TWO BIRDS,
ONE STONE

sensors booklet
From the prediploma

This diploma project wants to examine the potential that lies in abandoned agricultural buildings. Buildings that have lost their initial function and use, and their need to transform to stay "alive". Keeping the notion of the cultural history, while applying modern standards.

In Norway there are more than 500,000 buildings related to farming or some sort of agricultural production. The Norwegian State Agricultural Administration mapped these buildings in a selection of municipalities in 2013. The numbers showed that 1 out of 4 buildings were either not in use or totally abandoned. If these numbers represent the general situation in Norway, it means that there are about 125,000 empty buildings in the farming industry alone. And the numbers will probably rise the following years. Farming is changing from individual small farming to a more collective and bigger farm industry. This results in the need of new, more spacious buildings, leaving the too small buildings behind. In 2024 it will be forbidden by law to keep livestock in the traditional stall (bås) due to animal welfare. This forces the farmers to either give up their occupation or to build a new and bigger house. Again leaving the old houses empty.

If we can reuse these buildings, give them a new purpose and a new life, we would save a piece of history while using already processed materials to create something new and contemporary. Exploring an exiting typology in the process. It's a win win situation. Two birds, one stone.
To invasigate the possibilities that lies in the trasformation of abandoned agricultural buildings, it seems wise to use an existing situastion as a starting point. This will help narrowing down the project and add resistance to it.

The chosen site consists of several buildings with different original functions and constructions, a "tun". The primary focus will be on the barn. The size and the construction of this building allows a variety of solutions to be tried out. It is also the most general of the buildings, meaning that the solutions in the end result, should be transferable to the many similar buildings in the region.

The project is to be read almost like a manual to how one actually and realistically could restore this barn. The knowledge aquired should be helpful to other similar projects. The goal is to find a functional and easy way to include these old buildings into the modern life, not as a memorial of the past but a "living" structure in use.

Most farm buildings are privatly owned, and restauration of buildings tend to cost a lot of money. To keep this project as realistic as possible, it will be developed with an awareness of the economical factors. Aiming for a "low tech" result that will benefit a wider range of people

Some time in the beginning of the semester will be spent on exploring the different ways of transformation for buildings in similar conditions. Getting to understand the original structures and their positive and negative qualities. The work progress will force the project to jump in and out of the situation, constantly comparing it to similar but still slightly different structures.
Selected focus region. Tolga in Nord-Østerdalen in the so called "Mountainregion. Above is a map of the region and to the right a map of the center of Tolga.
The Kronmo farm lies in the municipality of Tolga, only 20 minutes from “the Mountain Capitol” Røros. The town was founded when a smelter in relation to the mines at Røros was built close to Toljefossen, the local waterfall. Since the primary industry was related to this, small farms were built around the smelter.

This makes the Kronmo farm interesting. The houses have a typical layout, but are unusually close to the town center. A small path crossing the outskirts of the town is the main travel route for pedestrians moving between the town center and the residential area.
THE PLOT: KRONMO
Sections of existing barn layout. 1:100
Sections of existing barn layout, 1:100
How to treat the construction and making it more suited the new use
Hvordan ligger jeg høyden på mellometasjen? Kan jeg tilligne å have midtre bjerke. Kan det løses på andre måter?

Hvor går grensem for hva som bør være som å endre på? Mever bygningen karakter desse som slike endringer ble utført?

Det varer ofte etter reversibile løsninger, å endre konstruksjonen på reglene som ikke reversibel (?)

Dette meddelen krever ingen endringer på original struktur, men er svært verktise med alle trappstuasjoner som oppftræ.
DAGENS SITUASJON:
HORIZONTAL KLEDDING
BLERKSTAK MED TAKUTSPRING

ISOLERT SITUASJON
(SITUASJONEN "SPISER OPP"
TAKUTSPRINGET, VIKLE OPPLEV
KUNSTIG A REKOMMENDERET,
SAMME KLEDDING SITUASJON (2)
Plan 1:100
følger tanken
om en åben og
en lukket side.
Fleksible rom-
delinger.
Å INNE ISOLERE HEMMER BRUKSMULIGHETERNE MEN BEVARER UTFYNKRET.

Å ISOLERE I KONSTRUKSJONEN MINERER INNEROM MEN BYGGER MINIMALT PÅ URSIDEN.

PÅHENT FÅR ETTE BYGGER MYE PÅ URSIDEN MEN LÅT KONSTRUKSJONEN STA UTSTÅTTET PÅ OPSIDEN.
Hvor store arealer trenger man til servicearealet? 
Hva er generell rumstørrelser? Når er derimot store rom? 
Kan det være en variant av denne med mindre servicearealet?

Vurder antall avdelinger. Tre er muligens bedre enn tre. Dinne planer odeligger velskuleplanleggingen bakleter.

Mindre trangt med 2 avdelinger.
Kan se ut som at dette er en bedre forholdsfordeling av primaer- og sekundærfunksjonene. 
Hvorfor forhilder andre seg til dette? 
Hvor ligger tripper og skikkelser?
New Plan ground floor
1:100