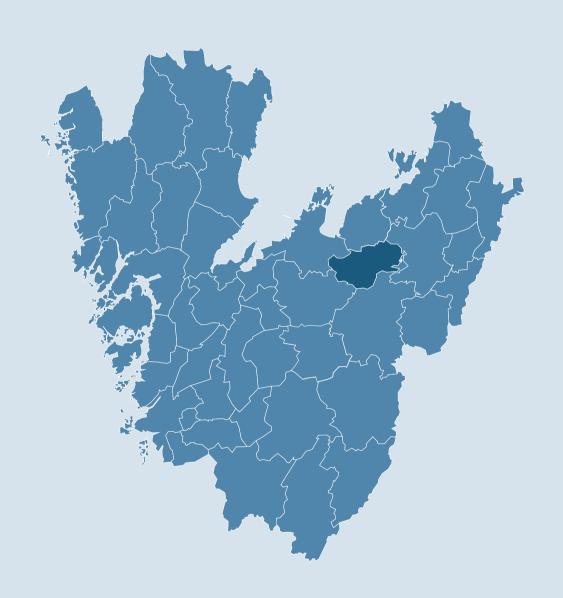
Making Places Together

Melisa Mundzic | Marie Caroline Peris | Cathy Reilly | Tove Wennberg

The project presented an alternative planning and design process which is more transparent and flexible for communities to utilize by providing simple tools and the necessary information in order to start a conversation. In particular, it has focused on how the municipality could work together with the inhabitants to create better public spaces.

1. Collage of square with new functions. 2. Proposed process with scenarios developed in the four stages.





2015 **Skara Municipality**



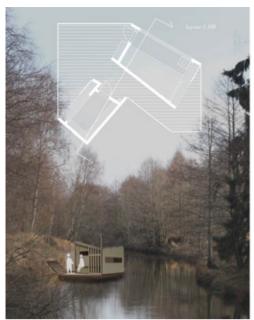
Naturally!

- Trails for knowledge in Skara municipality

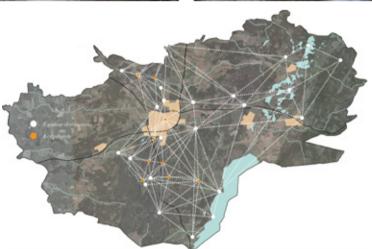
Emma Anderberg | Matilda Leffler | Fredrika Sandblom | Alice Valinger

The aim of the proposal was to encourage a stronger connection between residents and nature. This was achieved by strengthening existing trails, creating new paths and the implementation of key-projects which further support recreational functions and outdoor life.

1. Model visualising shelter for hikers. 2. Model visualising sauna. 3. Plan indicating network and connection between existing and proposed nodes. 4. Concept for re-purposing of the old railway tracks.













The Moving District

- Overcoming boundaries & barriers in Skara

Sarah Blake Elmvall | Eva-Lotta Holb | Karen Høstmark | Kailun Sun

The group have looked at existing boundaries and barriers in Skara, and defined five strategies to overcome these. The strategies were formulated based on analysis and in discussion with local inhabitants. One of the major barriers identified was the station area, which became the main focus.

1. Visualisation of the railway area with stage and cinema. 2. Concept for rail carriage functions.

























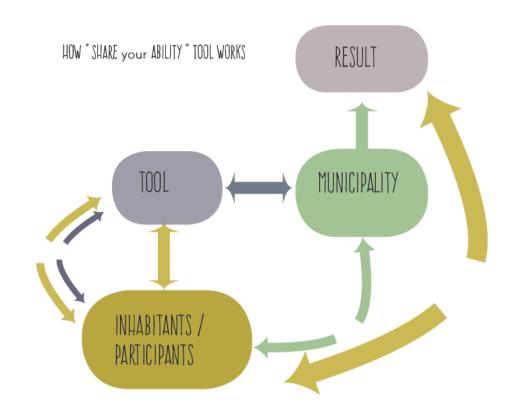
Share-Your-Ability - Board Game

- A tool to raise environmental awareness in Skara municipality

Helena Hoas | Stina Lööf | Natalie Novik

This group developed a board game in order to create awareness and engagement amongst local inhabitants regarding the local and global environment. The aim was to show how actions affect the planet in negative and positive ways. This was present in both as subject and also visually in the structure of the game.

1. Final game prototype. 2. Process of how the game can be used as a participation tool. 3. The game at different stages.

