

# **P4 Reflection**

## An anarchistic factory

Hendrikus Lambers 4176014 November 6, 2014 **The Why Factory** 

### Personal

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|                |                        |
| Studio         | The Why Factory        |
| Theme          | The Vertical Village   |
|                | 'JaJakarta'            |
| Teachers       | Ulf Hackauf            |
|                | Adrien Ravon           |
|                | Martin Sobota          |
|                |                        |
| Common title   | JaJakarta              |
| Individ. title | An anarchistic factory |

## 1. Relationship between research and design

Since the beginning of this year, we have been working on a Jakarta oriented graduation-project. The project's main focus is the Kampung and its complicated status within the growing city.

### **Brief resume**

In short our studio tried to map and understand some of the major issues the city is facing. From a larger towards the smaller scale many complex interlinked problems are present. We have displayed and explained these issues in our research book.

### **Project hypothesis**

Our hypothesis is, that a strategy of densification would allow for reconsideration of the entire urban fabric and give an incentive in the form of more income per square meter, thereby facillitating solving many of these issues. This strategy has become a starting point for the individual graduation designs.

### Test case: Kebon Kacang

In the course of our project, the neighbourhood Kebon Kacang has become a test-case for our studio. It harbours different situations that can be generically found across the city.

The Future Models exercise will focus on this particular area. In the drawing on the side, this is the area denoted in pink.



## What is shown and designed on which scale?

The connection between the research and design is found in the hypothesis; the hypothesis proposes a radical design for the entire Jakarta, a new model, a hypothesis that will give an incentive for solving all the problems.

### Hypothesis tested throughout the scales

The hypothesis and manifesto for a densified Jakarta are then tested throughout different scales; giving a brief for the design on every scale-level.

The graduation project is set up as a research by design studio. We tested the impact of a variety of densification strategies through various scales and models.

As a group we researched on the gualities and issues of kampungs and re-used rules and tools in our new design proposals. We also researched the current qualities and issues of Jakarta in regard to the cities future growth projections and written a manifesto based on the conclusions from that research.

The goal of my individual project is to find tools and strategies to provide an alternative for the illegal squatters along the Ciliwung riverbanks, while maintaining the settlements crucial factor as a steppingstone, while giving an incentive to help solve floods and introduce open, public, space at the same time.



**XS** housing unit

**S** community

**M** sites

L kebon kacang

| bric                          | - construc | Durating<br>flexibilit | - material<br>water re | fire resis | lifespan |
|-------------------------------|------------|------------------------|------------------------|------------|----------|
| - Urban fabric<br>- structure | bility     | method                 | tence                  | tence      |          |

V s sis-

à-

| flexibility<br>- light condi-              | 1   |
|--|-----|
| - ventilation                              | tei |
| lesignation                                | tei |
| frastructure                               |     |
| ransportation<br>- functional              |     |
| - internal                                 |     |
| - parking                                  |     |
| <b>fater management</b><br>sewage capacity |     |
| gencies                                    | 5   |
| - flooding<br>- land subsid-               | 1   |
| - traffic grid-                            | en  |
| - pollution<br>- privatized                |     |
| ice formal viable                          |     |

| System | - Urban fabric<br>- structure<br>- con | bility<br>bui<br>mathod | flex    | - <i>ma</i> | tence<br>fire | tence life. |  |
|--------|--|-------------------------|---------|-------------|---------------|-------------|--|
|        | etructa.                               | dling                   | ibility | t condi-    | tilation      |             |  |

| Infrastructure | - Transportation<br>- functional | se<br>- internal | routing<br>- parking | - Water management<br>- sewage capacity | Urgencies |
|----------------|----------------------------------|------------------|----------------------|---|-----------|
| μ              | Ë.                               | use              | rou                  | N "                                     | Б         |

|  |          |     | constructa- |
|--|----------|-----|-------------|
|  |          |     | 8           |
|  | <u></u>  |     | 1           |
|  | abric    | ure |             |
|  | <b>5</b> | 3   |             |

System

System

Urban fabric - structure

space space - designation - function - demographbuilding site communal - open space ics - safety Urban f - struct bility

nethod bility

> - Transportation - functional Infrastructure

- internal - parking Water management sewage ca routing ISE

Urgencies

pollution orivatized ormal right raste flooding land subsid traffic gridence ock

flooding land subsid pollutior waste

gencies

- small roads - parking

Water management - river/canal capacity - sub- rivers

looding and subsidtraffic grid

- fire preven-- FAR - Po/km2 - GSI Urban fabric - density System

 Transportation
Transportation
road capacity
tertiairy Infrastructure

- public transport - *platforms* roads

sewage capacity - main system

Urgencies

pace ence ock

System

- Po/km2 - FAR - OSR Urban fabric - density

- function - demographopen space designation

- Transportation - road capacity Infrastructure

public transport - rails netroads vork

- main roads - main sta-Water management tions

water-n storade river/canal

management Waste 1

**Jrgencies** 

ence



System

- FAR Urban fabric - density

Infrastructure

- Transportation - road capacity - main roads

public transport
rails net-

- main roads vork

Water management - river/canal capacity

Waste management
sewage capacity
main net

Urgencies

ence

ion

## safety

- main roads - secondary

sewage capacity

flooding land subsidtraffic grid-

ock

traffic grid-

flooding land subsid-

## 2. Relationship between theme and subject

What is the relationship between the theme of the studio and the subject/case study chosen by the student within this framework (location/object)?

