TUDelft | Graduation plan

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Studio
Name: Explore Lab
Tutors:
Architecture: Ir. E.J.G.C. van Dooren (Elise)
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Argumentation for studio
Explore Lab has given me the opportunity to develop a project within a topic and place that is closely related to me. In the year 2000, the city I grew up in was struck by a fireworks-factory disaster that killed 23 people and destroyed an entire neighborhood. I closely followed the subsequent participatory redevelopment of Roombeek, while developing an affinity for architecture. Almost two decades later, the redevelopment still has the opportunity to incorporate a visionary project. Explore Lab is the studio that gives me the space to find answers within this specific theme.

Graduation project

Bouncing Forward
Redefining a disaster-struck city: The case of Enschede

Goal
Location: Enschede, the Netherlands
Problem Statement:
On the 13th of May, 2000 a fireworks factory exploded in the middle of an Enschede neighborhood called Roombeek, leading to the loss of 23 lives and destroying an 420 acre neighborhood (Colenbrander, 2002, p.1). Once again, the city had to display the ability to recover from destruction.

The research deals with the theme of ‘resilience’, the ability to bounce back after a disaster. It takes a notion from ecological resilience, where the system has to adapt to the new requirements of time after a disturbance. Translated into the city, this means that the city has to apply a long-term vision for the scale of the city, not just the scale of the destroyed area (Local Environment, 2011, p. 432).

This ‘bouncing-forward’ principle is used to re-evaluate the Roombeek redevelopment. The post-disaster process has largely been based on a participatory governance-model where all of the involved individuals were given the chance to participate in the design process (Snellenberg, 2008, p.19). This applied model was applied by the municipality as a means to “separate the emotion from the actual development” (Colenbrander, 2002, p.2). The post-disaster redevelopment narrative is evaluated along the four phases of “model of recovery activity” (Vale, Campanella, 2012, p.335). The process has entered the last phase, a phase for betterment and development. It is an absolute necessity that this last development distances itself from the participatory-model and portrays a vision for the future and on the scale of the city instead of the neighborhood. The fact that the redevelopment nears completion and the relation between the public and the government has been destroyed, allows for a deterministic stance.

The vision that the city should take is derived from its experience in past destruction and reconstruction. A ‘learning-curve’ of resilience is produced where it analyzes the city’s repeated ability to redefine itself after destruction. By extrapolating this curve, a guiding theme for the subsequent design-project is extracted.
The architectural project will be designed onto one of the most historically significant plots in the area, in close proximity to the explosion site. As of yet, this plot has been given a parking lot that completely neglects the potential of the place. Its location carries the ultimate potential to display the disaster-given opportunity to fast-forward into a new urban future. A ‘learning-curve’ of resilience is produced where it analyzes the city’s repeated ability to redefine itself after destruction. By extrapolating this curve, a guiding theme for the subsequent design-project is extracted.

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**Research question**

How can the city of Enschede redefine itself by learning from its experience in urban resilience?

**Design assignment**

A historical analysis is done to see how the city repeatedly reacted to moments of destruction, following the notion that every reconstruction follows a new urban vision.

By learning from the past, a vision is formulated that reacts to the current requirements of time and place. This vision can be seen as the guiding theme for the design process. The architectural project serves an exemplary role into what direction the city should go.

**Process**

**Method description**

A theoretical research is conducted to provide a definition and set of criteria for the theme ‘resilience’. These criteria are used for a re-evaluation of the Roombeek redevelopment. The process of the redevelopment is studied through interviews and literature and the urban and architectural outcome is studied through a case-study. An historical analysis is executed to produce a timeline of the city’s experience in destruction and reconstruction. The lessons of the timeline are used to determine a proper future vision. The future vision serves as a guiding theme for the design project.

**Reflection**

**Relevance**

The research tries to establish a better understanding on how city’s should deal with destruction. Places of destruction are places where future vision for the city can be accelerated and therefore carry the potential to serve an exemplary role in urban development (Vale, Campanella, 2005, p.348).
Time planning

Week 2.8: 18/01/2019 P2 presentation
- first draft research
- site visit enschede
- conclusions research, guiding theme
- final draft research
- massing, program, function
- construction, façade, climate
- design reflection

Week 3.4 – Week 3.5 04/02/2019 – 10/02/2019 P3 presentation
- processing feedback, finish research
- visuals final design
- technical elaboration (climate)
- technical elaboration (details and construction)
- prepare presentation, booklet

Week 4.4 – Week 4.6 16/05/2019 – 28/05/2019 P4 presentation
- processing feedback, final model
- final model, booklet
- final model, prepare presentation

Week 4.10 – Week 4.11 24/06/2019 – 05/05/2019 P5 presentation
Literature
During the length of my research I will (i.a.) be referring to the following sources:

Resilience |


Re-evaluating Roombeek |


Learning Curve |


Urban redefinition |


General |