

DIPLOMA PROGRAM FALL 2017

Diploma candidate: Jørgen Joacim Høy
Institute: Architecture
Main supervisor: Christian Hermansen
Second supervisor: Catherine Sunter
External supervisor:
Company cooperation:

Title of project: Revitalising Barns through Careful Intervention

Revitalising Barns through Careful Intervention

Candidate: Jørgen Joacim Høy

Supervisor: Christian Hermansen and Catherine Sunter

The Oslo School of Architecture and Design Pre-diploma report, spring semester 2017

CONTENTS

Introduction	5
Thesis	7
Apporach	9
Site	13
Programme	18
References	19
Academic References	22
Deliverables	23



INTRODUCTION

Barns, they come in a huge variation of sizes, construction and cultural history. All around Norway, where agriculture has been practiced, you will find barns with different kinds of programme, such as household animals, producing food and storage of equipment and farming products. Sadly, the rate of decay in both used and abandoned barns is increasing. This is not new problem, but I believe it is a problem that is worth investigating.

I have always been interested in barns, the quality of the space they create inside, the visible timber construction and the story in the walls. I am interested to look at ideas of how to make use of these barns, and to see if they can accommodate different needs.

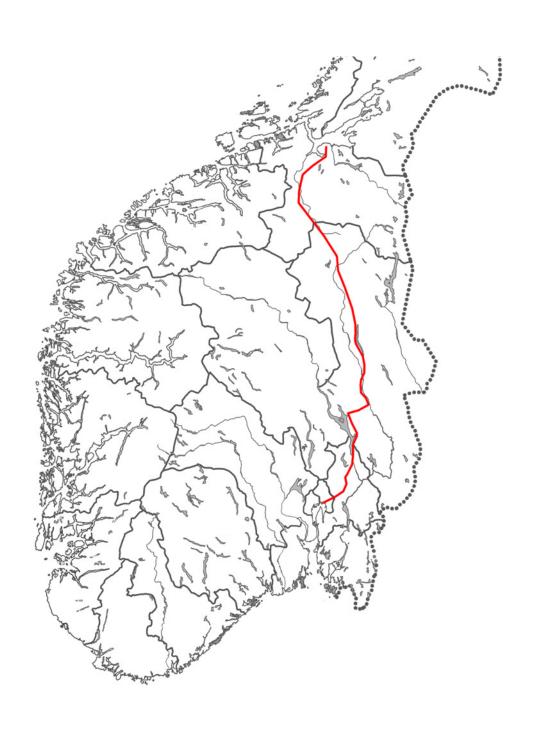
Norwegians have a rich agricultural history and we take great pride in it. The barns all over the Norwegian countryside is a part of our historical heritage. To preserve and maintain all of these structures takes a huge amount of time and resources, which falls to the owners, who may not see the value in maintaing the barns. Could revitalising the barns by giving them a new programme give the potential to save them? The main reason for abandonment of barns is due to costs, since maintenance and preservation can be expensive. My thesis proposes to investigate alternative methods of preservation through alternative, low budget ideas, that make use of what already exists.





THESIS

Explore the potential to preserve and re-use existing barn structures through minimal architectural interventions.



APPROACH

My approach is to take a closer look at the pilgrim route that runs from Oslo to Trondheim. By choosing this route I am narrowing my search down to barns that are close enough to the road that they could provide some kind of infrastructure to this tourist route.

During the summer of 2017, I cycled and camped along Pilgrimsleden to find out what type of Barns, nature, tourist attractions and camping sites this route could offer.

This trip resulted in the choice of programme: for a meeting and sleeping place that could be an alternative to the normal cabins and hotels along the route. The barn would work as an open place with accommodation for hikers and cyclists. The programme is developed through a concept of "Minimal luxury" (described later), enabling an exploration of the existing structure and character of the barns without necessitating complete refurbishment and climatic control.

















After two years of master studies at AHO there is one course that stands out for me. I have taken this course two semesters, and I found it to be the most rewarding semesters that I have had during my studies. The course is led by Professor Christian Hermansen.

The Scarcity and Creativity Studio (SCS) is a design and build studio within the Oslo School of Architecture and Design (AHO) whose focus is on 'translations from drawing to building'. The studio's aim is to expose students to the full architectural process, from interacting with the clients to building their designs. SCS seeks challenging contexts in which local conditions and creativity are employed to make the most of scarce resources.

In my Diploma I will follow the same kind of approach as I have learned from Scs. The sense of a real scale, materialism and detailing is what drives my interest for architecure.



Scs Project built in 2016: Småbruk

SITE

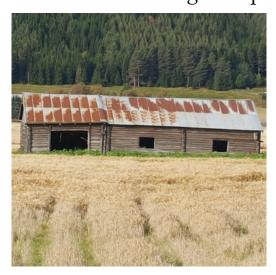
During the cycle trip I found three different barns that stood out among the rest.

The first barn is a large barn near Hamar with no current active programme, an open structure in good condition with minimal need of refurbishment. Footprint: 32x9m





Barn number two is located in Koppang. This is an older barn with thick logs constructed using the "lafte" technique. The structure is slowly decaying, and would need some attention. The barn consists of three smaller rooms with no real flooring. Footprint: 20x9m