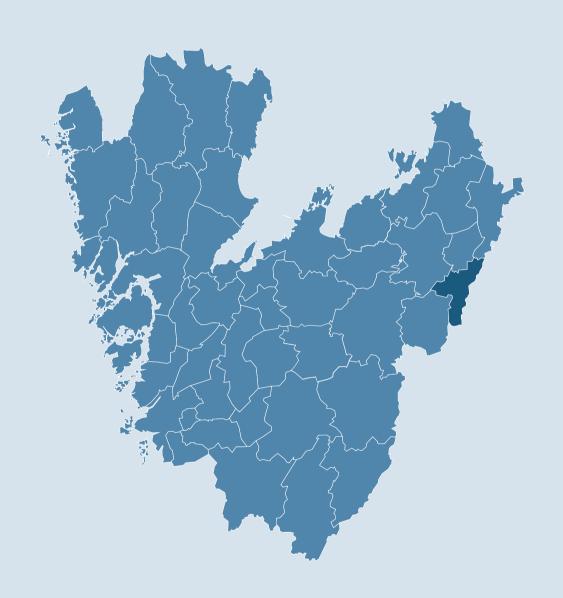


BEFORE YOU START

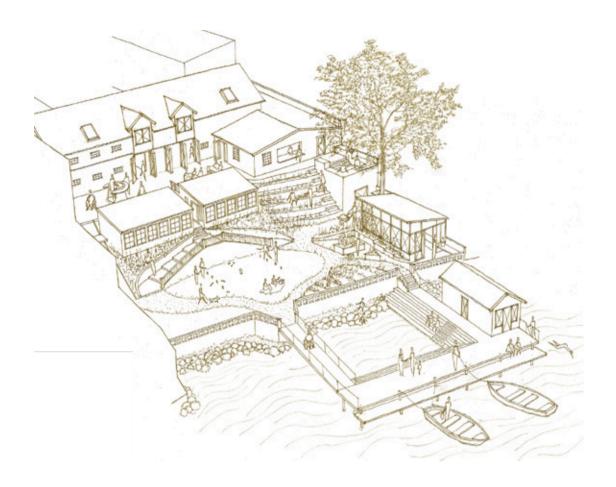
WHILE PLAYING







2016 **Hjo Municipality**



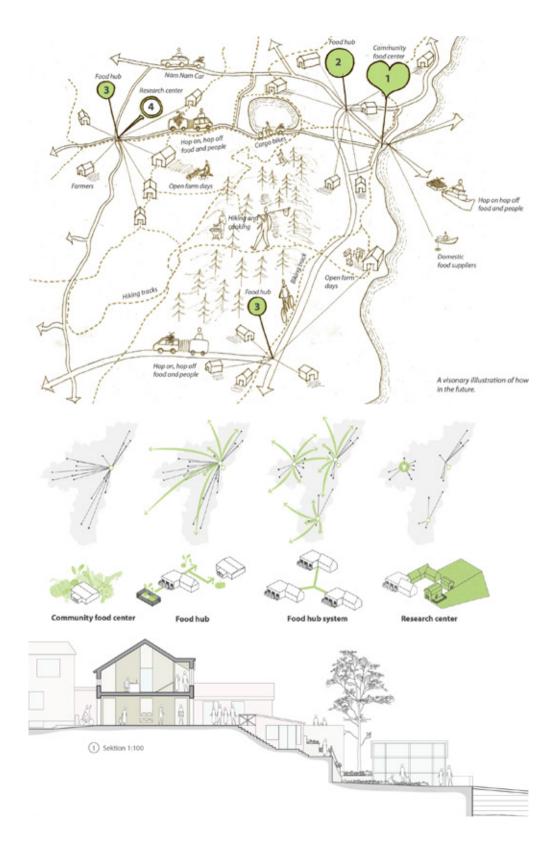
Co-Food Hub Hjo

- A community food center

Jens Andersson | Sofie Granberg | Omar Zalloum

The purpose of this project was to investigate the possibilities to distribute locally produced food and make it more accessible for people in Hjo by decreasing the distance between food producers and consumers. This project was aiming to design a comprehensive vision of how this could be implemented on the municipality scale and as a food node in Hjo town.

1. Axonometric of the food centre 2. Comprehensive plan for local food distribution. 3. Scale of impact of the Hub. 4. Section through the food centre.





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Agroecology and the Rural Landscape

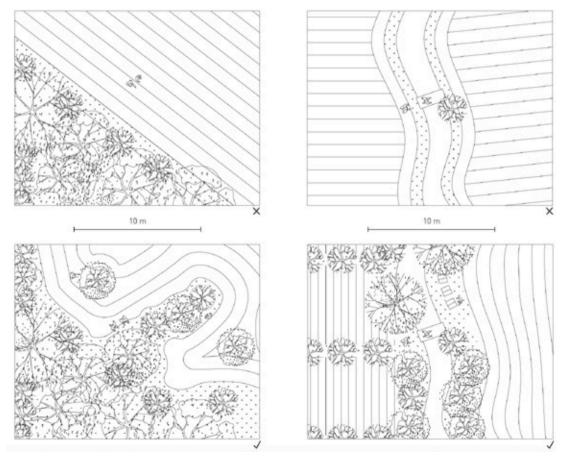
- An agriculture campus for Korsberga

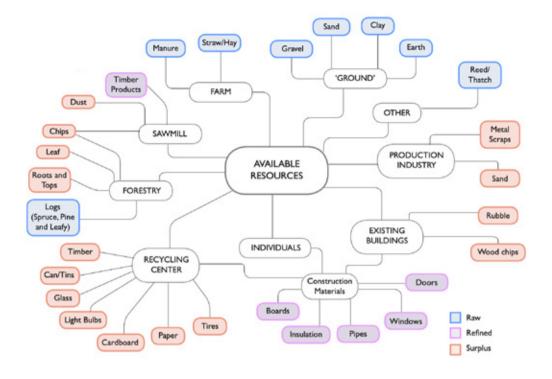
Eric Hedborg

The project takes departure in unsustainable industrial farming tradition. It explores ideas of regenerative farming and agroecology in the design of resilient landscapes and the proposal of an educational hub in Korsberga.

- 1. Landscape qualities of farmland in different countries (at the same scale).
- 2. Visualisation of the educational hub. 3. Plans of changed landscape characters





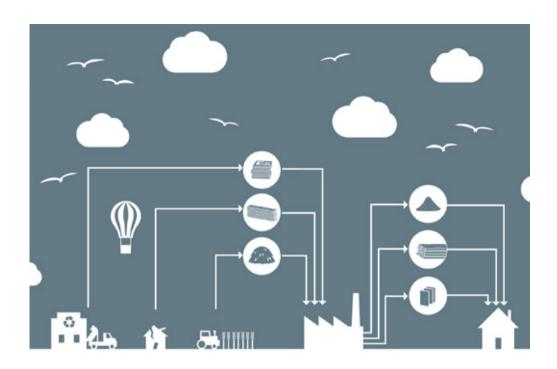


Can Hjo Build with Local Materials

Ida Röstlund

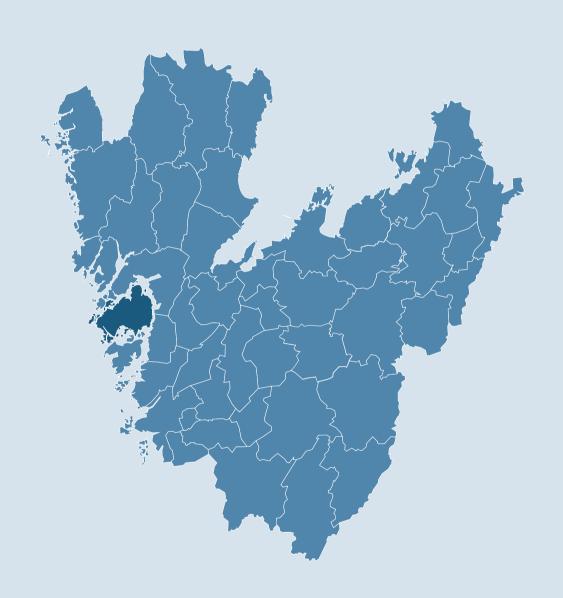
This project investigates the opportunities for the municipality of Hjo to design and build with the use of local resources and reflects on how this could effect the local society. The main outcome is a library of potential materials that could be created with main resources that are currently available within the municipality.

