Introduction:

The subject of my design is a new building for Rijndam rehabilitation clinic in Rotterdam. It is a graduation project within Interiors, Buildings and Cities department. The location of the building is on the edge of the Museumpark, at the end of Westersingel street. The function and the complex program of the building were determined at the beginning of the design process.

1) The relationship between the research and design

The design on the clinic is based on three intertwined elements of research. The first one is the investigation of the healthcare environment and the conditions that make the healing environment. As the main purpose of the rehabilitation clinic is treatment and rehabilitation of disabled patients, the other two are focused on a rehabilitation process through different stages and a way of accommodating this process. Treatment rooms and patient rooms are treated differently, adapting to the needs of the specific patient group.

When thinking about healing environment, the main question is: what is the rehabilitation about? It is about restoring the abilities of people to lead a normal life again. Although it is not a hospital, it is a medical institution where patients are undergoing treatment and they should feel protected. At the same time, patients should be going back to the normal life and back to the society, so they should not be isolated. As the rehabilitation clinic as an institution is new compared to the hospital buildings, it is yet to be seen how this balance will be achieved. There are several points that are important for the good healing environment: scale, orientation, circulation, natural light, view, liveliness, privacy, social interaction. For this reason, I analysed different building typologies to understand which one is the most suitable for a rehabilitation centre. For centuries, the courtyard was a favourite configuration of hospital buildings. The enclosed or semi-enclosed space a courtyard creates is a protected space, inward looking, concentrated, secure, fostering a privacy within a community, and yet with plenty of light, air and shelter, and a satisfying vista. Throughout the architectural history typologies were changing and tendency for creating a good healing environment became less important than functionality and efficiency.

As a form of a courtyard, atrium is a space that can offer many qualities. It is an artificial protected environment which can accommodate rehabilitation. It offers a point of reference in the building, it is a social centre of activities and it is a space with a lot of natural light. It also offers the liveliness and the sense of life going on within the building, as opposed to the many other healthcare buildings where patients are isolated. In this way, patients can motivate each other by seeing each other’s progress. Patients are positioned in a way that their common spaces have visual connection with treatment areas on all the floors of the building.

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1 Kirklin and Richardson 2003.
The proposed model offers three different floors where treatment rooms could be adjusted to the state and needs of patients. The floor with patients that are mobile can have treatment rooms that are large and transparent as the existing rooms in the clinic. These patients are farthest in the rehabilitation process and by seeing them exercise other patients can be motivated to progress. At the same time, on the floor with patients that are confined to bed, this is not possible. These patients are not able to move, so they are receiving their therapy in patient rooms or smaller therapy rooms that should be more closed and not exposed to everyone.

2) The relationship between the theme of the studio and the subject/case study chosen by the student within this framework (location/object)

The theme of the studio Interiors, Buildings and Cities is the relationship of the building with its surroundings and wider context as well as the notion of “public interior”. As the location and the subject of the design project were determined, the students couldn’t choose the topic. Instead, we could choose our own approach and position on the topic that was given. The theme of a design project is a new building for the rehabilitation clinic in Rotterdam.

The idea of the public interior in the context of a rehabilitation centre is very difficult to be implemented. This idea poses a question: should a clinic be an open space where public can enter and participate in the activities? Or should it be more closed and protected, as these people are in a very vulnerable state?

The goal was to make the clinic a protected environment for its patients. This means that the rehabilitation within the clinic is open, visible and accessible to every patient, but not open to public. The whole building works as one whole, uniting different stages of rehabilitation, transparency of the rehabilitation process and flexibility. It can be said that the interior atrium is a public space for patients, with the patient rooms on the façade of the building. Living rooms and public spaces for patients are also oriented towards the atrium, where all the patients can be in contact with each other. The space of the atrium is a special place where different activities can happen, according to the needs of the clinic – sports, workshops, exhibitions, etc.

3) The relationship between the methodical line of approach of the studio and the method chosen by the student in this framework

In the first semester of the design process I was focused on the idea of the building and the way it could correspond with the surrounding context. At the same time, I formed an idea about the organisation of the building and the way it would accommodate patients. In the second semester I was very much inspired by the two atrium buildings that I visited, especially Stadsarchief in Amsterdam. The tectonics of the building and the contrast between interior and exterior inspired me to explore this connection between architecture
and structure in my project. In my opinion, structure is not a separate element that is added to architecture, it can become an integral part of the architecture.

I defined the central space of an atrium using load bearing walls instead of columns and a double-beam structure for the roof. These walls are defining and shaping spaces in the atrium, uniting the building into one whole. This structure continues to the façade, where it is expressed in a more subtle way. The playfulness of the interior space is repeated in a different way on the exterior of the building, in a play of different kinds of openings.

I based my project on the research as well as on the fascination by atrium buildings and their enormous potential in different contexts and types of building. The method that I used is an integral method, combining at the same time the thought about the building interior and detail as well as its surroundings and spatial context. In my opinion, this is the best way for designing – focusing on different points in different intervals of time, but always keeping in mind all the other aspects of the building.

4) The relationship between the project and the wider social context

This project is very important for the wider social context. Architecture of medical buildings is changing and adapting to new practices in medicine. At the same time, rehabilitation centres became separate institutions from hospitals and their design is approached in a completely different way. My approach could bring new perspectives for the design that is oriented towards the motivation of the most vulnerable group of users of the building.

The whole debate about the future of rehabilitation centres in the studio is useful not only for students, but also for the designing team of the new Rijndam clinic as well as the other architects engaged in the architecture of medical institutions. This project was developed without a reference in a certain medical building and it is a product of the research and thinking about the user of the building. It is valuable because of the exploration of the old hospital typology interpreted in a different way to accommodate a rehabilitation clinic, which is a relatively new type of building. It is still to be seen if these ideas will be realised and tested in the future.