

# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

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## Graduation Plan: All tracks

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

<b>Personal information</b>	
Name	Shruti Maliwar
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<b>Studio</b>	
Name / Theme	Explore Lab
Teachers / tutors	Leo Van Den Burg, Els Bet, Robert Nottrot, Joris Hoekstra
Argumentation of choice of the studio	I chose to pursue my fascination for more context based design when it comes to cities in flux, today. Also how heritage structures could be adapted to this contextualized design strategy with constantly upcoming project, adapting their stories and histories to influence reality today.

<b>Graduation project</b>	
Title of the graduation project	<b>INTEGRATION of public infrastructure to address spatial and social FRAGMENTATION</b> Key words_ The Hef bridge; home; memory; future scenario; monument; Rotterdam; water

**Goal**

Location:

Rotterdam is chosen an example of a city in constant flux, based specifically due to 2 main events- the bombing of Rotterdam in 1940 and the shift of the harbors westwards- 1970's, focussing on the shift of harbor Westwards.

The posed problem,

In Rotterdam, post 1940's the main harbor activity moved more and more to the west and away from the living area's which lead to abandoned harbors and industrial area's.

This also led to fragmentation in the South of Rotterdam, as the infrastructure that catered to the shipping industry no longer served that function, and in certain cases was abandoned- like the HEF.

With new developments like Feijenoord city, slated to come up actively over the next decade, this will require 2 things:

1. Infrastructure to support new traffic and movement intake.
2. To integrate this infrastructure in the diverse urban fabric and everyday life of Feijenoord- preserving its identity, while still responding to the grand architectural gestures, that initiate innovation and economic growth of Rotterdam.

(The current 3 main bridges- Erasmus bridge, the HEF bridge and the Botlek bridge are at maximum capacity. Travelling to the South of the river is therefore a concern. There is a need for more bridges to be added and therefore the municipality has proposed another connection to the South bank of the river, from Willemsbrug bridge.)

<p>research questions and</p>	<p><b>RESEARCH GOALS:</b></p> <p>To research how fragmentation/integration - Social and Spatial occurred in Kop Van Zuid, and how it continues to occur- specifically with regards to infrastructure, after the shift of the harbors westwards.</p> <p>To analyze what Spatial and Social consequences such developments have brought and would bring for this region.</p> <p><b>SUB-GOALS:</b></p> <p>To plan connections and development scenarios for upcoming projects in Feijenoord- specifically to design connections and infrastructure for increased traffic intake.</p> <p>To question the role of the HEF as a monument in these contexts of flux.</p> <p>Re-use of qualities of culture and heritage as attached to the HEF bridge and integrate it within the infrastructure.</p>
<p>design assignment in which these result.</p>	<p><b>DESIGN GOALS + INTENDED PRODUCTS:</b></p> <p><b>A masterplan integrating new developments in Feijenoord- and subsequent connections.</b></p> <p><b>To design a strategy resolving and organizing movement in Feijenoord- ensuring a smooth plug-into the existing transport network of Rotterdam.</b></p> <p><b>This is followed by determining programmatic connections and tools for designing the in-between spaces.</b> The main aim of the design strategy is to design for interactive and integrated movement within Feijenoord, to create a new public place design strategy and typology.</p> <p><b>To consider the new bridge connection proposed by the municipality as a starting point for interventions. The design projects work towards integrating this bridge into the everyday life of Feijenoord.</b></p>

## Process

### Method description

#### 3 SCALES: CITY SCALE, NEIGHBORHOOD SCALE AND LOCALIZED DESIGN INTERVENTION

The analysis and the design solutions all take place over 3 scales- the city, the neighborhood and a more detailed localized intervention in Feijenoord.

#### LOCATION

Rotterdam is chosen an example of a city in constant flux.

With new developments like Feijenoord city, slated to come up actively over the next decade, this will require 2 things:

1. Infrastructure to support new traffic and movement intake and opportunities.
2. To integrate this infrastructure in the urban fabric and everyday life of Feijenoord- preserving its identity, while still responding to the grand architectural gestures, that initiate innovation and economic growth of Rotterdam.

#### ANALYSIS OF SOCIAL AND SPATIAL FRAGMENTATION IN FEIJENOORD

Mapping the existing social, movement and built environment of Feijenoord, and how it relates to a larger context was carried out.

Apart from the research gathered through the archives, traffic department of Rotterdam and other sources, site analysis was conducted in particularly Feijenoord. This involved demarcating areas of conflict and opportunity along the public spaces in Feijenoord. Barriers and missing links were concluded with an intent to be addressed with the design solutions.

Case studies for similar infrastructural projects were conducted- one for new binnenwag, and another for Lan Op Zuid to extract issues and solutions used for the same.

Data informing income, education, house ownership, employment was also used in comparison to other neighborhoods.

#### MUNICIPALITY: DEVELOPMENT OF 3 SCENARIOS

An analysis of future developments that are slated to come up in Feijenoord was conducted based on NPRZ plans and meetings with the municipality of Rotterdam, that is also currently working on developing 3 scenarios for Feijenoord.

#### Municipal scenarios:

The city has planned for several developments in the Feijenoord area. For the larger development strategy, they follow 3 scenarios which they presented to developers that have existing or new projects coming up in the area, and will be presenting to the national government. They continue to experiment with these general scenarios concerning housing, infrastructure and public space in Feijenoord, leaving the design proposals open-ended.

For the design, as a first step, I used the three scenarios as proposed by the municipality to build upon the masterplan-making decisions derived from either of the scenarios.