## Hypothesis tested throughout the scales

We started this project as a group within T?F with the goal of researching possibilities of increasing the density of urban villages in South East Asia. The Why Factory started a research on this topic in 2007 with the Vertical Village studios, which lead to the publication in 2011. We planned on bringing the knowledge and research further by focusing on the city of Jakarta, Indonesia.

Jakarta as a city was chosen because of the fact that 70% of the city consists of kampungs, which are urban villages. The city is in a desperate need of a new vision on this informal part of the city while maintaining the growth of its global and formal city; the kota.

The studio research is divided into scales ranging from XL to XXS, as shown before. Scale XL till L have been researched and designed by the group. The individual research focuses on one of the four generic situation which can be found within the L scale site (Kebon Kacang). These are the M scales and are:

- the innercity-kampung
- the kampung kota border
- the riverbanks
- the economic and production centre

My project (from the M to XXS scale) focuses on the riverbanks.

The goal of my individual project is to find tools and strategies to provide an alternative for the illegal squatters along the Ciliwung riverbanks, while maintaining the settlements crucial factor as a steppingstone, while giving an incentive to help solve floods and introduce open, public, space at the same time.



Implications > design (Jakarta Impian)

Kebon Kacang 1:10.000 Group

Implications > design (Kebon Kacang Masterplan)

### Μ

4 Individual sites (situations that accure more often) 1.1000 Individual

Implications > design (M till XXS architectural and policy designs



## 3. Relationship between studio and student

What is the relationship between the methodical line of approach of the studio and the method chosen by the student in this framework?

### **The Why Factory**

The Why Factory's research projects are positioned in a classical research tripod of models, views and software; of model cities, applications and storage. The research on the Future City is undertaken through the interactive composition of three fields. It speculates on possible theoretical models in the model city program. It makes counter proposals for existing cities.

Both the group and the individual parts of the graduation project have aspects in all 3 of the elements of the research tripod. 3D models of the city are been used to test the quality and impact of both architectural and infrastructural strategies. Parametric software tools have been used to show the impact of various scenarios of densification. Axonometric and section drawings of both the current and the future situation are used to test and showcase qualities to determine if the solutions maintain enough kampungness.



## 4. Relationship between project and wider context

What is the relationship between the project and the wider social context?

### Jabodetabek

Jabodetabek, the urban agglomeration consisting of DKI Jakarta, Bogor, Depok, Tangerang and Bekasi, is the second fastest growing megacity on the planet (Robinson, 2011). Current projections show that Jabodetabek's population will reach 38 million people in 2030 (Jakarta municipality, 2014).

However, this growth will take place in a city that is facing major problems; all these issues are deeply interconnected and are seriously jeopardizing the city's livability. (Kusno, 2010; Robinson, 2011; Silver, 2007). We believe these problems should be tackled with a radical reconsideration of Jakarta's urban fabric. We propose the double the amount of inhabitants, going from Jakarta to Jajakarta.

In 2030 Jakarta will have expended so much due to migration and population growth, and in this process overtaken many adjacent cities, that it will be called Jabodetabekasepususesuci (Jakarta municipality, 2014). An unpronounceable name for a megacity that has become so addictive to growth that it will become uncontrollable. The municipality will be left incapable in effectively managing the dramatically enlarged city. Stopping the urban sprawl will mean that the city center, known as DKI Jakarta, should increase its density; both in its inhabitants as in floor space, in order to be able to house the majority of the expected growth for all income classes. This change will require a new kind of urban fabric, in which the kampung is intensified.

The re-envisioned Kampungs will have to house more people then ever while maintaining its diverse income groups. Doubling the population density will offer the opportunity to tackle some of Jakarta's major issues while reimaging the core fabric of the city which is in grave need help. Jakarta is not the only city that faces these kinds of issues.

Other cities in Indonesia such as Yogyakarta, Semarang, Surabaya and Bandung are all facing similar issues due to massive migration from the countryside to the cities. The strategies on an architectural and infrastructural scale are therefor not site specific, but could be implemented within various all of Indonesia's kampungs and other south east Asian cities.

