

# 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](mailto: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	Joost van Driesum
Student number	4699939

Studio		
Name / Theme	Design of the Urban Fabric	
Main mentor	Birgit Hausleitner	Urban Design
Second mentor	Lei Qu	Spatial Planning & Strategy
Argumentation of choice of the studio	<p>The choice for this studio has a twofold argumentation, one is related to my topic and the other one is related to my personal development and interest.</p> <p>Firstly, the topic I am working on addresses the main themes of the studio, urban form and socio-spatial processes and their interrelation. The urban form is recognisable in the research, spatial analysis, and design of this graduation project where I focus on the specific spatial characteristics of post-war neighbourhoods and densification strategies. The socio-spatial processes that are dealt with are social mixing and social cohesion.</p> <p>Secondly, on a more personal interest, I like the practice of combining design and research integrally during this graduation project. Additionally, the analysis and design strategies that this studio uses like, advanced spatial analysis of the urban fabric, space syntax analysis, scenario-driven design, multi-scalar approach and the combination with spatial design and social challenges are interesting to me and I would like to develop further skills in them.</p>	

Graduation project	
Title of the graduation project	Densify to Diversify: A study on post-war Den Haag Zuidwest
Goal	
Location:	Den Haag Zuidwest
The posed problem,	Many <b>Dutch post-war neighbourhoods</b> , among which <b>Den Haag Zuidwest</b> , which is one of the largest in the Netherlands, struggle with <b>liveability issues</b> , not in the

	<p>last place because of high <b>social segregation</b> and <b>social dissolution</b>. This results in various negative effects, firstly for its population, but also society as a whole. Additionally, the Netherlands and specifically the Randstad is facing a <b>housing crisis</b> that needs to be dealt with, mainly by <b>densifying</b> within current urban areas. Post-war neighbourhoods are spatially designed providing large densification potentials. This thesis is an exploration of how urban design and densification in post-war neighbourhoods can be used to increase <b>social mix</b> and <b>social cohesion</b> with Den Haag Zuidwest as a case study. This will be done by smartly densifying the area to contribute to a reduction of social segregation by inserting a more mixed and diverse population and ensuring social cohesion between the existing and new populations.</p>
<p>research questions and</p>	<p><b>How can spatial design and densification in deprived post-war neighbourhoods increase social mix and social cohesion?</b></p> <ol style="list-style-type: none"> <li>1. What (spatial) characteristics of post-war neighbourhoods cause their social segregation and social dissolution?</li> <li>2. What are the spatial characteristics of socially mixed and socially cohesive neighbourhoods that can be applied in the densification of post-war neighbourhoods?</li> <li>3. What are the current governmental policies regarding social mix and social cohesion?</li> <li>4. What are the current spatial characteristics regarding social segregation and social dissolution in Zuidwest?</li> <li>5. What are densification and spatial intervention possibilities regarding social mix and social cohesion in Zuidwest?</li> <li>6. What regional strategic interventions can contribute to the better incorporation of Zuidwest into the city of Den Haag to reduce segregation?</li> <li>7. What local spatial interventions can be done to transform Zuidwest into a more socially mixed and socially cohesive neighbourhood?</li> <li>8. Which policy and institutional changes are needed to enable and strengthen the spatial interventions?</li> <li>9. To what extent are the interventions in Zuidwest transferable to other post-war neighbourhoods with similar problems?</li> </ol>

design assignment in which these result.

The design will be a combination of three elements. Firstly, a city-scale strategic plan with a focus on densification, social mix and social cohesion will, and an improved connection to the city region will be made for Zuidwest. This will be informed by looking at criteria that are derived from the literature in the theoretical background and assessed according to these criteria to test its qualities. Secondly, a neighbourhood design will be made for Zuidwest with street and block scale design interventions on strategic locations will be made. This will be done by creating and comparing different options. Again, the previous literature review will be used to assess the different options and choose (a combination of) the most successful ones. Additionally, there will be looked at important stakeholders and possible policy changes to support the designs. Lastly, the designs that are made for Zuidwest will be tested on transferability to other post-war neighbourhoods with similar problems. The goal is to create a framework of design interventions that can be applied to other similar neighbourhoods.

## **Process**

### **Method description**

- Questions 1, 2 and 3 will be answered by a literature review (see next part).
- Questions 4 and 5 will be answered by spatial analysis and data mapping, fieldwork and interviews, these will be informed by a literature review.
- Questions 6 and 7 will be part of the design strategy as described above and will therefore be answered by research by design.
- Question 8 will be answered by policy and stakeholder analysis.
- Question 9 will be answered by looking at transferability to other post-war neighbourhoods, as described above.

### **Literature and general practical preference**

As written above, the first three questions will be answered by a literature review. Below, the used literature per research question and their input to the research in one sentence will be listed. Note that more literature is used, but these are the main ones used to build the argument.

