P4 Reflection

Graduation studio 2014 Jonathan de Veen - #4148282

General project description

Since the beginning of this year, we have been working on a Jakarta oriented graduation-project. Our 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 Jakarata is facing. From a larger scale towards the smallest scale, many problems seem to be interlinked. We have tried to display and explain these issues in our research book.

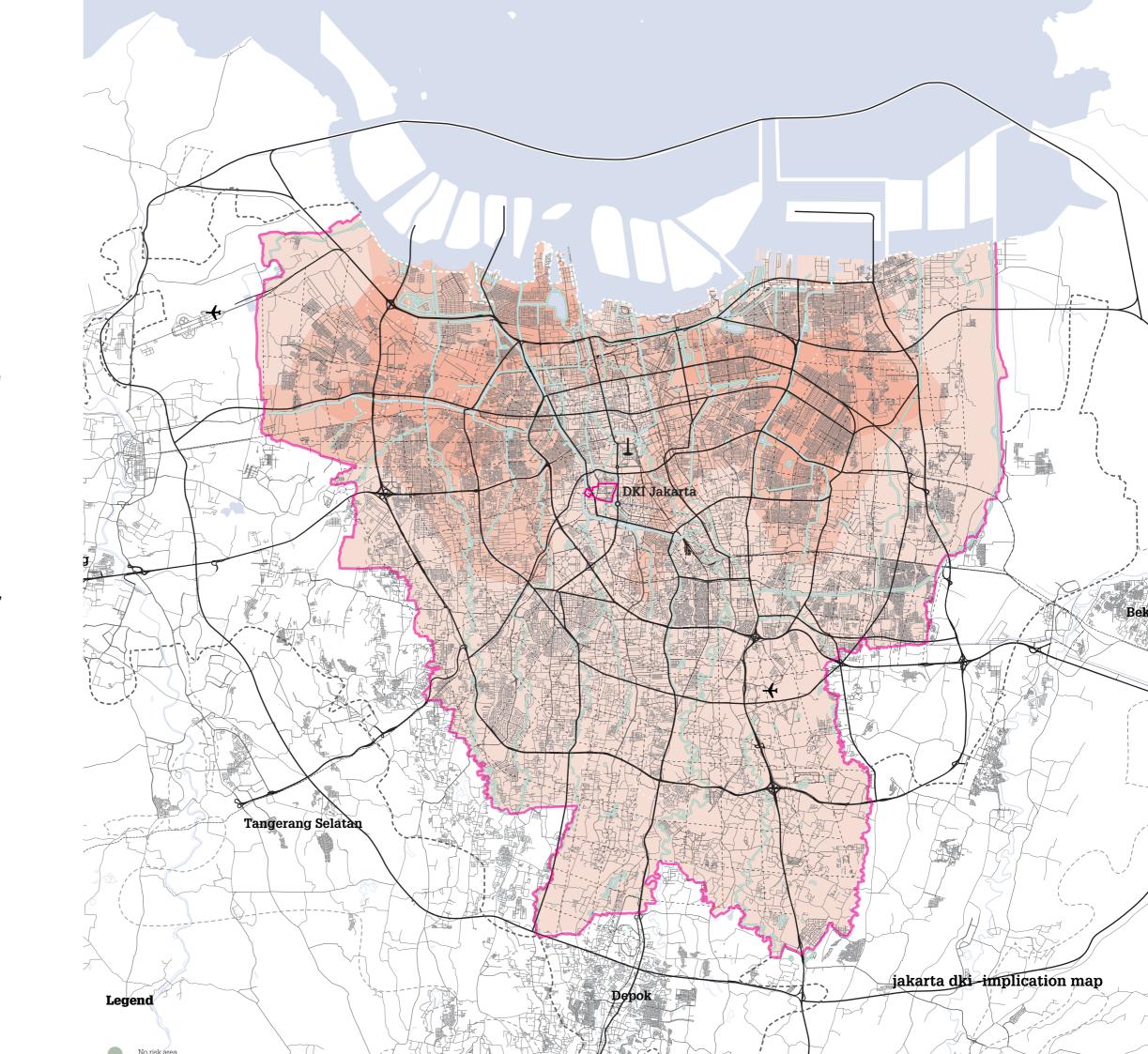
Project hypothesis

Our hypothesis is, that a strategy of densification would allow for reconsideration of the large parts of the city. It would thereby facillitate the solving of multiple interrelated issues. This strategy has become a starting point, and a common ground, for our graduation designs.

