

Abstract

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A home for elderly

Introduction

Norway faces challenges due to a shift in demographics, from 2018 to 2040, the amount of people above the age of 80 years is rapidly growing. Today, this age group makes up 4.2 percent of the population, however in 2040, this age group is projected to make up as much as 8.0 percent of the population in Norway. Based on this development, it is expected that there will be more elderly than children in the year 2040 (Helsedirektoratet, 2018). As a society, we must prepare for this development and build more nursing homes. Nursing homes as a term, also called retirement homes, resting homes or old people's homes, are institutions for elderly patients who are unable to take care of themselves, who need 24-hour health service in the last phase of life (Store Norske Leksikon 2018).

By examining typical plans and organizational principles of nursing homes, I see that there is little variation in architectural solutions. Nursing homes as a typology are generally characterized by repetitive and orthogonal organization of patient rooms, narrow corridors and common spaces, hence few spatial qualities. However, it is conceivable that there is a lot of potential in how to work with patient rooms as a holistic organization within a building, both for these to work internally and for the surrounding spaces. I chose early in the thesis to work with a more independent organization that was aiming to create good transitions between, insight, views, private and public space. Based on this, I have chosen to develop an alternative architectural solution where I have challenged the current conventions. The idea of the thesis focuses on how nursing homes as a repetitive typology can create varied and unique spatial transitions.

The ambition of the project has been to embrace this idea of a holistic construction that solves the program's functions within one structural system. The project consists of a continuous wall that runs along the patient rooms and the common spaces, punctured only for passages between the private and the more public. The shape of the wall has been created through the desire to create varied spatial processes with varying degrees of private and public character. It has also been important to work with an organization that does not provide corridors, but rather creates residences for the residents. Between the residences, outdoor spaces are created that shield the residents from having direct access to each other and that provide a close view of the natural surroundings from the site.

Site

The site for the project is located in the district of upper St. Hanshaugen in Oslo between Ullevål Hospital and the Veterinary College. The area adjacent to the plot has from 1920 until today contained the buildings of nursing homes. On the plot Thulstrups Gate 4, there is today a building that was previously a nursing home, which is now to be demolished due to poor building condition. The new building to be built is also a nursing home that will be completed in 2022. This forms the basis for choosing a plot for the project.

You arrive at the plot from Ring 2, Kirkeveien. Another potential access is from Sognsveien. The plot is located between two buildings from Thulstrup Gate. The houses towards north are today homes for the elderly, while the building in the south is used as private apartments. The plot faces two green courtyards in the north and south. To the east, there is an existing car park and a gravel track belonging to the Veterinary College. From the west, the plot meets a building under Eugene Hanssen's small home, which today is used as a kindergarten and outdoor area near the plot.

Program

As part of the thesis, I have studied existing nursing homes and have based on this prepared a program. Due to the size of the plot, I have had to simplify the content of the program and have thus focused on the most important rooms, patient rooms, common rooms and the administrative rooms.

The nursing home is designed for 12 residents and 8 employees, of which 2 are department heads, 1 is a doctor and physiotherapist and 4 are nurses. On the ground floor there is an administrative department. On the first and second floors there are patient rooms and common rooms.

Area plot: 1200 m²

Area building: 600 m²

Outdoor space: 600 m².

Volume

The building has been offset by 4 meters from the site boundary and follows the existing building lines. The volume is located across two open courtyards and serves as an end to these. One courtyard in the north is closed off from the city, while the other one is more open which makes this courtyard more connected to the city. The idea has been to place the private functions towards the closed courtyard in the north and the more public functions towards the city in the south. The elongated and rectangular shape of the plot provided guidelines that the building volume should be a long and narrow building that occupies space on the sides of the building. The heights of the volume occupy the heights of existing houses adjacent to the plot.

Space

The building consists of three floors and a lower floor with parking spaces with a descent from the access road. Here there will be 10 parking spaces for employees and visitors. Downstairs, each patient also has access to their own storage room for personal belongings.

On the ground floor is the administrative department with access room, reception, offices, physiotherapist, doctor, office, meeting room, staff room and laundry room. The common rooms are used by the residents, staff and visitors. The entrance to the project is on the east side with a ramp from Thulstrup Gate.

On the first and second floors there are two wards for two groups of patients. Each ward accommodates 6 residents. Each resident has a private room with a wardrobe and bathroom. The common rooms consist of the kitchen, dining room, living room and activity room.

The circulation rooms are located at each end of the building to meet the requirements for an escape route and consist of a U staircase and an elevator. The circulation room can be closed at each end and acts as a fire cell for the building.

Construction

The construction consists of a CLT wood wall that folds in different directions and forms a rigid structural disc. Glulam beams are mounted to the wall in a system of triangles that makes the beams work together. The beams sit on thin steel columns along the periphery of the building.

Materials

The project is intended mainly in CLT wood with the exception of underground parking which is in concrete. The columns and railings are made of steel. All moldings, frames and window profiles are also intended to be made of wood. The background for the choice of wood is the environmental properties and the sensory qualities of the wood. As this is a nursing home, it has been important to choose a material that can provide good associations for the patients.

Summary

In the diploma thesis, I have worked on a project that challenges current conventions, but which still maintains the requirements for universal design. The project has created new spatial connections as a result of a new organizational principle. The project adds new qualities than the existing nursing home typology does today. Even though the project has a new organizational principle, the efficiency and logistics for employees and patients are still maintained. Today's nursing homes are often referred to as being institutional and the goal of the project has been to create architecture that breaks with such an experience.

References

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