SLINGE

design of a prevention & treatment centre for
obese or overweight children in Rotterdam

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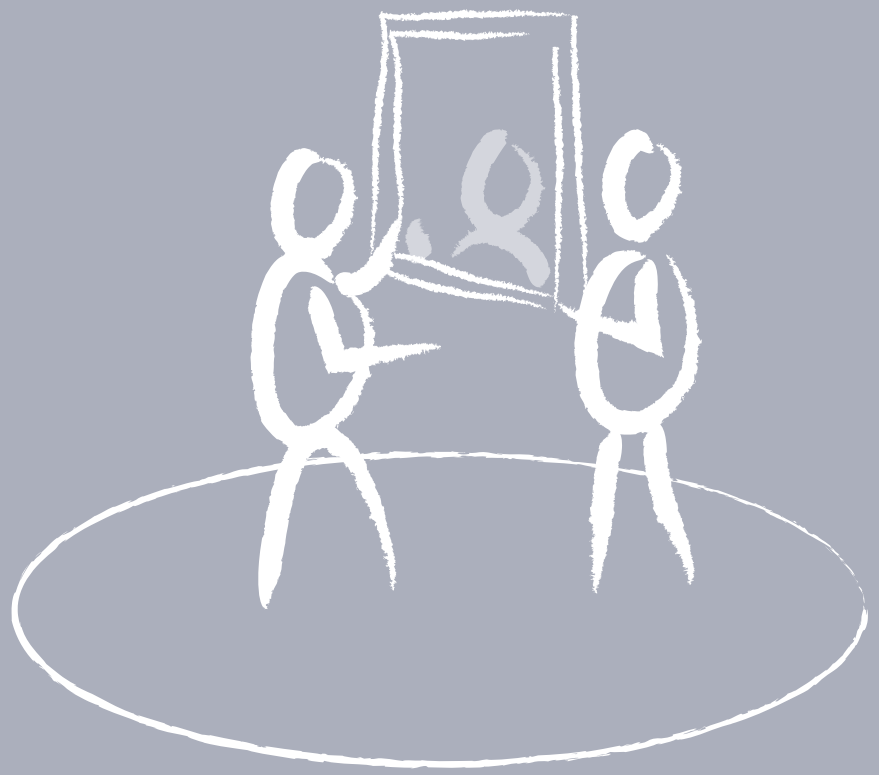

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Reflection Graduation Explore Lab
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Reflection

During my study, I developed a fascination for the design of healthcare institutions. Through an internship and studies abroad, I could learn more about designing within this context. With my graduation project I wanted to continue this learning process and link the role of architecture within a healthcare institution to the wellbeing of its' users.

Relationship between the theme of Explore Lab and healthcare architecture

At no other graduation studio than Explore Lab I would have been able to conduct the research I planned at the start of my graduation. Apart from the fact that the healthcare platform was not founded jet and at interior the health studio was just finished, I wanted to explore different research methods and the possibility to use research to create certain design tools that could help in this and future design assignments.

The studio Explore Lab offers its' students freedom and a fitting environment to conduct a more thorough research. As mentioned, the focus of this research lies on the effect of architecture of a healthcare institution on the wellbeing of children by stimulating their imagination and help them forget about their illness and their surroundings. The research resulted in a set of design tools which I used in the design of a health promotion and treatment centre for overweight or obese children.

The research question, leading to these results was:

> *In what way can activities, in which the imagination of children is active, be translated into generic properties, which can be used to design the built environment, stimulating the imagination of children aged 3 to 6 years?*

Relationship between the methodical line of approach of Explore Lab and the chosen methods
The graduation studio Explore Lab offered the freedom to create an extensive research plan which included different research methods. During the first phase of the graduation, I was able to conduct many interviews with different people from architecture and other design professions to create a focus and gain knowledge on the different topics I wanted to address in my research and design. Without these preliminary research, I would not have been able to create the right focus for my research topic.

The research itself included literature studies to provide background information on the development of children and imagination stimulating activities. This was followed by many observations of playing children and (spatial) analyses of these play areas, other playgrounds, designed by Aldo van Eyck, and the analyses of artworks. Apart from the information, needed to answer the sub questions and research question, these observations provided a lot of insights regarding the way a child experiences and interacts with the world. This knowledge was very useful in the design.