Test case: Kebon Kacang

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

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



Research & Design

The diagram on the side tries to summarize the implications of our research. The general reasearch findings indicate specific considerations for each scale. Obiviously the diagram is far from complete, however it served as a tool during the design process.

Research understanding

Jakarta as a city was chosen because of the fact that 70% of the city consists of urban villages, the so-called Kampung. The city of Jakarta could best be described as a city of urban villages. This particular mix between these villages (the Kampung) and the modern city (the Kota) seems to be a perculiarity of Jakarta. However the Kota is gradually taking over space of the Kampung. Numerous sources indicate that relation between the Kampung and the Kota is vital for the city. 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.

Design approach

Understanding the city to be a Kota-Kampung symbiosis leads to a research into the mechanisms of their relation. At first hand their relation is evident in omnipresent in many ways: socially, culturally and economically.

Both the findings of the larger scale as the smaller scale have become starting points for my graduation design. Viewed from the larger and the smaller scale at the same time, my design tries to mediate between the needs of the city and the needs of the common Kampunginhabitant.

Jakarta

Sites

Community

XS

Housing unit

Detail

System

- Urban fabric - density

System

- Urban fabric density
 - Po/km2 - FAR

Kebon Kacang

- open space - OSR
- designation
 - function demographics

System

- Urban fabric - density
 - FAR - Po/km2
 - GSI
- safety
 - fire prevention dimensions

System

- Urban fabric - structure

- constructability building site
- open space - communal space
- designation - function
- demographics safety
 - fire prevention dimensions

System

- Urban fabric - structure

- constructability buidling method flexibility
- light conditions ventilation

functional use

functional use

- parking

- internal routing

- designation - function

Infrastructure

- Transportation

System

- Urban fabric - structure

- constructability buidling method flexibility
- materials water resistence fire resistence lifespan

Infrastructure

- Transportation
- road capacity - main roads
- public transport - rails network
- Water management
- river/canal capacity
 - main rivers - water-net

- main roads

- storage
- Waste management
- sewage capacity main net

Infrastructure

- Transportation - road capacity
 - main roads - secondary roads
- public transport
 - rails network
 - main roads - main stations
- Water management
- river/canal capacity - sub-rivers
 - water-net
 - storaσe
- Waste management sewage capacity
 - main net

Infrastructure

- Transportation - road capacity
 - tertiairy roads
 - small roads - parking
- public transport - platforms

- Water management

- river/canal capacity - sub- rivers
- sewage capacity main system

Infrastructure

- Transportation

Urgencies

functional use - internal routing - parking

- Water management

- sewage capacity
 - main system

- flooding - land subsidence
- traffic gridlock
- pollution

- waste

- formal rights

Urgencies

- flooding

Water management

sewage capacity

- land subsidence
- traffic gridlock
- pollution

- waste

- privatized space - formal rights

- flooding
- pollution
- waste

Urgencies

- flooding
- land subsidence
- traffic gridlock
- pollution waste
- **Urgencies**
 - land subsidence
- - flooding
 - traffic gridlock
 - pollution waste

Urgencies

- flooding
- land subsidence - traffic gridlock
- waste - privatized space - land ownership