What (spatial) characteristics of post-war neighbourhoods cause their social segregation and social dissolution?

- 'De stedenbouwkundige kwaliteiten van de 40 krachtwijken' by Harbers et al. (2009) is used to identify the post-war neighbourhood characteristics.
- 'Patterns of co-presence' by Legeby (2013) and 'The challenges of understanding urban segregation' by Vaughan & Arbaci (2011) are used to identify the relation of the urban with social segregation.
- 'Does quality of the built environment affect social cohesion?' by Dempsey (2008) is used to identify the relation of the urban with social dissolution.

What are the spatial characteristics of socially mixed and socially cohesive neighbourhoods that can be applied in the densification of post-war neighbourhoods?

- 'Space Matrix' by Pont & Haupt (2021) is used to identify additional qualities of densification.
- 'Design for diversity' by Talen (2008), 'Ontmoeten als keuze' by Blom & Soomeren (2015), 'Patterns of co-presence' by Legeby (2013), 'Een hele opgave over sociale cohesie als motief bij stedelijke herstructurering' by Kam

& Needham (2003), and 'The inclusive city' by Schreiber & Carius (2016) are used to identify spatial characteristics of socially mixed and socially cohesive neighbourhoods.

What are the current governmental policies regarding social mix and social cohesion?

- 'A multi-level model of vicious circles of socio-economic segregation' by Van Ham et al. (2018) is used to identify policies regarding social mix.
- 'Social implication of housing diversification in urban renewal' by Kleinhans (2004) is used to identify policies regarding social cohesion.

## 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)?

This graduation project is a trying to connect the urban environment and urban design to social and economical phenomena in society. This is generally the main practice of the MSc AUBS master programme. For the fact that this project deals with larger-scale strategies and interventions in the public space while dealing with issues such as densification, social mix and social cohesion, the urbanism track is the most suitable to conduct this research in. The Design of the Urban Fabric studio has a main theme of "interplay between the physical urban environment (elements, materials, form, scales, density and networks) and the psychological, socio-cultural, ecological, managerial and economic processes to foster sustainable and liveable places.". This is also what I intend to do in my graduation project, more specifically, I try to find a link between the spatial character of post-war neighbourhoods and densification opportunities while trying to increase social mix and social cohesion. This is an example of the interplay between the physical and non-physical that is mentioned in the studio description. Additionally, the main focus and approach of the studio are characterised by research-by-design of the urban fabric, which is also the approach and scale level that I will mainly be working on.

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

### Societal relevance

The Netherlands is dealing with the matter of the housing crisis and high pressure on the urban environment. In addition to its necessity, densification is perceived as a positive factor for urban societies to thrive. However, good consideration of densification practice is needed, not only to ensure these positive factors but to strengthen them and use their full potential. A specific neighbourhood typology that is often targeted for densification is the post-war neighbourhood typology, because of its relatively low density and strategic position in metropolitan areas. Additionally, the Netherlands is dealing with some deprived neighbourhoods with all sorts of socio-cultural and socio-economical issues, like social segregation and low dissolution. It can be recognised that these deprived neighbourhoods are very often built during the post-war reconstruction period, and it raises the question if there is a link between the urban design principles from this period and the issues they are dealing with now. Combined, great potential can be recognised in the above-mentioned observations. With smart design and the densification of post-war neighbourhoods, they can become more socially mixed and socially cohesive. Hereby, not only taking pressure off the housing crisis but also socially and economically improving neighbourhoods

making them more resilient. This benefits the neighbourhoods, as well as its residents, and with that, society as a whole. One of the largest neighbourhoods in the Netherlands is Den Haag Zuidwest, therefore the core focus of the research-by-design part of this graduation project will be conducted in that neighbourhood. Afterwards, to increase this project's relevance, design elements that are transferable will be derived so they can form a framework that could be applied to similar neighbourhoods with similar problems.

### **Scientific relevance**

In the field of research into social segregation and social dissolution, there are a lot of theories on the causes and effects. However, they are often focussing on all kinds of factors and processes, but not so much on the effect of the spatial design of neighbourhoods. This goes also for recommendations on solving these issues that can be found in literature, let alone an integral approach to solving the wider range of these problems through spatial design interventions. Additionally, a combination of the pressing need for densification and social mixing and social cohesion has yet to be found. This is important because policymakers write all kinds of claims and goals in urban development plans and visions towards these phenomena. However, indications on how to reach them are often not defined. This graduation project can add to that body of knowledge by providing an overview of spatial implications on social mix and social cohesion in combination with densification in post-war neighbourhoods in an integral way. For this reason, the thesis will end by collecting all location-specific interventions on Den Haag Zuidwest and collect them into a transferable framework that can be used by governments and designers. This gives the project a wider relevance for all post-war neighbourhoods in the Netherlands.