1. Diagram over locally available resources. 2. Process diagram over refinement process. 3. Elevation of Bioglass material and Stonecycling bricks









2017 Orust Municipality



Path for Strana

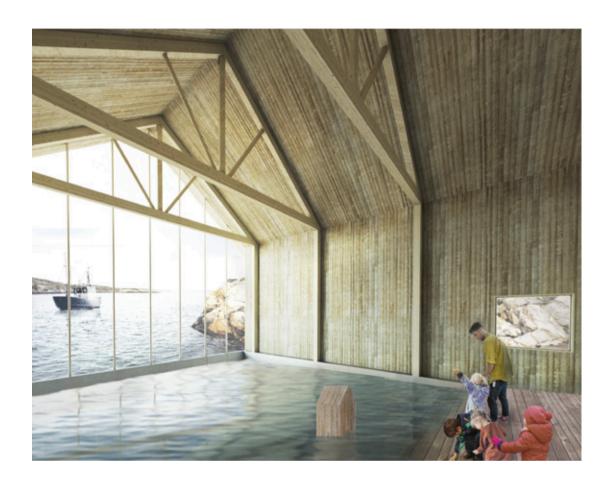
- Interventions for a sustainable development in Hälleviksstrand

Johanna Galleron | Roberto Garnfeldt | Marine Kerboua | Sandra Olsson

The engagement of the local community in Hällvikstrand has been a driving force in this project. The result is a proposal for how Hälleviksstrand, through several small interventions based on the community's need, can develop in a sustainable way.

1. Collage of development concept 2. Proposal area plan for beach and swim area. 3. Section through Hällevikstrand. 4. Visualisation of square





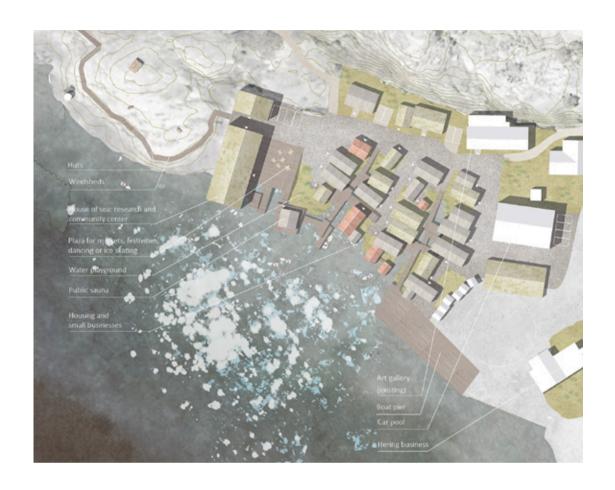
High Water / Low Season

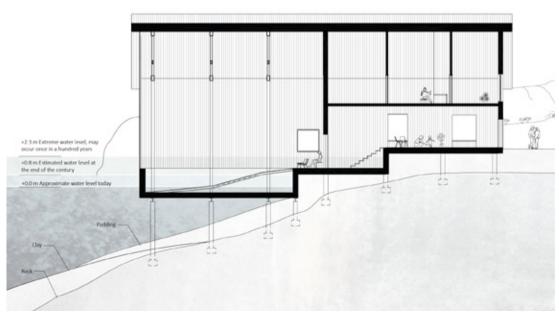
- Exploring coastal living in a changing environment

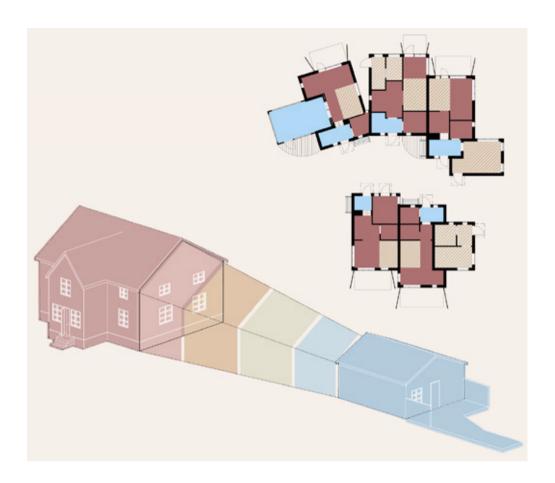
Janna Kampers | Sandra Moberg

This project explores living with and by the sea in the face of rising sea levels in the highly seasonal village of Mollösund. A multifunctional sea centre House of Sea adds a lively "third place" for the people even in the low-season. The proposal aims at strengthening the special connection to nature that the place has and increase awareness regarding changing conditions due to climate change.

