PROJECT PRESENTATION:

IN COMMON
A Future for Student Housing at Moholt
Trondheim is a student city. Nowhere this is more apparent than at Moholt Student Village. With some 2,100 residents from all over the world this could have been a vibrant place not only to house students, but also a place they can truly live. A place where collective housing is not just a financial or practical matter and the purpose of home is more than meeting the most basic physical needs. A collective state where each individual home extends from the small private unit out into common areas, confronting and merging with the homes of a multitude of fellow dwellers. A network of intimate personal refuges inspiring interaction and social life.

This project is an investigation of the future potential of collective student housing at Moholt Student Village.
The Student

Although a common notion clearly exists of who the typical student is, this can hardly be said to be a very accurate. Students represent a highly diverse group with members as different as the rest of the population. A high diversity in factors such as variation in background, age and stage of life as well as interests, personality and social network makes it almost impossible to understand students as one homogeneous group.

However, one thing particular to many students is the collective housing situation. And this characteristic is certainly true for the ones this project is aiming on. This form of living is often preferred not only due to financial concerns, but more importantly because of social aspects. The time spent as a student is normally a phase of establishing the first own notion home, an important part of the personal identity. And as identity has to be formed in relation to others collective housing could provide a great arena for this process.

"Social aspects of student life and the need for contacts among the various inhabitants are probably more important in a student house than in other residential settings. Especially in the case of young students, who are used to living with their family around, new social relations need to be established when they move into their own place."

–Judith Thomsen

Student Housing – Student Houses? (2008)

1: Trondheim Kommune, 2008, Rapport Helhetlig Studentpolitikk
2: SSB, 2011, Levekår blant studenter 2010
3: StudiebyEn/Sit, BoIdeer 2010
4: Trondheim Kommune, 2006, Rapport Prosjekt studentbosetting
Moholt Student Village

Designed by architect Herman Krag and built during the 1960s and 1970s Trondheim’s oldest standing student village is still by far the largest one. More than 2,100 residents live here, either in small four student kitchen cluster collectives or in separate family apartments. Despite the high population the huge area has a low density character, practically being an open modern park scattered with red brick houses.

Moholt is located right between the city’s two biggest campuses, and a range of major locations are easily reachable by both bicycle and bus, still many students do not find the location central enough. This notion might be connected with the student village reputation’s steady decrease the past few decades. Due to age and a highly international population the Moholt has gone from being a top of the line housing dream to being perceived as a cheap ghetto. Something needs to be done.
The main strategy of the development plan is the establishment of a new clear center in the student village. Reaching out to the main road Jonsvannsveien in the East the center becomes the major point of connection between the student village and its surroundings. Thanks to the increased density of the student village it is possible to focus new public program at this point and create spaces with more urban qualities. This is not only benefiting the student residents themselves, but also makes Moholt Student Village a worthwhile destination for the greater public, neighbors, and other students.

The new center creates a strong identity for Moholt Student Village as a whole, but also helps differentiate different places within the area. The urbanization makes the green qualities of the existing parks stronger giving them worth and a real sense of places.

The only public program not located in the new center are two new kindergartens. One of them is easily reachable at the northern border, while the other is located in close proximity to the family houses.

Today Moholt is divided into two zones of family houses and single units in collectives. This division reflects the different housing needs following stages of life and gives the two areas within the student village a slightly varying character. While areas designated for families in the outskirts of the village are laid out with children in mind with moderately sized outdoor spaces and playgrounds, the larger areas with housing collectives are more centrally located.

Following and strengthening this already established and well working pattern the project proposes two different kinds of collective housing typologies. This strategy strengthens the up distinct area characters within the student village, and makes it possible to design to meet the user groups' specific needs.

The new family collectives are relatively small in number of residents, three or four families of one floor share kitchen, play and living space. In the much larger single and couple collectives up to 150 residents share all common areas throughout the building, making the them multitudes of overlapping homes.
### New Areas of Development

New buildings are laid out in the currently unbuilt areas of the student village. Other than extensive car parking these areas are of limited use today and also hold the biggest potential for a significant increase in housing capacity of Moholt. By avoiding infill developments between existing houses and leaving them mainly as is one does not put undesirable constraints on future developments, keeping the possibility for a continued urbanization of these zones many years down the road.

In total the plan more than doubles the housing capacity of the student village, giving home to one in ten of Trondheim’s students. This is neither practically possible or socially desirable to carry out in one giant step. The plan should be carried out in several phases that can be adjusted as the need for student housing grows and new development becomes financially possible.
Outdoor Spaces

Current green areas are generous but not very clearly defined. This gives the buildings a beautiful scenery of being placed in an open park, but also causes a feeling of sameness throughout the area. Spaces are loosely defined, lack distinctions in character, and of little use as their programming is sparse.