- pollution

- privatized

Urgencies

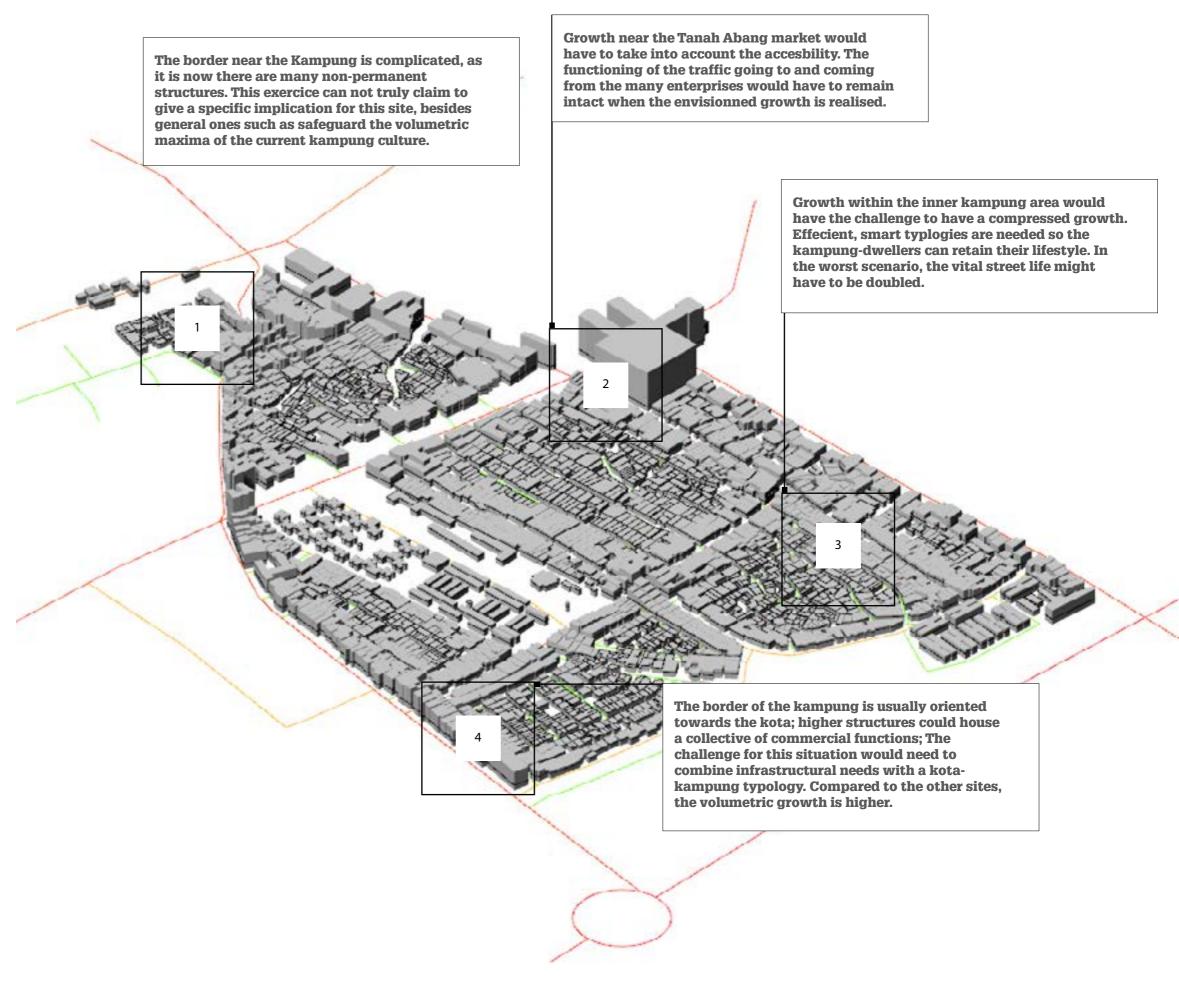
- land subsidence

Studio & methodology

We started this project as a group within T?F with the goal of researching possibilities 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 a publication in 2011. Our goal was to continue with the concept of the densified village.

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, and to determine if the solutions keep the kampung qualities we determined ealier.