1. Perspective of sea centre, House of Sea. 2. Area plan 3. Section of House of the sea.







Varm och kall

- Housing for social and climate change

Olga Peterson | Ellen Uggla

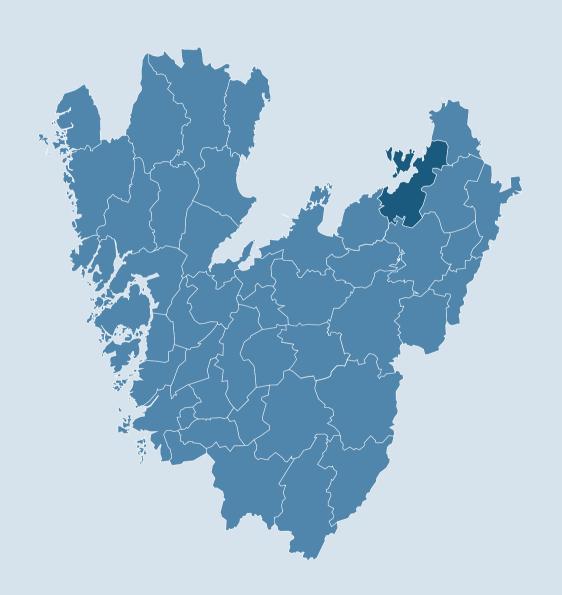
The project aimed to give more people who grew up on the island the possibility to live and dwell in the archipelago. This was made in an updated version of housing where the focus and drive of the design was social and environmental sustainability. This was achieved through ex. shared housing and climate zones.

1. Concept of the relation between the dwelling and the boathouse and plan with climate zones 2. View of shared living area. 3. View of private living area. 4. Plan of ground floor.









2018 Mariestad Municipality

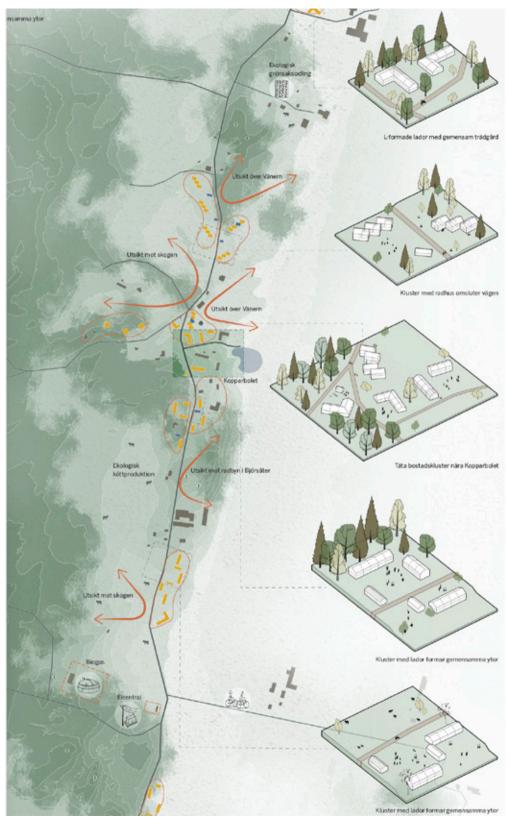


Every Little Matters

Hanna Bandmann | Rebecka Bolt | Lihui Hao | Ida Krokström

This project proposed a step by step approach towards a self-reliant community by reconnecting people, food, and nature. It explored the concept of a contemporary row village with cooperative housing, local food production and meeting places from the perspective of the house, plot, valley and municipality.

1. Axonometric over Kopperbolet. 2. Proposal for new row house village in Lugnås with axonometrics over building structures.





Making a Living

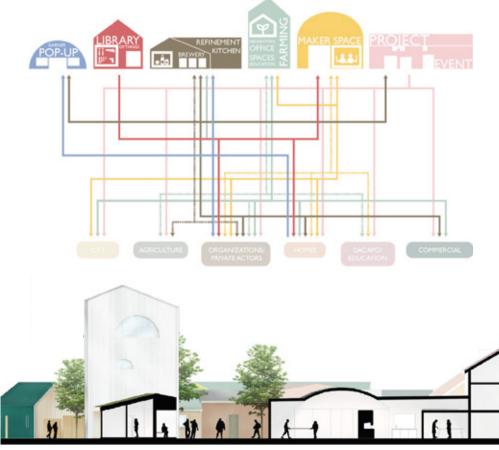
- Co-production as a driver in the search for new rationalities

Hedda Arlid | Gustaf Sjöberg | Klara Sjögren Holtz

Strategic proposal for the industrial area Katthavet in Mariestad and a design proposal for the block Kastanjen. The project proposes spatial interventions that aim to challenge the industrial large scale rationality through co-use, co-production and mixed driving forces for participating.

1. Visualisation of the proposed transformation of Kastanjen. 2. Axonometric over the industrial area. 3. Organisation chart for new functions. 4. Section through the library of things and maker space.







Reuse Within Reach

Sara Marklund | Taleen Josefsson | Sofia Jonasson

This project proposed a material reuse facility that was developed in tandem with a block of self-constructed row houses. It advocates for the implementation of a reuse culture in Mariestad as a step towards meeting the municipality's climate goals and aimed to take advantage of the rich variety of resources already in place.

- 1. Overview of the Reuse Centre and self-construction housing area.
- 2. Two sets of plans showing changes made to the house over time. 3. Perspective of Reuse Centre. 4. Diagram of local materials. 5. Perspective of inner courtyard of the housing block.

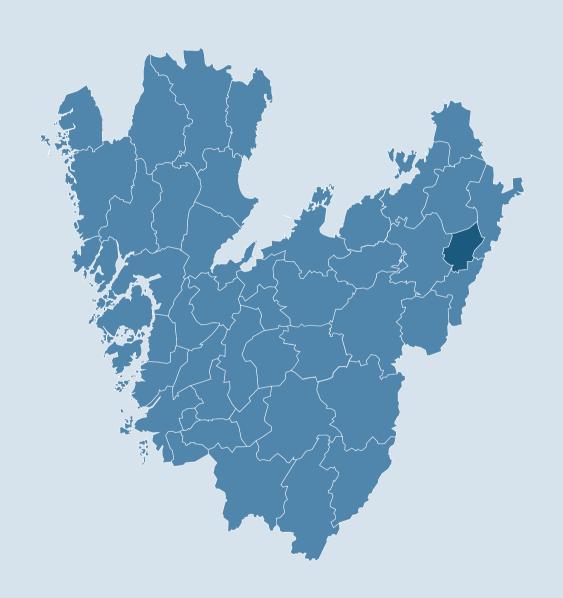












2019 **Tibro Municipality**



Back on Track

Emma Lamberg | Martin Lindholm | Mikael Junehag

It explored how the revival of Tibro's station area can become a catalyst for a sustainable transition over time. The transformation is based on a strategy that integrates cultural heritage, ecological and social values.