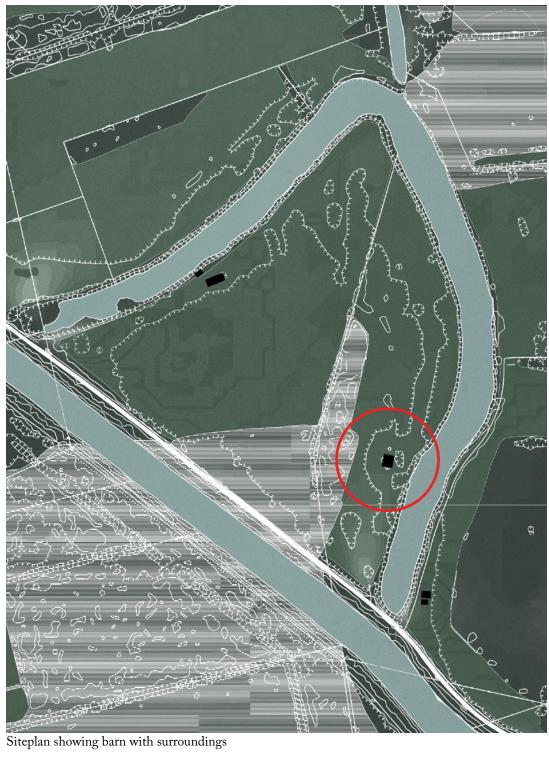
Barn number three is located in the middle of a field in Rendalen. The facade is in good condition with the inner wooden structure still intact. One big open room will need some refurbishment and there is no active programme existing today. Footprint: 10x8m





The barn in Rendalen. is the barn I have chosen to use as the focus for my diploma investigation.

The site is an oats field surrounded by a river called Unsetåa. With a river near by you have the possibility to sustain the need of water for the visiters. The oats field is in use by the owners of the barn and will make the idea of an "open to all" situation more viable in view of the supervision arising from this existing surrounding activity. The barn is approximately 130m from the pilgrim route and stands out in the middle of the field. The nearest town Bergset is just an 8km walk, with stores open daily if visitors are in need for extra supplies during the trip. If you want to catch your own food there are also several marked fishing spots along road.





Turist road sign just by the site



Road to Bergset



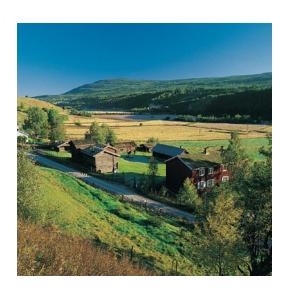
Barn in the middle of the field



Nearby fishing spot

Rendalen is known for its nature, and is the biggest recreational municipality in the south of Norway. It is surrounded by mountain plateaus and large forests that give many possibilites for camping and hunting. Jutulhogget is one of the biggest canyons in Europe and can be found in the southern part of Rendalen.

There are also several festivals in the area that revolve around music, food, nature and outdoors activities.









The barn is constructed in pine wood, and all of the inner structure appears to be in good shape. The roof was originally wooden shingels, but was later cladded with corrugated steel. The wooden shingles are still intact and can be seen from the inside of the barn. There are two big openings, one in the front mesuring 3,8m wide, and one in the second floor with a width of 1,8m. The entrance in the front is missing the original doors and now functions as the main source of light. The wooden flooring in the barn has curved up due to a flood, and some of it is rotted. The second floor is no longer accessible due to the "barn bridge" having been removed. The owners of the barn predict that it has a potential lifespan of 80-100 years left.









PROGRAMME

The experience of camping can be one of the best feelings when you are out in the wild, only dependent on what you can bring in your backpack. Life is simple and down to its core elements. It can also be a hard time: wet, cold and dark. You are out there and all you want is a nice, warm place to rest. I have experienced both situations many times and it is what makes a trip exciting.

During trips like these you will have moments with what I call "minimal luxury". What I mean by this is a moment when you have a good snack, find a good camping spot, take a quick bath in a lake, or when you tuck into a warm sleepingbag. I will use "minimal luxury" to define my programme in this project.

A place to sit down around a fire

A place of sosial encounters

A place to get a warm night of sleep

A place to dry and hang your clothes

A place for drying and maintain your bike

A place to prepare and cook simple food

A place for doing your necessities

REFERENCES PROJECTS

Reiret by Opaform

http://www.opaform.no/Reiret



Ei Løe by Opaform

http://www.opaform.no/Ei%20Loe



Chemin du calvaire by Antoninziegler

http://www.antoninziegler.com/



Sørum Gård by Are Vesterlid https://www.arkitektur-n.no/prosjekter/sorum-gaard



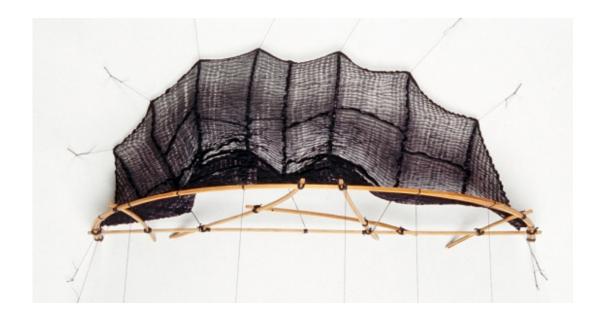
Seating by Matthias Pliessnig

http://www.matthias-studio.com/



Dark Side by Mo Kelman

http://mokelman.com/recent-work/view/259/0003



ACADEMIC REFERENCES

Norske Låver

Eva Røyrane, 2014

A story about the Norwegian barn, the most important building in Norwegian agriculture, an icon in the Norwegian landscape

Beresystem i eldre norske hus

Jon Bojer Godal, Steinar Moldal, Trond Oalann, Embret Sandbakken, 2009

Documentation of about 1000 construction works from Vardø in the north to Lista in the south, and of the active performers' working methods.

Deliverables

Plans and Sections in 1:20
Plan and Section of 1:1 Model
Model in 1:1
Model Pictures
Illustrations of Architectual idea
Siteplan in 1:100
Pictures of Barn
Cycle Route + Mapped Barns
Movie of Building Process
Model 1:10 of Barn
Test Models
Process Booklet
Barn Booklet
Cycle Trip Booklet
Pre-Diploma Report