The research resulted in a set of design tools which could be used as a guiding theme in the design process. These tools were the result of a continue abstraction of the properties of elements, present and used in the children's play. By first analysing elements, stimulating play, to define their main properties and later, in the design, using these properties to design new elements, my view broadened, and this way I was able to come up with a wider range of elements in the design.

During the design phase, the contacts of my research mentor Luc Willekens resulted in the opportunity to contribute in a design and research assignment for the WKZ (Wilhelmina Children's Hospital) in Utrecht. I was able to include the experiences and insights I gained during the research within the hospital in my graduation as input for the design assignment. The research at the WKZ included observations, interviews, and testing of concepts in the hospital. The project started right after my P2. In the beginning I had the intention to incorporate insights and results from the research at the WKZ in the research for my own graduation or even to conduct extra experiments or observations, apart from the assignment for the WKZ. However, as mentioned, the insights and

information gained during the assignment for the WKZ was very useful for the design, but not for my research. In my enthusiasm in the beginning, I forgot to notice the stage the research was at the time. Therefore, it was hard to incorporate more results or experiments in the research, without expanding my research too much, conflicting with the planning of, and the design.

Relationship between research and design
The research resulted in the definition of several generic properties of the built environment. These abstract properties formed the basis of two design tools that let to the main concept of my plan. The first tool shows a diagram explaining how generic properties describe a place where play and the imagination is stimulated by providing a form of shelter and diversity of different characteristics such as height and planar differences, contrast, and the presence of loose materials. This is translated in the concept of my plan regarding the composition of different elements. Different elements should be placed in a way that new, sheltered, in-between spaces are created. Starting with the creation of different outdoor spaces by the placement of buildings, to the creation of small spaces in between interior walls and the façade and placement of two columns, with space in between, instead of one. All these in-between spaces show different levels of shelter and are designed in different themes to create diversity.

The second tool describes how by the composition of elements and the abstraction of shapes or context information can be 'left out', stimulating the imagination to fill the gaps. This second tool is also translated in the design with the composition of different elements, creating certain lines of sight, but also in the design of the different elements separating the spaces into smaller areas.

In addition, the many analyses of play areas and the study of specific elements of the built environment increased my personal frame of references and images I used in the design, either conscious during the design process or unconscious. To explain the latter, as I analysed many play areas and buildings of Aldo van Eyck for my research, the composition of not only the buildings, but also elements in the space show a strong resemblance with the work of Aldo van Eyck.

As mentioned, the insights regarding the behaviour of

children I gained during the observations at play areas, helped a lot during the design process, creating a plan for children. This project showed me that by observing and studying a user group, one, as a designer, is significantly more capable to create a fitting plan for that specific group. Also, I learned during this project how I prefer this research based approach of a design assignment and want to explore this more in future projects.

Finally, though the goal of the research was more focussed on hospital-like healthcare institutions, the design tools are suitable for all kinds of institutions, as is shown in the design assignment which includes a small, less complex treatment centre. During my graduation I often thought about how the tools could be implemented in a more complex situation, considering all sorts of strict regulations. This would have brought more complications with the implementation of the different generic properties, though the concept of the tool still could be used in the design.

Relationship between the project and the wider social context

Children experience stress and anxiety due to being ill and possible admission to a hospital or other healthcare centre. This stress and anxiety has a negative impact on the children's mental wellbeing and healing process, but also, for younger children, has a negative impact on the cognitive, social, and motoric development. Since the built environment has a great influence on its' users, therefore the possibilities to reduce the stress and anxiety with architecture should be explored.

Furthermore, part of the research (and design) focussed on the stimulation of play with architecture. Play is not only an activity in which the imagination becomes active and a child is able to forget about the illness, treatment, or healthcare setting, it also plays an important role in the motoric, social, and cognitive development of children. Therefore, by stimulating play behaviour, not only stress and anxiety can be limited, also the development is extra stimulated.

The program of the design does not only include a treatment centre, but also offers space for the prevention of illness and the promotion of a healthy lifestyle. The last couple of years, within healthcare, the focus has shifted from only cure and care to cure, care and prevention.

The goal of this project is to fit this development within healthcare.

Finally, the flexibility of a building to its' users is a topic within (healthcare) architecture which has become more important. The rate of speed of the development of care and treatment, the organisation of healthcare institutions and systems influences the layout of the building. This project explores how the structure of the building can adapt to new situations and does not obstruct the development of healthcare.

This way the new health promotion and treatment centre for overweight or obese children is able to fit the development of not only technology within healthcare, but also its' approach to cure, care and prevention.