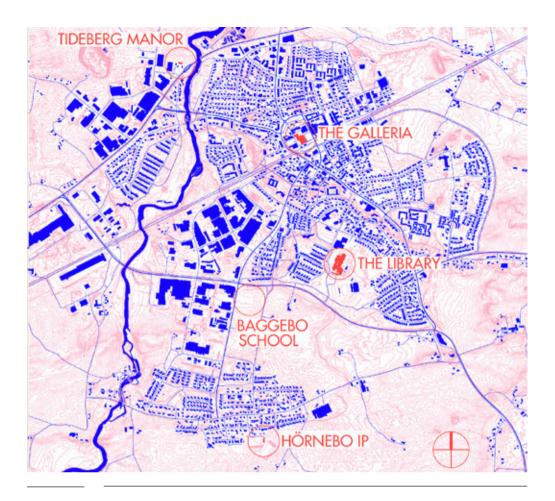
1. Visualisation of the train station area. 2. Site plan of proposal. 3. Model of proposed playground 4. Model of Bokaler (housing and workshop/shop area)











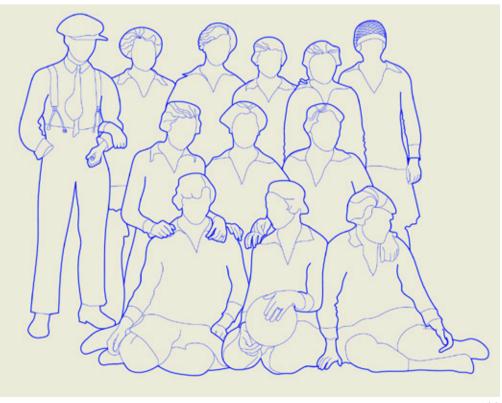
Rewriting History Through Woodcarving

Agnes Janfalk | Amanda Olsson | Kerstin Olsson

This project used the local wood carving tradition as a tool to visualise this history. By placing a traditional craft like wood carving in a new context, they aimed to create a discussion about identity, cultural heritage and the sense of belonging in Tibro. The project is a political manifestation which questions who it is that owns traditions and who has the right to be a part of them.

1. Plan showcasing where woodcarvings could be placed. 2. Woodcarving pattern based on Rosa Taikon, 1926. 3. Woodcarving pattern of local women's football team, 1927.







Rurban Meanders

- A journey along Tidan

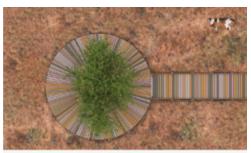
Joel Ekelöf | Anna Krassuski | Jonatan Svensson

By the implementation of small wooden paths and recreational functions the project aimed to make the river Tidan and it's ecosystems more accessible both physically and culturally for the residents in Tibro.

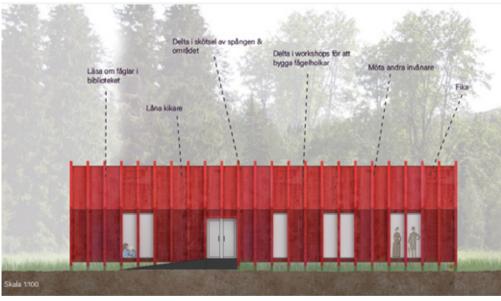
1. Plan over focus area with paths and functions. 2. Section and plan over moments along the path. 3. Elevation of outdoor classroom. 4. Plan of outdoor classroom. 5. Elevation of new sauna.





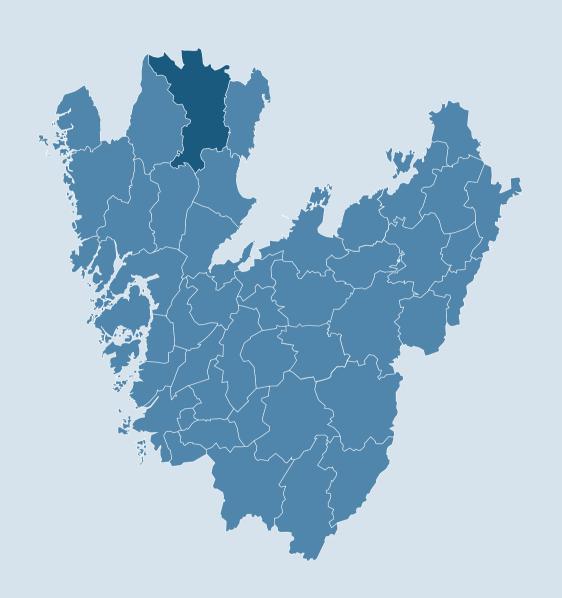




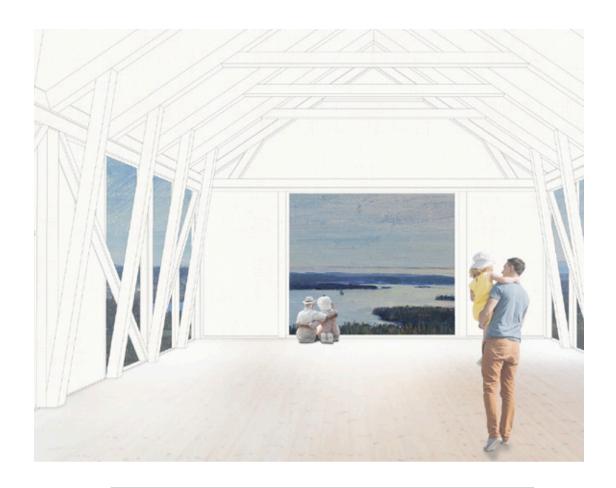








2020 Bengtsfors Municipality



Föreningens hus

- Uniting past stories with future sustainability

Jontan Forsman

This project investigated the stories existing in the area, the stories people tell and the stories buildings tell us by considering local traditions regarding from, construction and culture. The proposal provided a meeting space based on values derived from the local historical context which had been developed to meet the needs of today.

