

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	Sander van der Kooij
Student number	4606094

Studio		
Name / Theme	Designing for health & care – towards an inclusive living environment	
Main mentor	Cobe Macco	Architecture
Second mentor	Maria Meizoso Aguilar	Building Technology
Third mentor	Leo Oorschot	Research
Argumentation of choice of the studio	<p>Architecture is everywhere in daily life, especially dwelling. For me, this is one of the most interesting aspects of designing. Designers of living spaces and environment can enhance people's lives, especially for those with extra needs. Next to this there is a personal reason. Not that long ago, a family member got a psychosis, and the feeling of the emergency care building and unavailability of after-care left a lot to be desired. I believe, we as designers, can improve the experience of (ex-)mental health patients and have a positive effect on peoples' lives. We design for the end-user. Therefore, the user-centred design in the studio is one of the main reasons for choosing this studio.</p>	

Graduation project	
Title of the graduation project	Preparing for home in the neighbourhood: About the gap between mental health care & society and how the built environment can promote reintegration into society for ex-mental health patients in supportive housing.
Goal	
Location:	Delft, Netherlands
The posed problem,	The gap between mental health facilities - with long term stay and patients taken out of their social network - and returning to living independently causes loneliness, increasing the risk of relapse. Although current mental health care policy is changing to a focus on ambulant care, there is still a group that cannot take care of themselves and need to relearn

	daily skills and to be self-sustainable again. Often this group benefits from a social network, which is often lost when going into supportive housing.
research questions and	<p>Main research question: How can architecture & built environment features and location conditions promote the integration into the neighbourhood of inhabitants of supportive housing?</p> <p>Sub questions:</p> <ol style="list-style-type: none"> 1. What is the background of inhabitants in SH with the aim at reintegrating into society? 2. How are current SH/rehabilitation facilities integrated in their environment and neighbourhoods? 3. What are important features of neighbourhoods for inhabitants of SH? 4. Where do inhabitants of SH have social interaction? 5. How does the design of the interior and dwelling influence social interaction?
design assignment in which these result.	The goal is to develop guidelines for a supportive housing building or complex which promotes social reintegration into the neighbourhood for temporary but long-term stay (2 years) of ex-mental health patients. The complex will consist out of separate clusters with multiple dwellings and one building with public/shared functions. In between, there will be a variety of private and public gardens. The buildings should prepare the inhabitants for returning into society by being a(n open) gateway from mental health care into society and connect to local facilities and networks.

Process

Method description

There will be four methods applied during the project:

1. Literature study: This will be used to find important architectural elements in designing for mental health patients and promote social integration.
2. Case studies: How do architects tackle such an assignment and how does it translate to spatial qualities? These are studied in location, program, qualities of spaces and design philosophy.
3. Interviews: Architects, designers, and health care managers are interviewed on how they tackle the needs of inhabitants in supportive housing. Qualitative reviews will be required. Staff and inhabitants of supportive housing are interviewed to acquire their needs and use of spaces with the aim on social interaction, independence, and rehabilitation. However, since inhabitants of supportive housing are vulnerable, these will be informal interviews.
4. Observations: Staff and inhabitants of supportive housing are observed to see how they use spaces in practice, where do they go for social interaction

(outside or inside the complex, what spaces, where within spaces) or to fall back. Locations will be mapped, and sketches of the situation will be made.

Literature and general practical references

About the city and how certain design strategies can stimulate mixing and meeting different people. This relates to how the inhabitants of supportive housing could integrate into the neighbourhood. It should be noted, that Perry (1929) wrote that the neighbourhood is the community and therefore a base for your social network. Gehl, J. (2011) *Life Between Buildings: Using space*. (J. Koch. Trans) (6). Island Press.

Perry, J., Felce, D., Allen, D., Meek, A. (2010) *Resettlement Outcomes for People with Severe Challenging Behaviour Moving from Institutional to Community Living*. *Journal of Applied Research in Disabilities* 24(1). <https://doi.org/10.1111/j.1468-3148.2010.00567.x>

A systematic review of literature about designing a psychiatric hospital that promotes social interaction. Different topics on mental hospital design are discussed and how they affect social interaction. However, the study reviews through multiple scales, with a focus within the hospital building itself. The review admits there needs to be more research about integration of mental health patients into a community.

Jovanović, N., Campbell, J., & Priebe, S. (2019). How to design psychiatric facilities to foster positive social interaction – A systematic review. *European Psychiatry*, 60, pp. 49-62. doi:10.1016/j.eurpsy.2019.04.005

A chapter from a book about rehabilitation. What is the best strategy to promote rehabilitation and quality of life of mental health patients. This chapter specifically talks about the residential services and the goal, which is often independent living. Although this book is about people with mental disabilities, during the research it was found the field of mental disabilities and mental illness are often related, especially in the field of Supportive Housing.

Pratt, C.W. (2014). Residential services and independent living. In Pratt, C.W. (2014) *Psychiatric rehabilitation* (3rd ed. Pp. 341-372). Academic Press. Retrieved November 5, 2023, from <https://kb.on.worldcat.org/search/detail/810083215?queryString=bn%3A0123870089>

Additionally, to get practical information from an architectural point of view, architects will be interviewed about their approach to design temporary housing for mental health patients as mentioned above.

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?
2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The research relates to the topic of health & care in a more direct sense with designing housing for former mental health patients that promotes their integration back into society. The architecture of the building will take care of part of the

problems of the users. Although, it must be admitted that architecture has its limitations in tackling problems. In this study the social interaction is promoted through the building design but in the field of mental health care, there are lots of other problems, which are more related to society and policy-making problems. Although limited, architecture has a connection to these problems.

Although the research is done on a specific target group, it can be used in a wider range of different functions of buildings and might be useful for designing for other vulnerable target groups, that benefit from a social network. It provides architectural guidelines for the design of supportive housing and how to promote this social interaction.

Studies close to this topic have been done before as seen by the systematic review by Jovanović et al. (2019). Based on three main search topics during research: the neighbourhood, healthy & healing architecture and, rehabilitation of mental health patients. However, it was found that most existing (although useful) research only touches two out of three topics. Often, the social network outside of the mental health care facility is not considered. By researching what architecture can do, it adds to existing architectural studies and other fields in mental health care. This research adds to and combines existing studies on these three topics.