Project and wider context

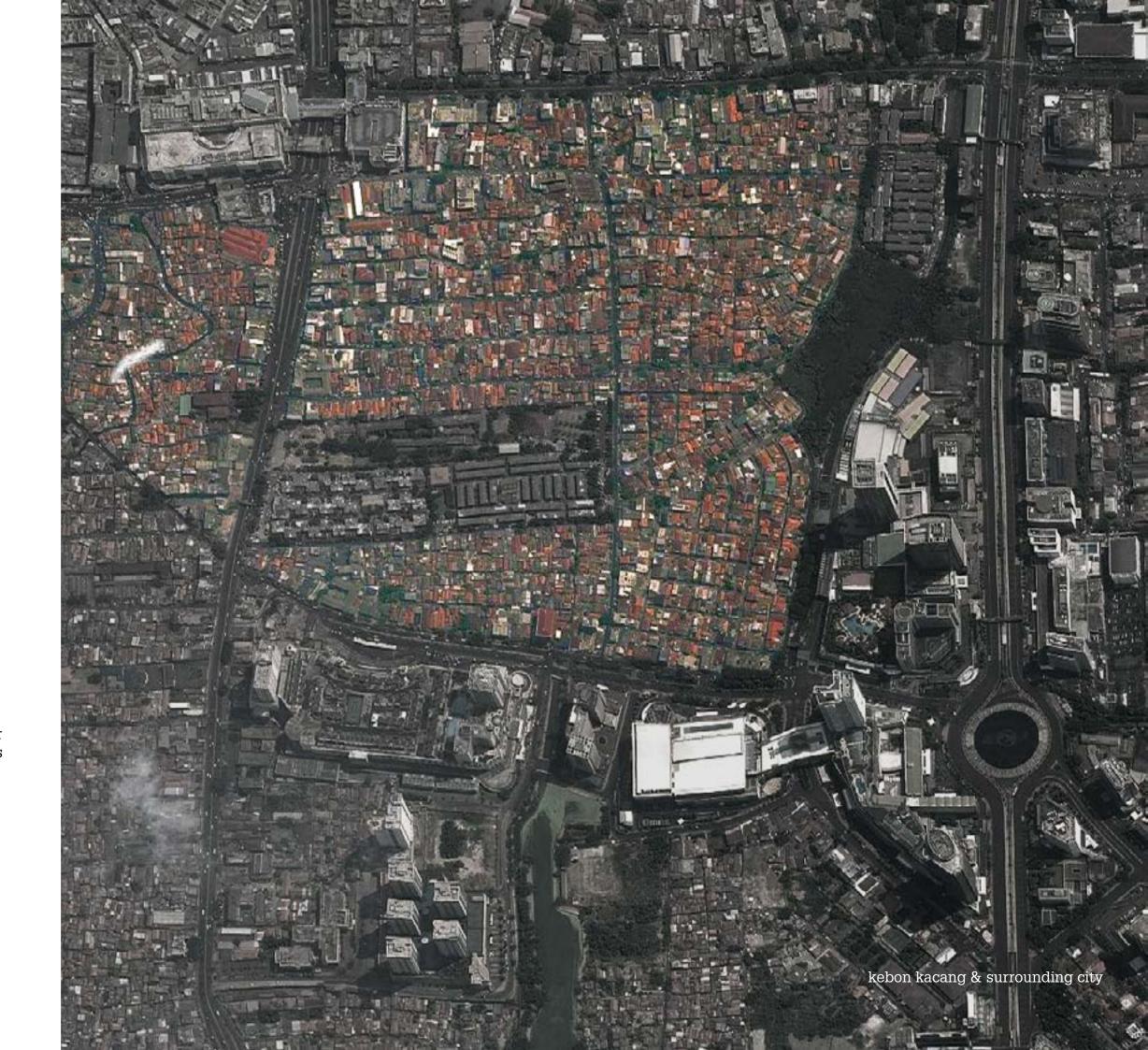
In 2030 Jakarta will have expended so much due to migration and population growth, and in this process overtaken many adjacent cities, that it will be called Jabodetabekasepususesuci The municipality will be left incapable in effecti vely managing the dramatically enlarged city. Stopping the urban sprawl 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." (Jakarta Impian manifesto)

Relation to general theory

The designs I developped focus on the immidiate border between the larger and the smaller scale: the Kota and the Kampung. This border could be understood using a spatial syntax analysis. This theory brings forward that cities function with two layers: the supergrid and the non-supergrid.

Theoretically the supergrid is a space where the movements of the local and city-wide scale overlap. In Jakarta the supergrid functions as a gateway to pass through a series of 'in-between' spaces. They serve the higher scale of the movement within the city. The bigger vertical lines in the drawing display parts of this supergrid.

Along the supergrid the formal 'front' of the city can be found. The characteristic buzz of urban exchange and interaction can be found behind this grid. This area of interaction seems particularly relevant as project area.



Personal approach & viability

Personal emphasis

Influenced by the Regionalist theories, I believe a profound attempt of creating a genuine culture-sensitive architecture is possible by introducing a form of continuity in a defined cultural tradition. If applied to the Kampung, an approach based on the experience of space seems to be problematic. Since the Kampung can be understood as a pragmatic and informal entity, the experience of materials, colours, natural light are merely a consequence of other design constituents. Within the inner city, the Kampungs that were embedded in Javanese building traditions have long gone. Many historians have noted that the global culture has gradually penetrated the Kampung life.

To my understanding, the Kampung culture can be found within its community oriented practices. This culture is strongly intertwined with numerous informal economies. These dynamic aspects of the Kampung are especially relevant when one considers the financial status of most Kampung-dwellers. I believe that understanding and facilitating this culture would solidify the position of the Kampung within the city. Therefore, I believe that understanding the socio-economic dimension of the Kampung would offer the means of creating genuine culture-sensitive developments.

Personal strategy

The design approach I followed tries to incorporate the need for infrastructural change, and the economic potential in the benefit of the smaller local context. The designs can be regarded as attempts in finding typological approaches in the benefit of the city and the local context.

Project evaluation

The growth of cities has been a widely discussed phenomenon. The densification strategies that are developed during the research and design processes might be viable on a wider context. Other world cities face similar questions regarding cultural heritage and the need for change.