The development plan builds on the green qualities of today as it more clearly defines a wide variety of outdoor spaces, ranging from large parks to urban squares. Variation in size, definition of outer edges, surface treatment, and programming such as sport fields, playgrounds, and barbecue areas creates a hierarchy of spaces with different role, character and usability. Residents and neighbors will still be able to move freely through generous connecting outdoor spaces, but now in a sequence of more variation than before.

New buildings are organized to form inner yards with each other and existing buildings, thereby integrating with the situation and contributing to more intimate and usable outdoor areas around the present houses.

Streets, Roads, Paths

The road system of the student village is kept as today, but elaborated with a few important connections, both internal and along the areas perimeters. The new roads and streets do not only serve as access to the new buildings, but also establish a new rich movement network. This plays a key role in stitching together different parts of the student village itself as well as with the immediate its surroundings. This same principle is also applied for walking and bicycling paths.
The investigated collective is centrally located in the student village facing the small urban square, the new heart of the area. Several small public functions are located here, including the activity house, a small café, a hairdresser, a second hand shop, and the sports center. Close by one also finds bus stops and a grocery store. This program is intended to draw both residents, neighbors, and other people to the square throughout the course of the day, making it a natural place to meet old friends, encounter new ones, or just sit down for a coffee. The open space itself can be used as an event space for a multitude of student initiated activities as exhibitions, sporting events, concerts, and flea markets.
In Common

One great continuous living space flows between the private volumes throughout the building. This is one big room with several smaller zones along the central line of travel, offering a multitude of different spatial situations. In Common can be used in a flexible manner by the residents, depending on mood, activity, if they are together or alone, if they want to engage in what’s going on, or just watch the common life unfolds in front of them. In Common offers encounters with the others, opportunities to hang out, or even being alone in the smaller niches.

The common space becomes an empty canvas for each student’s individual constitution of home. Inhabiting the common space and meeting fellow residents each student will use the space and make it their home in a different manner. To any student some zones will be close and others further away, both in terms of physical location and in their mental notion of home. The same applies for the social relationships between residents, while one fellow residents might turn out to be a new best friend others will be more distant.
The collective buildings have two different types of units, single rooms and couple rooms that also are wheelchair accessible. These private rooms form the spatial core of each resident's individual home. The rooms are intimate refuges where all circumstances can be under complete control by the inhabitant. Here students can retract from the common areas to be alone and find true quiet and privacy.

The private rooms are of limited size in order to prioritize common areas and encourage the use of these. Through the use of built-in furniture utilizing the entire height of the room they become space efficient but rich in terms of content. Every room holds all basic features needed in the close personal sphere; a separate bathroom, bed, working place, and generous storage space. Recognizing different needs among different residents the couple rooms also feature a small living zone separated from the bedroom - a place to be alone together.
Size

In collective living size does matter. If too few people are sharing the common spaces chances are less likely for residents to meet others with whom they identify and develop relations. Further more few users do normally not bring the needed level of activity to the common areas for the true potentials of collective living to unfold. Intensity is simply not high enough. Still mega collectives can cause feelings of unfamiliarity, anonymity and even loneliness among the residents. In Common counters this effect through the smaller spaces within the great living room and assigning students to smaller kitchens. Each resident has several social arenas in immediate proximity to the private sphere.
Numbers

100 units total
- 60 in single rooms (9 sqm)
- 40 in couple rooms (23 sqm)
In Common: 1250 sqm

Total per person:
- Net: 24 sqm
- Gross: 31 sqm
- SiT guidelines: 30 sqm (gross)

Area per person will be lower in most other buildings as this one holds public functions on the ground floor, leaving only three full floors of private rooms to share the kitchen floor.
Floors

All the collective buildings are organized with the most public functions on the ground floor and progressively more private spaces further up. The particular investigated building holds a street facing activity house and café, which means the common kitchens are located on the first floor and more intimate spaces on the following. In buildings with no public program the kitchen floor will be on ground. This distribution softens the borders between the public student village, the common housing facilities, and the private rooms.
Verticity

The building is organized with a main centrally located vertical axis of stair and elevator. Stretching through the common area including both entrance and kitchen zones this serves as the main communication and orientation point of the collective. To connect and open for communication between the different floors there are also several visual connections through double or triple height spaces and a set of secondary staircases. This makes different zones of the common space more available for residents of different floors and expands the potential of the house as a social arena. The immediate neighbors are not just the ones living next door, but also the ones above and below.
Elevations

The new buildings are designed in relation to the existing structures of the student village. Although they are clearly new additions of a different material and somewhat bigger size there are several subtle references that ensure a well working dialogue between new and old. Architectural elements such as the composition of separate volumes, colors, window slots, sizes and vertical proportions are all familiar in the student village. The brick used for the public ground floor base ties new and existing housing together.

