Graduation Plan
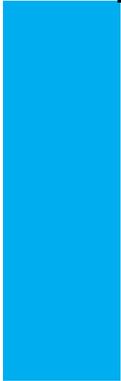
Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan

Personal information

Name	Edward Kooi
Student number	5100372

Studio	
Name / Theme	Complex projects is a graduation studio, in which the relationships between the building, global relevance, urban contexts, functionalities and technology are examined. The aim is to conduct research in the first semester to develop a design brief, and then respond with a project proposal in the second semester. The studio's goal is to instill a methodological and structured approach to the design process, emphasizing a balance between the various scales of Berlin, the Building, and the Body.
Main mentor	Benjamin Groothuijse	Architecture
Second mentor	Jan Van de Voort	Architecture
Argumentation of choice of the studio	I'm interested in how architecture affects an individual's mental health. As a result, selecting 'Dwelling graduation studio: Designing for Care in an Inclusive Environment' may have seemed logical. However, I chose Complex Projects, because it would allow me to apply this on a larger scale, which I believed would provide a more interesting challenge. Especially since the Complex Projects aims to find the right balance between the various scales of Berlin, the Building and the Body. The efficiency focus of healthcare design, combined with the additional focus of patient-centered design, would provide an interesting field of research.

Graduation project	
Title of the graduation project	"OASIS OF VITALITY" Health promoting rehabilitation center for the recovering patient.
Goal	
Location:	Project location is Berlin, as this was part of the task withing the graduation studio. However, it also fits with the interest of healthcare design, explained in the proposed problem section;
The posed problem,	Ensuring positive patient experiences post-hospital discharge is vital, as hospitals aim for patients to leave as quick as possible due to efficiency focus. However, due to lack of regulated aftercare, Germany has a healthcare system mainly focused on providing acute care, but is not sufficient in providing enough long term, non-acute care. This results in an average length of hospital stay (LOS) of 9 days compared to 4,5 days Netherlands and 5,5 in

	Denmark for example. So this is nearly double, which is bad for staff and patient. It puts unnecessarily high pressure on the staff, less time for patient centered care and more chance of hospital induced deconditioning. So therefor I argue that there is a need for an additional facility specially tailored for providing long term rehabilitation care after hospitalization, and for providing the best recovery experience for the patients as possible. To understand how this would work in practice, I aimed to answer the following question;
research questions and	"How to design a health promoting, inpatient rehabilitation center for the recovering patient?"
design assignment in which these result.	In order to provide an answer to the needed long term, follow up care I chose to design an inpatient rehabilitation center, as rehabilitation is a key part of long term recovery care. For the additional focus on the best recovery process of the patient, I wanted to create an understanding of how architecture could help, therefor the addition of 'health promoting architecture'. With the research I wanted to understand what that means and how this could be translated into an inpatient rehabilitation facility. Based on this research, a design brief has been developed. This will guide me in Msc4 to be able to propose a project fitting to the requirements set by the design brief and answering to the ambitions of 'health promoting care'.

Process

Method description

For the research and Design Brief, I looked into four key components: Architecture, Program, Client, and Site.

Architecture:
- Literature Study: Exploring health-promoting architecture through a review of Therapeutic and Biophilic design frameworks.

Program:
- Literature Study: Examining healthcare program requirements for an inpatient rehabilitation hospital.
- Case Study: Benchmarks against similar buildings to determine programmatic needs and building size.
- Questionnaire: With lead architects from healthcare design firms EGM and Gortemaker Algra Feenstra for insights into healthcare architecture principles.

Client:
- Literature Study: Analyzing architectural requirements for diverse target audiences, including pediatrics, young adults, geriatrics, and staff.
- Internet Search: Investigates Germany's healthcare system and financial structures for a comprehensive understanding.

Site:
- Internet Search: Determines additional site requirements for rehabilitation hospitals, considering the affiliation with a health-focused group in Berlin and the urban strategy developed within the Complex Projects studio configuration.

Literature and general practical references

Literature:

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Thimbleby H. (2013). Technology and the future of healthcare. *Journal of public health research*, 2(3), e28. https://doi.org/10.4081/jphr.2013.e28

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Case studies:
Minner, K. (2019, October 24). *Rehabilitation Centre Groot Klimmendaal / Koen van Velsen*. ArchDaily. https://www.archdaily.com/126290/rehabilitation-centre-groot-klimmendaal-koen-van-velsen

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Reflection

The project explores the significant influence of the built environment on the mental health of its users by proposing and developing an inpatient rehabilitation facility with an emphasis on health-promoting architecture. Understanding the critical role that positive mental health plays in accelerating recovery and improving overall results, the goal was to create a delicate balance between the necessity of patient-centred care and the inherent efficiency of healthcare facilities.

The studio's theme of optimizing the interplay between Body & Building and exploring this complicated balance, fits nicely with this ambition. If done right, the design becomes more than just a building. It turns into an evolving structure where the architecture itself serves as a therapeutic component, assisting staff and patients in their healing process.

This project has wider significance for the field of architecture than just the healthcare sector. It aims to highlight the impact of design on mental health, with environments that promote healing. Essentially, the goal of this project is to rethink the function of architecture by going beyond traditional limits to promote healing and recovery.