## **Literature and general practical preference**

**Over the length of my thesis I will be referring to the following papers and books:**

### **1. Objective Analysis Site Based Rotterdam Timeline Mapping**

- Han Meyer, 2003, "City and Port: The Transformation of Port Cities: London, Barcelona, New York and Rotterdam." Netherlands, International Books
- Patricia Van Ulzen, 2007, "Imagine a Metropolis: Rotterdam's Creative Class, 1970-2000." Rotterdam, 010 Publishers
- Paul Van De Laar & Mies Van Jaarsveld, 2004, "Historical Atlas of Rotterdam: The city's growth illustrated." Amsterdam, Uitgeverij SUN
- Vanstiphout, W., 2005. Rotterdam verdwijnt en verschijnt, 1940-1948. In: Maak een stad: Rotterdam en de architectuur van J.H. van den Broek. Rotterdam: Uitgeverij 010

### **2. Media Rotterdam The HEF**

- 1983, "Rotterdams Kadenboek." Rotterdam, Uitgeverij 010
- Joris Ivans, De Brug, 1928

### **3. Theory Home Memory**

- Yi Fu Tuan, 1974, "Topophilia a study of environmental perception, attitudes and values." New Jersey,
- Gaston Bachelard, 1994 (1964), "The Poetics of Space." Boston, Massachusetts
- Henri Lefebvre, 1991, "The production of space, London." (La Production d'espace, Paris 1974)
- Pallasma Juhani, 2000, "Hapticity and time: Notes on fragile architecture." The architectural review, 207:78-84
- Colin McFarlane, 2011, "The city as assemblage: dwelling and urban space." Environment and planning D:society and space, 29(4):649-671
- Juhani Pallasmaa, 2005, "The eyes of the Skin: Architecture and the Senses." Great Britain, Wiley-Academy
- Aldo Rossi, 1984, "The architecture of the City." MIT Press
- Gaston Bachelard, 1999, "Water and dreams: An essay on the imagination of matter." Dallas Institute of Humanities and Culture.
- OASE #91: "Building Atmosphere" With Peter Zumthor and Juhani Pallasmaa, © OASE Foundation & NAI Publishers
- SA Read & C Pinilla Castro (Eds.), 2005, "Visualizing the invisible; towards an urban space." Amsterdam: Techne Press. Read, SA, & Sezer, C (pp. 68-83)
- Florian Hertweck and Sébastien Marot (eds.), 2013, "The City in the City, Berlin: a Green Archipelago." Lars Müller Publishers

### **4. Theory Writing**

- John Hejduk, 1980, "The Silent Witnesses and Other Poems." Institute for Architecture and Urban Studies
- Amy Bragdon Gilley, 2010, "Drawing, Writing, Embodying: John Hejduk's Masques of Architecture." Virginia Polytechnic Institute and State University.
- Klaske Havic, 2015, "Urban Literacy: Reading and Writing Architecture." NAI Uitgevers / Publishers Stichting

### **5. Site Research**

- Gehl, J. (2001) Life between buildings using public space. Copenhagen: The Danish Architectural Press.
- Gemeente Rotterdam, City vision Rotterdam territorial development strategy 2030
- Jacobs, Jane (1993) The Death and Life of Great American Cities. New York.
- Meyer, H. (1999) City and port : transformation of port cities London, Barcelona, New York, Rotterdam. Utrecht: International Books.
- Carmona, M. et. al. (2003) Public spaces Urban Spaces. Oxford: Architectural Press.
- Bakker, R., Bout, J. and Pasveer, E. (1994) Kop van Zuid. Rotterdam: 010 Publishers.
- P. Van De Laar, M. van Jaarsveld, Historische atlas van Rotterdam. Nijmegen.
- Rotterdam: Nai010 uitgevers, Rotterdam Stadhuis.
- Rammelt Daalder, Havens van Amsterdam en Rotterdam sinds 1870
- Citymetric.com
- Rotterdam climate initiative plan
- edugis.com

## Reflection

### Relevance

**Social Relevance\_** ‘For Rossi, a monument is an urban artefact, whose form should embody the memory and character of a place. The role of the monument could also be to structure and order the collective life of the city, offering society a chance to explore different modules of shared spaces.’

Infrastructure is used as a tool for urban renewal and as an analogy of home, in a city in constant flux- serving 3 larger goals on site: to improve the quality of public place in Feijenoord, to connect this better to old and new infrastructure, to make it an interactive environment.

### Time planning

- 24.01.17: **P2 presentation**\_ Site analysis and mapping along with initial sketches and diagrams, Questionnaires, case studies, initial design ideas+ concept models

01.02.17 - 15.02.17: Site Analysis, development of network for design intervention

16.02.17 - 28.02.17: Development of program through case studies and questionnaires, development of scenario

01.03.17 - 15.03.17: Design exploration, development of design strategies. Finishing Research Paper

16.03.17 - 30.03.17: **P3 presentation**\_ Presentation of sketches, plans and sections and overall design strategies

01.04.17 - 15.04.17: Development of design. Detailing Overall scheme, along with detailed plans, and physical models+visualizations

16.04.17 - 30.04.17: Development of design. Detailing Overall scheme, along with detailed plans, and physical models+visualizations

01.05.17 - 15.05.17: Development of design. Detailing Overall scheme, along with detailed plans, and physical models+visualizations

15.08.17 - 15.12.17: **P4 Presentation**\_ Presentation of final scheme. Drawings, architectural details, Visualization of scenarios, Models

01.01.18 - 26.01.18 Finalizing material for final P5 presentation

26.01.18: **P5 Presentation**