

# 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:

<b>Personal information</b>		
Name	Nurhadi Nugraha	
Student number	5118042	
<b>Studio</b>		
Name / Theme	AR3AH105 Graduation Studio Adapting 20 <sup>th</sup> Century Heritage – New Heritage	
Main mentor	Nicholas Clarke	Architectural Design
Second mentor	Lidwine Spoormans	Architectural Research
Argumentation of choice of the studio	<p>The growth of world population raising the needs for housing. In the Netherlands, there is a need to build housing approximately one million homes before 2050 (Oorschot,2020). The current and future challenge to provide adequate housings also culminate the idea of revitalizing and densify the current housing stock to meet the demands. Thus, investigation of the values and potentials of the existing housing stock to meet these challenges is required.</p> <p>New Heritage Studio offers the opportunity and challenge to examine the values of one of the neighbourhoods in Amsterdam Zuid-Oost perceived by its people. The result of the approach then become the base for the intervention needed but also in other countries to tackle the similar problems and future challenges. This approach to examine the values in the relatively new buildings will be resourceful and applicable not only for the housing building but also other built environments.</p> <p>In my country, Indonesia, there are needs to revitalize and improve the quality of built environment in almost every city. The approach of New Heritage Studio is beneficial to assess the existing built environment and propose the possible intervention to improve its quality.</p>	

<b>Graduation project</b>	
Title of the graduation project	Clipping <i>Kampung</i> – Improving the Neighbourhood’s Resilience through the Community Ties in Hoptille using Indonesia <i>Kampung’s</i> Socio-spatial Character.
<b>Goal</b>	
Location:	Hoptille, Amsterdam Zuid-Oost
The posed problem,	Hoptille in H-Buurt (Amsterdam Zuid-Oost) neighbourhood is facing the socio-problems such as lack of feeling safety, nuisance, criminality, to the maintenance issues. These socio-problems were the result of many factors from the housing policy, immigration, oversupply housing, lack of facilities, to criminality in general. (Wassenberg, 2013). Moreover, the buildings from the 1970s and 1980s are considered to have poor quality resulting in maintenance issues and high energy demand (van Thoor, 2020). At the same time, the needs of housing put the Hoptille as a potential for densification.
research questions and	Which lesson from Indonesia’s <i>Kampung</i> that can contribute to social-spatial quality improving the resilience of Dutch housing in Hoptille?
design assignment in which these result.	The possible design intervention for Hoptille building based on the value assessment and implementing the socio-spatial character of Indonesia’s <i>Kampung</i> in Hoptille to the improve its resilience through community ties.
<p>The design assignment is based on the result from the value assessment in H-Buurt through the appreciation of different stakeholders. The values derived from the assessment is used as a base for the possible building intervention. This value assessment also derived attributes, problems, and challenges in H-Buurt. The finding of socio-problems and challenges occurs in the neighbourhood became the trajectory for the design research to address. Hence, the design assignment is focusing on improving the resilience to tackle its socio-problems and future challenges of the neighbourhood (Hoptille).</p>	

Urban-*Kampung* (Urban Settlement) in Indonesia shares similar socio-problems with Hoptille. *Kampung* has a problem with its density, diversity, building quality, safety, economic opportunity, moreover the lack of basic facilities. Apart from its problems, Shirleyana (2018) urges that *Kampung* has resilience in social, economic, and environmental vulnerabilities with its community bond. In relation to Hoptille, the question to be raised is what lesson learned from *Kampung* can contribute to tackling the socio-problem that occurs in H-Buurt?

By assessing the values, learning the *Kampung* characters, analysing the building and neighbourhood, and developing the possible intervention in Hoptille, the current design direction is to improve social contact among the residents. One of the possibility is to split the elongated Hoptille building to improve its permeability from its surrounding. At the same time having intervention on providing different platforms on the skin of the building which acts as an access to the housing also become public space for the users to interact. Adding more housing on top of the building and proposing new blocks in the area are parts of the attempt to densify the building. To improve the community bond, the different communal facilities are provided based on residents' background analysis and *Kampung's* spatial characters.

## **Process**

### **Method description**

The research consists of collective research and individual research.

#### **1. Collective Research :**

##### **A. Value Assessment**

The first part of collective research is to find and analyse the values and attributes in the neighbourhoods from different stakeholders perspectives into codebook which contain values, attributes, and challenges of the three neighbourhood in H-Buurt; Bijlmerplein, Hoptille, and Heesterveld. The questionnaire and photo elicitation (Harper, 2002) were used to conduct the research along with media and literature. Then, the heritage value assessment matrixes from Tarraffa (2012) and Clarke (2019) were utilized to combined the result in the codebook.

##### **B. Scenario and Impact Assessment**

The second part of collective research is to develop a toolbox that which later can be used as tools for the individual research to develop the individual research and design solution. The developed scenarios then are assessed on their impact on the existing attributes of the neighbourhoods. The follow up from this impact assessment is to find how to mitigate the impact in the design proposal.

#### **2. Individual Research:**

Knowing that Hoptille and *Kampung* have a similar problem, the main aim of individual research is to find a lesson from Indonesia's *Kampung* to improve socio-spatial quality in Hoptille applying Shirleyana's (2018) research on *Kampung* resilience and its qualities.

1. Literature Research of Indonesia's *Kampung* Socio-Spatial

This research mainly will be literature research to analyze the relationship between residents' activities in *Kampung* and its spatial configuration.