To give a clear and sharp definition of the private bedroom volumes their outer surfaces are covered with a homogeneous flat wood cladding stained brown. This main treatment is the same all around the main outer surfaces of the volumes, both outside the building and indoors facing the common areas. This blurs the borders between inside and outdoors and stands as a clear contrast to the warm massive wood interiors of the private rooms and niches.

To differentiate between the volumes and help the students develop the individual understanding of their own home each volume has a colored face, giving a small but effective variety in the faces of the different units behind. The faces follow a palette of four clear colors recognizable throughout the student village.
Three materials

Buildings are composed of three main kinds of elements, each with different materiality and construction system. Wood, brick, and glass make for clear distinctions of the building’s functions. Like for the existing buildings at Moholt massive construction techniques are employed, bringing in massive wood to compliment the now all dominant brick.

Wooden Volumes

The volumes that hold private rooms are the most dominant element of the new buildings. A small set of massive wood element types with different window configurations are combined and repeated for all the volumes. The elements are exposed in ceilings and inside the private rooms, giving a warm and intimate character. Externally the massive wood is insulated with wood fibre insulation boards, making these all wood constructions.

The outer cladding and window recess depths differ between the light colored faces and the more quiet brown stained surfaces. While the faces are framed and feature a lot of depth through deep windows and the shadow play of board and batten paneling, the other facades are almost completely flat with shiplap cladding and windows placed far out in the wall.

Brick bases

Public functions are made in a brick cavity wall, lightly rendered with a dark, yellow finish. As well as announcing function the switch of material from wood to brick gives visual variation to the facades offering a firm base for the heavy volumes on top.

Glass walls

The collective housing’s common areas are protected from the weather by a transparent glass wall system. This offers light to the inside areas and softens the transition between the outdoor public student village and the common areas inside.

CONSTRUCTION
Looking at the details

Roof
200 mm: Massive wood element
500 mm – 400 mm: Stone wool insulation board
3 mm: Membrane
703 mm – 603 mm total
U-value: 0,08 W/m²K

Floor
200 mm: Massive wood element
25 mm: Wood fibre insulation board
80 mm: Wooden batten
22 mm: Chipboard, slitted
28 mm: Wooden floor board
373 mm total

Brick cavity wall
Thin render, yellow-brown
104 mm: Brick
200 mm + 50 mm: Stone wool insulation board
20 mm: Air gap
104 mm: Brick
Thin render, yellow brown
478 mm total
U-value: 0,16 W/m²K

Massive wood face wall
150 mm: Massive wood element
240 mm: Wood fibre insulation board
35 mm: Wood fibre insulation water resistant wind breaker board
30 mm + 30 mm: Furring
19 mm + 19 mm: Board and batten
Colored wood stain
523 mm total
U-value: 0,12 W/m²K

Massive wood side wall
150 mm: Massive wood element
240 mm: Wood fibre insulation board
35 mm: Wood fibre insulation water resistant wind breaker board
30 mm + 30 mm: Furring
19 mm + 19 mm: Board and batten
Colored wood stain
504 mm total
U-value: 0,12 W/m²K

Private room

IN COMMON

Construction

Detail horizontal section
Through private room 1:50

Detail vertical section
Through private room 1:50
Deep window placement
Volume faces
1:10

Outer window placement
Volume side walls
1:10

Meeting brick base - massive wood construction
FAMILY COLLECTIVES
Study of a house with 9 collectives at the village perimeter

Situation
The new family collectives are located in the quiet areas already dominated by family apartments. New buildings compliment the existing situation and define protected courtyards where children and parents can meet at the playgrounds. As the current family units have only one bedroom and is best suited for families with one very small child, the new structures seek to improve the housing offer through the introduction of accessible units with two and three bedrooms.

Architecture
The family houses follow the same basic set of architectural principles as the single and couple collectives. The collectives are however of much lesser size. Three or four families share a common area between their private units. This space features kitchen, dining, play, and living zones. As families generally also will have a desire for time by themselves each private unit features a small living space along with separate bedrooms and a bath.

Numbers
9 collectives
- 3-4 families / collective
- 115 - 157 sqm common / collective

95 housing units in 30 family apartments
- 22 two bedroom apartments(31 sqm)
- 8 three bedroom apartments(48 sqm)

Total per person:
- Net: 23 sqm
- Gross: 30 sqm