1. Perspective from the main hall of the association house. 2. Example of historical references regarding local building culture. 3. Elevation and plan of the proposed association building. 4. Perspective of the proposed building in Billingsfors.





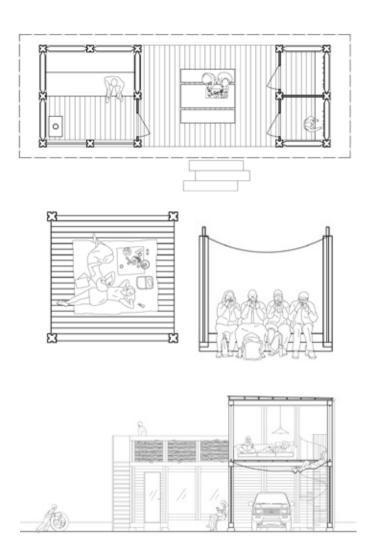


Joints

Erika Klein | Li Wallin

The aim of the project was to create outdoor meeting places through a flexible building system. This was developed based on traditional joinery techniques derived from local wood working tradition. A range of meeting spaces were proposed from street furniture and sauna to cinema and garage for EPA cars.

1. Model of building system based on traditional joinery. 2. Examples of functions supported by the modular system; sauna, seating, youth hub for EPA users. 4. Visualisation of EPA hub.







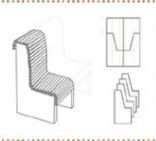
Paper Town

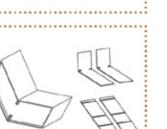
Lucy Chen | Maja Lindroth | Helene Wallberg

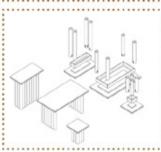
The project explored how paper, a material with strong cultural importance, can be used to support the need for meeting places. Solutions were proposed in the form of a pavilion in Billingsfors as well as interior solutions with flexible walls and furniture supporting different functions.

- 1. Perspective from the paper pavilion. 2. Section of the paper pavilion.
- 3. Selection from the paper library, objects made by cardboard elements.
- 4. Perspectives of flexible functions supported by furniture and walls.







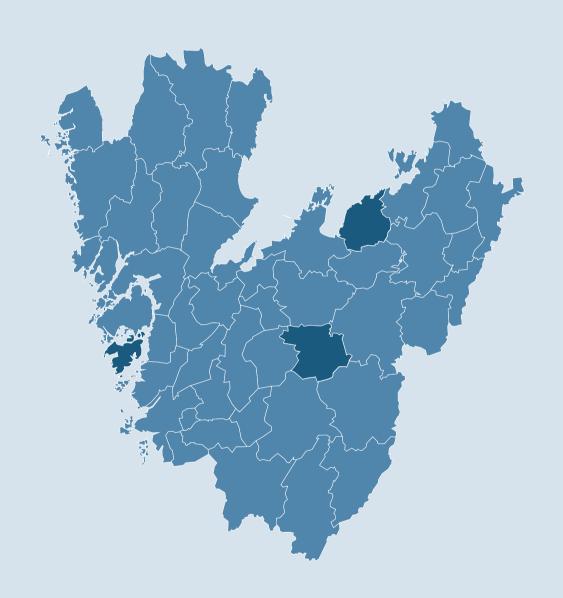






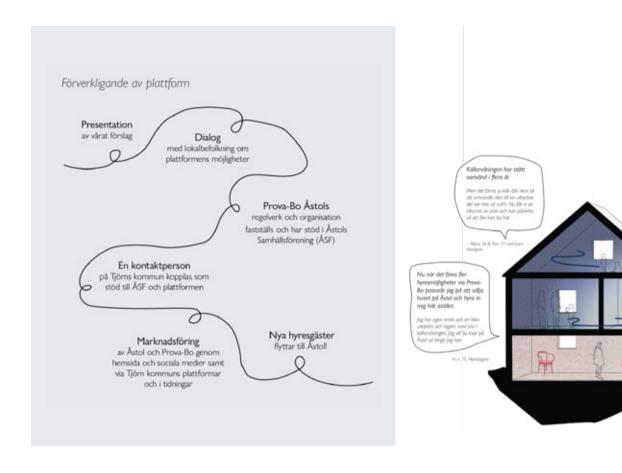






2021 Åstol, Dyrön, Fåglavik and Hällekis Region Västra Götaland

This year the course collaborated with the Region Västra Götaland and worked with four sites in the region in three municipalities; Tjörn, Herrljunga and Götene.



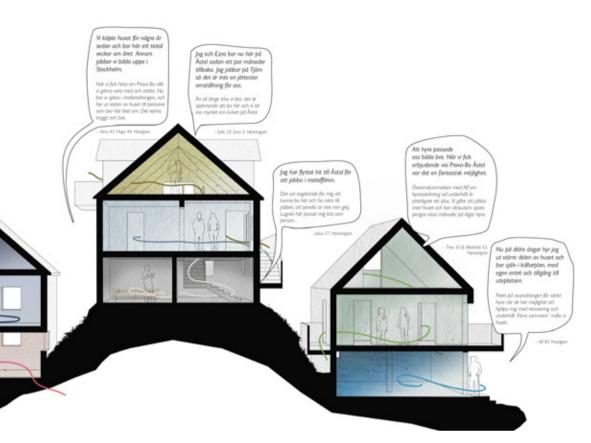
Rearrange the Existing

- To use what you have - Astol

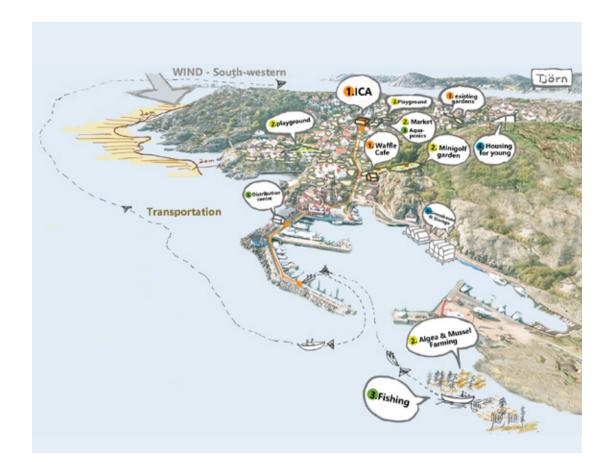
Elisabet Arns | Lovisa Kumlien

The project has explored how existing resources in form of the current building stock at Åstol can be reorganised in order to better meet the need of the islanders today. The proposal encompasses both a Prova-bo platform to encourage people to live at Åstol all-year-round as well as a process to allow for the community to make use of one of the church buildings on the island.