2. Hoptille's analysis

To identify the existing socio-spatial in Hoptille, ethnographic (Kajima, et al., 2018) observation is conducted and extracting from the findings in the collective research, together with urban block analysis on facilities and public space in Hoptille. To further develop the notion of social ties and community-based projects, the residents' background, occupation, and skill are identified through interviews and desk study. This will map the network of skills and provide the spatial solution to accommodate the potentials.

3. Implementing Socio-spatial characteristic and Resilience in Hoptille

- a. Building analysis

Using the ABCD (time) matrix (Zijlstra, 2009) as a base for heritage building analysis.

- b. Case Studies

- c. Scenario and Possible Intervention

- d. Sketches and Model Making

- e. Developing Design & Building Technology

## Literature and general practical preference

Clarke, N., Kuipers, M., & Stroux, S. (2019). *Embedding built heritage values in architectural design education*. International Journal of Technology and Design Education, 30 (2020), 867–883.

<https://doi.org/10.1007/s10798-019-09534-4>

Clarke, N. and Spoormans, L. (2020) New Heritage: Amsterdam/Almere (Studio Introduction Text). Available at:

<https://brightspace.tudelft.nl/d2l/le/content/278720/viewContent/1957414/View>

Funo, S., Yamamoto, N., & Silas, J. (2002) *Typology of Kampung Houses and Their Transformation Process– A Study on Urban Tissues of an Indonesian City*, Journal of Asian Architecture and Building Engineering, 1:2, 193-200, DOI: 10.3130/jaabe.1.2\_193

Gehl, J. (2011). *Life between buildings : using public space*. Washington, D.C.: Island Press.

Harper, D. (2002). *Talking about pictures: A case for photo elicitation*. *Visual studies*, 17(1), 13-26.

Hennink, M., Hutter, I., & Bailey, A. (2020). *Data Preparation and Developing Codes*. In *Qualitative research methods* (p. 207-234). SAGE Publications Limited.

Hutama, I.A.W. (2016), "*Exploring the sense of place of an urban kampung. Through the daily activities, configuration of space and dweller's perception: case study of Kampung Code, Yogyakarta*", ITC, University of Twente, Enschede, available at:

[www.itc.nl/library/papers\\_2016/msc/upm/hutama.pdf](http://www.itc.nl/library/papers_2016/msc/upm/hutama.pdf)

Jacobs, J. (1961). *The Death and Life of Great American Cities*. New York: Random House

Kajima, M., Stalder, L., & Iseki, Y. (2018). *Architectural Ethnography*. Tokyo: TOTO Publishing

Oorschot, L (2020). *Wonen in een waarde(n)volle samenleving: De apostel van de verdichtingskerk rijksbouwmeester Floris Alkemade en de weilandvolbouwer en woningbouwhoogleraar Peter Boelhouwer in debat over de woningopgave*.

Shirleyana, Hawken, S., Sunindijo, R.Y., (2018) "*City of Kampung: risk and resilience in the urban communities of Surabaya, Indonesia*", International Journal of Building Pathology and Adaptation,

<https://doi.org/10.1108/IJBPA-02-2018-0025>

Tarrafa Silva, A., and Pereira Roders, A. (2012). *Cultural heritage management and heritage (impact) assessments*. Joint CIB W070, W092 & TG72 International Conference on Facilities Management, Procurement Systems and Public Private, Partnership, Cape Town, South Africa

Wassenberg, F. (2013). *Large Housing Estates: Ideas, Rise, Fall and Recovery – The Bijlmermeer and Beyond*. Amsterdam: IOS Press under the imprint Delft University Press.

Zilkstra, H (2009). *Analysing Building from Context to Detail in time ABCD(time) research method*.

Amsterdam: Delft University Press.

### **Website :**

Informatie wijk Bijlmer Centrum D F H. (n.d).

<https://allecijfers.nl/wijk/bijlmer-centrum-d-f-h-amsterdam/#kaart>

BIJLMER IN TIJD : in chronologische volgorde, van opbouw naar afbraak, sloop en eengezins (n.d)

<https://bijlmermuseum.com/de-bijlmer-in-tijd/>

Little change in poverty rate – nearly 8% of Dutch households are poor (2019, December 9)

<https://www.dutchnews.nl/news/2019/12/little-change-in-poverty-rate-nearly-8-of-dutch-households-are-poor/>

Cultural Identities: Almere (The Netherlands). (n.d)

<http://www.planum.net/cultural-identities-almere-the-netherlands>

### **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 project's approach is related to look for possible solution in improving the resilience of Dutch neighbourhood through inter-cultural approach of socio spatial from different country. This approach is the attempt to tackle socio-problems of the Hoptille in which are found by using heritage value assessment. This also amplifies the possibility to utilized the heritage value assessment to find the hinder problems in different built environment. This also become the tools to identify the potential heritage value in the "not so" heritage building.

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

The 1980's neighbourhood is examined in this project to find the values using heritage value assessment. This will add new knowledge of assessing the value of relatively new buildings to be looked as a potential to renovate/improve. This assessment become tools to seek the potentially hinder problems in a built environment which will be resourceful to deepen the research quality. The different stakeholders involvement in the appreciation of the neighbourhood will also rise the social awareness among the stakeholders of their environment. It might also helps to open the potential further participation to derive the solutions.

Regarding the inter-cultural approach of learning from Indonesia's *Kampung* character to be implemented in the design solution in Hoptille, this will add new exploration of cross-over in Dutch housing to tackle current and future challenges. On the other hand, the lesson learnt will add the richness regarding the *Kampung* study.

The result of the design intervention to enhance the interaction among the neighbourhood in mid-rise building also can add the knowledge on communal life in mid-rise building as well as the densification solution.