

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	Sylvan Muijlwijk
Student number	
Telephone number	
Private e-mail address	

Studio		
Name / Theme	City of the Future	
Main mentor	Maurice Hartevelde	Urban Design
Second mentor	Igor Tempels Moreno Pessoa	Urban Studies
Argumentation of choice of the studio	<p>The City of the Future interested me due to the fact it is a cross-domain studio. Within my project I attempt to explore the overlap and possible collaboration of planning, urban design and architecture. Until now the seminar organized by the City of the Future has helped me explore new literature and approaches.</p> <p>The theme of the City of the Future is also of interest to me because of its focus on design research.</p>	

Graduation project	
Title of the graduation project	Vertical Social Connectivity
Goal	
Location:	Binckhorst, The Hague
The posed problem,	<p>Social segregation (horizontal and vertical), loneliness, social exclusion, lack of humanistic approach in high-rise design, hyper-diversity*</p> <p>*Not a problem but a challenge</p>
research questions and	<p>Main Research Question: To what extent can the design of a high-rise building informed by an urban design approach contribute to facilitate social connectivity of its residents?</p> <p>Sub Research Questions:</p>

	<p>What design challenges need to be tackled in order to design a socially connected high-rise structure from a urban design approach?</p> <p>What aspects are required to achieve social connectivity?</p> <p>Which design philosophy and design principles are suitable to tackle the posed challenges and contribute to social connectivity of the residents?</p> <p>What design solutions related to the design elements life, spaces and the building are resulting in facilitating social connectivity of residents?</p> <p>What design scenario fits in the context of the Binckhorst The Hague?</p> <p>In what way should the collaboration between and the responsibilities of the disciplines of planning, urban design and architecture be organized to design socially connected high-rise buildings?</p>
design assignment in which these result.	<p>Design assignment The implementation of urban design strategies into the interior and spatial layout of a high-rise building on a plot in the Binckhorst The Hague.</p> <p>Design challenges The design aims and the problem statement are related to some challenges to overcome. The aim from a humanistic perspective to design a high-rise using urban design principles that facilitates social connectivity touches upon the social complexity (hyper-diversity, changing human preferences) and the traditional practise of urban design, planning and architecture (2-dimensional urban design focus, outdoor focus of urban design, strict boundary between disciplines of urban design and architecture at the façade/volume).</p>
<p>Problem Statement The predicted population growth of The Hague until 2040 entails 50,000 to 80,000 new inhabitants,</p>	

this accounts of a relative increase of 15% of the current population (Gemeente Den Haag, 2016, 2017). The city of The Hague has selected high-rise developments as a means to improve spatial quality, sustainability and to create a strong business climate (Gemeente Den Haag, 2017). This high-rise developments fit in a wider European and Dutch re-emerge of residential high-rise developments. One of the reasons is the globalisation and financialisation of real estate (Drozd, Appert, & Harris, 2018), this neoliberalist system results in housing to be treated as a commodity instead of a social good (OHCHR, n.d.). This approach to housing potentially increases the existing segregation in The Hague on the horizontal (Bailey, Gent, & Musterd, 2017; Kloosterman & Priemus, 2001) and vertical dimension (Soeters in Milikowski, 2018). The humanistic approach in high-rise design is lacking as a result of these financial interests and often results in a polarising debate rather than a constructive one (Schoorl, 2017). Other aspects that cause this high-rise trend are individualisation and smaller household sizes (BPD, 2016; de Graaf, 2018) and the diversification of international migrants that move to the Hague related to globalisation (Meeteren, Pol, Dekker, Engbersen, & Snel, 2013). Following on these developments the population of The Hague should be regarded as hyper-diverse (Tasan-Kok, van Kempen, Raco, & Bolt, 2013), which attributes to the social complexity inherent to the city (Sennett, 2018) and possibly contributes to the issues of loneliness and social exclusion that play a significant role in The Hague (GGD Haaglanden, 2017). The municipality of The Hague argues the high-rise developments should increase spatial quality and facilitate in this way a lively streetscape where social interaction is facilitated and an inclusive development within buildings (Gemeente Den Haag, 2017). The design of the high-rise can form a social challenge or potential (Barros et al., 2019; Baxter, 2017; Gifford, 2007; Larcombe, Etten, Logan, Prescott, & Horwitz, 2019), the amount of residents in one building potentially contributes to this, however, it can also result in a more anonymity among neighbours resulting in isolation, loneliness and social exclusion (Gifford, 2007; Larcombe et al., 2019).