1. Diagram over the "Prova-bo" process. 2. Section visualising house sharing strategies. 3. Section of the Elim church.







Refarming

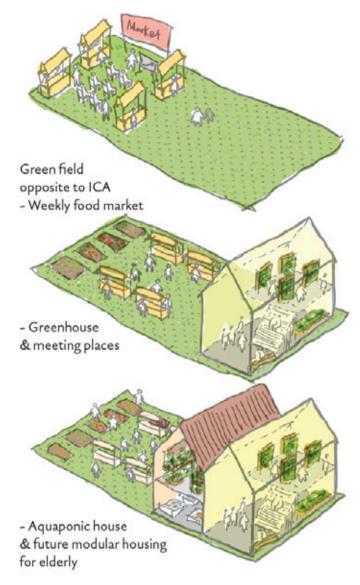
Yuren Chen | Jonathan Naraine

This project explored a future where the majority of food consumed on Dyrön is produced locally. It considered the produce volumes and the strengthening of social cohesion in relation to farming and fishing as well as local seasonal distribution.

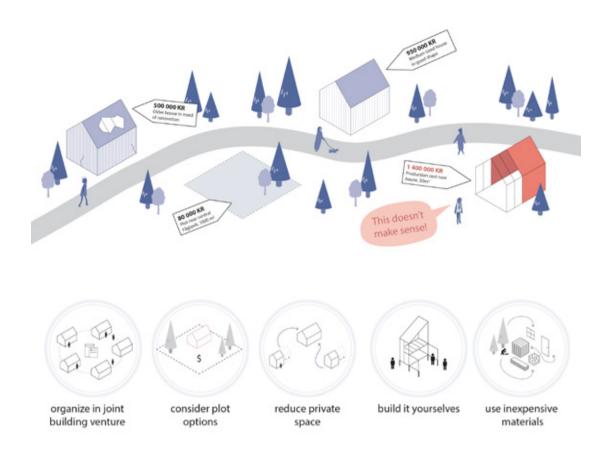
- 1. Overview of island strategies. 2. Steps for process of local engagement.
- 3. Axonometric of steps for local farming. 4. Conceptual section through aquaponics- and greenhouse.



Sea-farming for food & feed







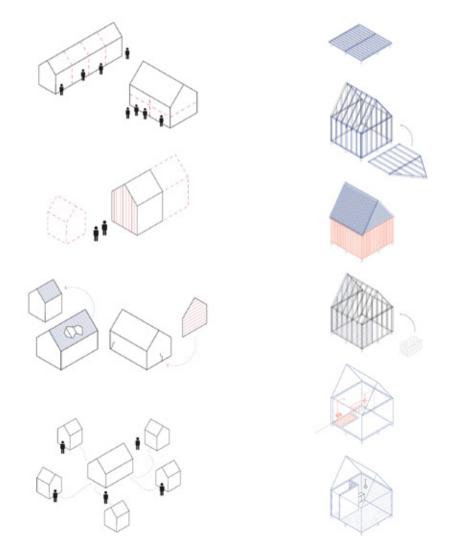
It Takes a Village

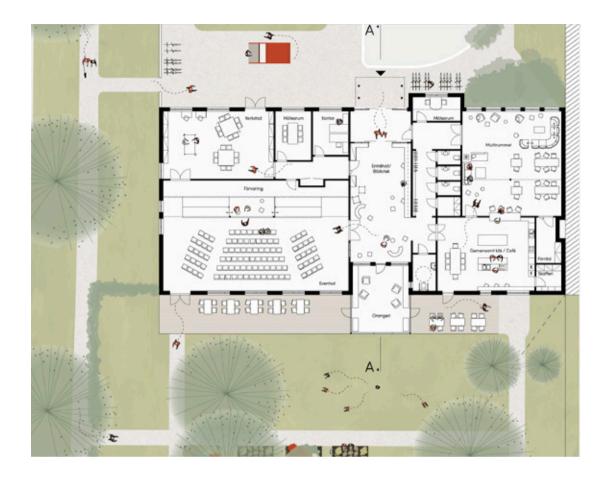
Paula Bruns | Ellen Jonsson | Ida Lindbäck | Nina Parot

The current economical system today steers housing development away from the countryside leading to rural housing shortages. This project explores ways to build affordable housing on the countryside. It includes site and housing strategies as well as economical organisations and construction process.

1. Axonometrixc visualising the current housing situation. 2. Building concepts for collaborate housing. 3. Axonometric of the proposed situation. 4. Housing concepts for shared space and prioroties. 5. Construction steps.







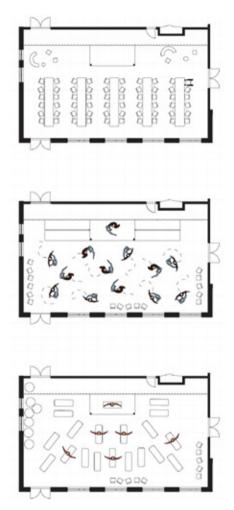
Community is Unity

- A new folketshus in Hällekis

Christina Dimitriadou | Linnéa Gabrielsson | Sofia Peterson

The main goal of the project is to spark the engagement of local activities among the residents of Hällekis. A renovation of the old preschool into a Unity House is suggested to act as a foundation for the locals to start their own local development. The goal of the Unity House is to be a place where citizens can meet and talk, share knowledge and further develop their everyday life.

