

scattered clusters

- or how to live closer together and closer to nature

Truls Slevigen

Tutors: Sverre Sondresen (APP),
Hedvig Skjerdingsstad (DAV),
André Fontes (TTA),
Frode Jacobsen (social science).

For more than fifty years the de facto model for new homes in rural Norway has been single-family homes in housing developments in or close to rural centers. This rural suburbia has been criticized for being planned mainly for technical infrastructure with the large fenced in plots with large isolated houses without community.

Recently urban densification of rural centers is being presented as a viable alternative model. In some situations, and through carefully planned interventions this might be the case. But it is always a danger that the urban becomes just as alien in the rural setting as the housing developments was decades ago.

The diploma proposes a third alternative through scattered clusters. The project draws inspiration from clustered farms, not mainly as a typology but as a model for social interaction, social inclusion, and residents working

together and helping each other achieve common goals through sharing of spaces and resources.

The project's context is the municipality of Krødsherad in Viken, and as a possible input to the local debate, a relatively realistic scenario has been conducted regarding the degree of implementation. The intention is that the project could be an example of a realistic alternative to the expansion or densification of the rural centers.


The chosen site sits on the border of the forest and former farmland. A common situation in rural areas, where much arable land has been going out of use as farming has been rationalized. This is most often meadows and species-rich grasslands that support a huge range of wildlife, including the important pollinating insects, like bees. The loss of these habitats is the main factor for many species of bees becoming endangered.

The diploma proposes a site strategy that includes restoration of elements of the cultural landscape, mainly the meadow - and it becomes the most important shared space of the community. A meadow must be maintained to keep its biodiversity, thus becoming an important common project. I believe that active participation in restoring and maintaining a productive cultural landscape will create a stronger sense of belonging.

My architectural response to this situation reflects the rural aesthetic of the surrounding agricultural vernacular, utilizing a simple wooden construction, where columns meet the ground and adapt to it rather than the adaption of the ground so common in housing developments.

The private dwellings include all necessary functions, while at the same time benefitting from multiple shared spaces. They have a defined private side in the forest and a public side towards the open meadow. An inner solid services core inspired by the stone fences of the site defines this border. The public side is further clarified through the use of natural stone of the site as a common, shared material.

Although not a self-build project as per-see I suggest active participation from the residents in all phases, including the transfer of knowledge to facilitate the residents to further develop both their private dwellings and the shared spaces.

An aerial photograph of a residential area in winter. The ground is covered in snow, and a road curves through the scene. Several clusters of houses are scattered across the landscape, some with snow-covered roofs. The overall scene is bright and wintry.

Diploma program
Truls Slevigen

scattered clusters

*intentional hamlets as an alternative
to subdivisions in rural centers*



Concept model (for presentations January 31.)

Abstract

In my diploma project I will be working with the small rural municipality of Krødsherad in the east of Norway where the majority of new homes built after 1970 is single-family homes in subdivisions in the rural centers.

I want to explore an alternative typology with hamlets dispersed outside the rural centers. I believe this could have multiple benefits; among them less land use, lower ecological and climatic footprints and better social interactions among the residents.

Inspirations for this typology stems from the historical klyngetun (clustered farms), the ideas of cohousing that started to evolve in Denmark in the late 60s and today's sustainable intentional communities.

Wood is a natural material based on renewable raw material and has little negative impact on the environment. Wood is one of the most environmentally friendly building materials we have available today.

Key terms



Klyngetun

Clustered farm

The word klynge translates directly to cluster in English. The word tun has the same origin as English town - as a spatial term it is mostly used where farm buildings stand so close that they create a common space. Grew organically from single farms that through centuries were split multiple times. Many similarities with European villages. Common all over Norway until most were dissolved in the second half of the 1800s.



Byggefelt

Subdivision

An area of housing planned with common infrastructure such as roads, electricity, water and sewage. Subdivided into plots for individual houses. Most often approved by the municipal authorities through a zoning plan. The detail design is left to the individual builder, who often is the future occupant himself (self-builder).

Økogrend

Ecological hamlet

A defined area characterized by the fact that residents want to live sustainable lives and that the buildings are built and maintained with a focus on climate-friendly material and energy use. A distinction is made between økogrend which is an independent part of a local environment and an økolandsby (ecovillage) that strives to be an independent and self-sustained village.

Intentional community

A planned residential community designed from the start to have a high degree of social cohesion and teamwork. The members of an intentional community typically hold a common vision and often follow an alternative lifestyle and often share responsibilities and resources. Intentional communities include cohousing and ecovillages. The purposes of intentional communities vary in different communities. They may include sharing resources, creating family-oriented neighborhoods, and living ecologically sustainable lifestyles, such as in ecovillages.

Wood

Increased use of wood in buildings will be a simple and effective means of reducing the CO₂ emissions. Wood is our only renewable building material. Unlike other building materials, wood products are produced resource-efficient, with low consumption of fossil energy and a high proportion of climate-friendly bioenergy in production. Wood also binds CO₂, and the carbon is stored in the wood product until it is released through decomposition or combustion. The use of wood in buildings gives a real climate benefit.

Where

I grew up in the rural, on a farm by a lake surrounded by forest and close to a mountain, 100 kilometres west of Oslo.

The municipality of Krødsherad has 2216 inhabitants, 1061 detached houses, 6 apartments and 1542 cabins as of today.