Process

Method description

Following on the problem statement and the research and design aims the first steps in the research is formulating the design challenges related to those statements by a literature review.

The strategy to tackle those design challenges is formulated in a general design philosophy, the formulating of design principles, and the design elements used to apply those to. This will be concluded from a literature review. The design elements will be grouped in typologies to categorise the possible design interventions.

Observations of the use of social spaces and interviews with residents of high- and low-rise buildings will be used to form a 3-dimensional ethnographic map and an evaluation of the design principles. As Poot et al. (2015) describe regarding interior urbanism the creation of a ethnographic or behavioural map can help to understand how people use their surroundings.

The 3-dimensional ethnographic map, the evaluation of design principles, typologies of design elements and the design principles form the basis to start with designing an application of the design principles to the design elements.

By using a spatial analysis the plot of the proposed high-rise development will be selected based on existing plans and the proposed spatial structure. Methods used here will be field visits, mapping and sketching.

On the basis of this information different variations of a design will be proposed which will be evaluated according to the design challenges and principles. A score will be created for each challenge or principle.

Next to the different design variations the project also aims to formulate recommendations for the collaboration between disciplines and the application of urban design strategies to the interior and vertical spaces of high-rise buildings.

Literature and general practical preference

(Fincher & Iveson, 2008)(Sennett, 2018)(Gehl, 2011)(Harteveld, 2014)(Poot et al., 2015)

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)?

Particularly my graduation project aligns with some of main subjects of the city of the future: spatial inclusivity; hybrid spaces; and the interaction between indoors and outdoors.

Within the mastertrack of urbanism the project relates the most to the chair of urban design.

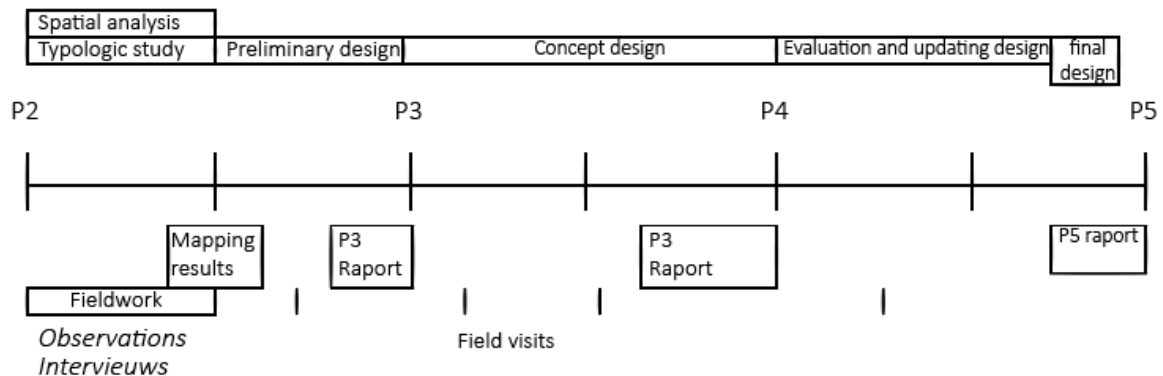
2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

The research project attempts to create a better understanding in the use of urban design principles in the design of the layout and interior spaces of a high-rise building. By doing this a contribution can be made to the theories of vertical urbanism, interior urbanism, the open-city and a just diversity.

In the professional field it can serve as an alternative strategy for designing high-rises from the perspective of social connectivity in this way informing planning, urban design and architecture. Additionally a strategy of how to integrate the approaches of those disciplines can be taken from this project.

Specifically for the high-rise developments in the Binckhorst this project can inspire new developments or the future high-rise policies of the municipality.

Graduation plan



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