- 1. Plan for the Unity House. 2. Scenarios showcase uses of the large hall.
- 3. Visualisation of the library of things. 4. Elevation with community created street art.







Towards a diversity of local contexts

Nils Björling | Ida Röstlund Examiner and Teachers from 2018 to 2022

As the course has developed over the last 20 years so has the discussion and awareness regarding the local and global challenges posed by the climate and environmental crisis. The pedagogical experiences gained over the years together with concepts such as the UN Sustainable Development Goals, Planetary Boundaries and Social Foundations have allowed for the students to become more precise and sharp in the mapping, analysis, spatial strategies, future images and imaginaries, and concrete proposals. Exploratory work is an important part of the process in order to acknowledge the different paths society might embark on as it allows for a discussion of who they cater for, which in turn creates holistic visions that can meet the needs of tomorrow in resilient ways.

In recent years we have had a special focus on these issues in the course, from a position that we have tried to describe as the 'rurban'. Situations beyond an urban interpretation and domination for the development of society, and a context in which the historical differences between the city and the countryside are increasingly blurred and emerge as new spatial power relations.

Based on annual themes such as *Towards Rurban Diversity*, *Architecture of Rurban Territory*, and *Another Countryside is Possible*, the course has in the last few years worked to critically discuss how centralities peripheries need to be re-evaluated. By considering aspects of the socio-ecological landscape such as resource flows, eco-systems, knowledge and culture, we can develop planning, design strategies and solutions that ensure a holistic geographical perspective and where a diversity of places with different conditions strengthen the ability of society to handle different futures.

Architecture, urban design, and planning have during the emergence of the Swedish welfare society focused largely on optimizing resources in society towards a modernist forward-looking progression where socio-economic development is based on technological innovations and extraction of natural and human resources. However over the past 50 years, the modernistic idea of progress has gradually begun to be questioned on the basis that we are more and more noticing the negative effects. For example, how overexploitation of both nature and society cause degradation of biodiversity, collapse of ecosystems and climate change. Negative effects on our living environment in turn create socio-economic injustices at both a global and local level and result in a division between geographical situations, groups in society and individuals who have, or do not have, opportunities to influence their future.

This means that today we have a future with increasing uncertainties. Therefore we need to include a diversity of resources, competencies, and decision mandates in design and planning, instead of optimizing society towards one overall goal of growth. It is then not just a matter of developing new spatial solutions to acute problems, but at the same time re-assessing fundamental values for the development of society as a whole.

At the same time, it is precisely in this interplay between overall visions and concrete spatial changes that architecture, urban design and planning possess strong approaches for change. It is when overall visions can be translated into physical form and when abstract images are transferred to concrete spatial changes that new directions of development can open up. It is here that the interplay between space as physical form and space as process can be used as a tool for the transformation of society.

It is in this intersection that Local Context has for 20 years, tried to develop its pedagogical approaches. In the course, we have used the concept of 'spatial lock-ins' to describe how the built environment can limit opportunities for change if it is not possible to change as physical form. We have also focused on the development of 'key projects' as a method to identify how we can open up new directions of development with specific spatial interventions. However, this not only requires a basic understanding of both the local situation and changes in the world around us but also the ability to formulate futures that include the resources, skills and mandates that exist in a specific place.

We see that the projects, which are partly compiled in the publication, over the years has built on the course's accumulated experience. They therefore are able to ask new forward-thinking questions about sustainable development and with increasing precision develop projects that can provide support for new directions of development.

In 2021, we have not only collaborated with one municipality in the implementation of the course but also with the Region Västra Götaland and four other different places / towns in three municipalities. The collaboration has clearly shown that the conditions for development look different in various parts of the region and in different parts of the municipalities. In several municipalities today, it is difficult to ensure a geographical holistic perspective because the resources are not sufficient or because investments are prioritized to only a few places in the municipalities to ensure competitiveness in relation to other municipalities. The collaboration with the region has given us opportunities to discuss the effects of what we see as regional urbanization and how it affects the understanding of centres and peripheries and shapes new relations between the city and the countryside in the regionalised urban

landscape. It has strengthened our commitment to developing an understanding of how different local situations in their context are affected by societal change and what opportunities it provides for changing the built environment.

Working in a sustainable direction requires new and critical approaches to both the interpretations of the existing situation and the consequences of ongoing transformations in the broader context. New visions and imaginaries are also required beyond the often stereotypical and simplified visions today of both the sustainable city and the sustainable countryside. Here we see how each year the students have started from a critical approach to mapping and analysis and that they discover new spatial qualities when they look beyond an urban interpretation of the existing situation. Then new places, landscapes and infrastructures emerge as being important for framing and enabling meetings and relationships. At the same time, other forms of participation and representation emerge to strengthen democratic processes and space of manoeuvre to influence the environment of everyday life.

Through the work of the course and in the research developed at Chalmers during the last two decades, we have seen that if planners, architects, civil servants, and politicians work with the development of places and landscapes based on the existing conditions and do not start in stereotyped imaginaries of what the sustainable countryside, or sustainable city should be, a wider range of resources open up that can be used for local development.

It can be about how we value knowledge of various kinds, that a tree, clay or sand does not have to pass a commodification process to be used as a building material or that the opportunities to rebuild the physical environment in the countryside or in the smaller town can be greater than in the big city because the distance to the decision makers or the owner of the trees, front loader or sawmill is shorter. At the same time, we see today that the development of society is increasingly focusing on addressing the problems of the larger cities, which means that smaller towns and rural areas are facing a difficult and often critical situation.

A development of society that is more inclusive, strengthens the potential in a diversity of places and can establish resistance to negative directions of development is necessary. Based on the engagement of the students in their work, we as teachers are hopeful for the future. In the work, we see creativity, commitment, and curiosity to develop new ways of thinking, working and re-evaluating conditions, which we believe is crucial to strengthening a critical and sustainable development of a diversity of local contexts.