After a dramatic population drop following the mechanisation of agriculture and forestry in the 1950s, Krødsherad saw a new rise in population in the 1970s as a result of local authorities' efforts to attract secondary industries.

Until 1970 most homes were spread out at farms or close to farms, but from then on almost all new housing became centralized to new subdivisions in the two centres of Noresund and Krøderen. With their generously sized plots for detached houses, these developments have come to occupy an ever increasing area, as they have been expanded during the last five decades to keep up with the demand for new plots.

Zoning permits have not been given for housing developments outside the centers. This is based on national and regional policies saying that new zoning for housing should be within safe walking distance of schools and center functions.

The population of Krødsherad is estimated to increase to 2654 by 2040. With an average of 3 persons per household this translates to a need for 146 new homes in addition to those new homes needed just to maintain the current population.

Is it necessary that all these new homes be built in housing developments in the centers, or can new technology and transportation innovation like autonomous buses and car sharing allow for more dispersed housing, and bring humans closer to nature?



Why



Havråttunet, Osterøy (own photo).

The past three decades has seen a trend where urban inhabitants want to move to more rural areas. Even though this represents a relatively small percentage of the population, the demand for smallholdings and houses in rural areas within a few hours commute from Oslo is larger than the supply. The fact that smallholdings and single family detached homes are the most popular signals that a closer connection to nature is an important factor for the majority.

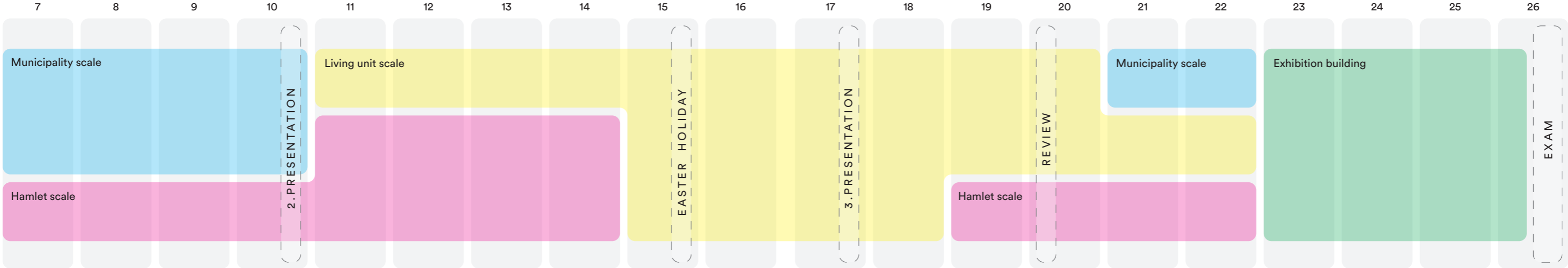
An aspiration to live a greener life has been a significant motivational factor for rural migration. Until now most people wanting to live in “eco” housing have come from a minority who have a higher than average interest in “green” issues, and like the idea of an alternative to mainstream life.

I believe the increased focus on sustainability and the climate crisis will make green values important for the majority of the population, supported by public regulation and incentives. An example is electrical vehicles that merely 5 years ago was seen as an option only for the few with a special interest, yet now is the most common choice for new vehicles in Norway.

More dispersed housing will not in and of itself be more sustainable or eco-friendly. However, if units are grouped in smaller communities with indoor and outdoor common spaces, and where amenities such as heating, waste drainage, and transportation can be shared, this can contribute to a considerable reduction in ecological footprint.

Perhaps these new communities can be placed in the transition between wild forest and cultured forest on former pasture or cropland. This prevents encroachment on valuable agricultural land while still allowing inhabitants to have plots for growing small crops. Such transitions are often found in the hillsides above existing farms, giving attractive views.

Timeline



Master courses

Autumn 2020

Complex Context - age friendly city

A spiraling ramp inside the steep hillside of Holbergallmenningen in Bergen with focus on universal design and experience, creating a third generation allmenning. Group project with Jim Hoddevik and Emilie van de Walle.

Tutors: André Fontes, Tom Chamberlain, Hedvig Skjerdingsstad

Spring 2019

Vanishings - transient inhabitations

Bringing sand from Sandviken up to Skredderdalen. Building a small public bath from the sand in the river. The bath lets water through, divert water, and collect water. The rivers water flow fluctuates through the seasons. The water will eventually erode the construction and return the sand back to Sandviken.

Tutors: Rikke Jørgensen, Claudia Carbone

Autumn 2018

Open Form, New Wood

Six two-story family sized living units, elevated 4.5 meters above ground, with a shared outer weather protection creating both a covered public space on the ground level and weather protected shared spaces between and above the living units.

Tutors: Marco Casagrande, Charlotte Erckrath, Jacob Schroll

Education

2015 – 2020

Architecture

Bergen School of Architecture

2003 – 2004

Geographic Information Systems (GIS)

One-year study – Telemark University College

2000 – 2003

Forestry and Wilderness Management

Cand. mag. – Hedmark University College

1996 – 1997

Graphic Design

One-year study – Høyskolen Kristiania

Work

2005 –

Forestry and wilderness management

Family farm in Krødsherad

2004 – 2015

Graphic designer and web developer

Own practice

1998 – 1999

Graphic designer and web developer

Headquarters Defense Command Norway

Interests

Photography (analog and digital)

Model building

Woodworking

Electronics/Programming

