REFLECTION PAPER (P4) Redefining a disaster-struck city: The case of Enschede





Figure 1: Form-Studies (R.Meijer)

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Introduction

When the dust settles, and a period of disaster-relief and processing trauma passes, the ruins are breeding ground for ideas as opportunities for progressive reform. A disaster is an ultimate opportunity to "bounce forward", it offers an incentive for the enhancement of local properties in opposite to restoring the pre-disaster conditions. Destruction gives the opportunity to fast-forward the development of a city into a completely new urban paradigm.

19 years of redeveloping (to this day exact), allows for re-evaluation of the Roombeek redeveloping) Applying the participatory model of planning has enabled the return of Roombeek's citizens and linear restoration of the built environment, but the constant focusing on mundane issues has hindered the possibility to propose a bold vision for the city's future development. The applied model led to unbalanced spatial results since the most part is focused on restoration and return to pre-disaster conditions. In a time when Enschede is need of a thorough redefinition, this location still offers the opportunity for a development whose significance would go beyond the confines of the local neighborhood. By analyzing the city's turbulent timeline of destruction and reconstruction, the research aims to find direction for future redefinition. Hence, the research question emerges: How can the city of Enschede redefine itself by learning from its own experience with urban resilience?

Method

In order to answer the research question, I first established a proper definition for "urban resilience" (1). It has taught me that resilience includes abilities of "transformation" and "betterment". By doing a proper formulation of the main research-theme, urban resilience, I reduced my frame of research into a comprehensible size. Analyzing the learning curve (2) of the local context has not only confirmed the notion of betterment but has also taught me that urban resilience can shift the city into a completely new paradigm. Shifting from general theory (1) and then projecting these theories onto the local context (2) allowed me to link theory with the tangible context. By then evaluating Roombeek (3), the most recent (and still active) reconstruction, I made the conclusion that Roombeek still has the opportunity to project a vision that is tuned to the expected requirements of place and time.

By mapping and analyzing the learning curve of resilience, I acquired the characteristics and criteria to subsequently evaluate the Roombeek reconstruction. It taught me that urban resilience only valid if it includes the ability to predict future requirements and transformation of the system.

To formulate a proper direction for the city's transformation, I dived into the city's current problems on a local scale and predicted a universal objective for the city's future. These were the set of criteria I implemented throughout the rest of the research and design project (5).



Figure 3: Urban Pattern Study (R. Meijer)

Objective

Analyzing the city's learning curve of resilience, I came to an understanding that the "bouncing forward" principle includes urban recovery that is tuned to both time and place related requirements. The city-fire, the allied-bombings and the destruction of industrial heritage and their subsequent reconstructions are part of a sinusoid-wave of resilience tuned to the urgent societal requirements of time and place. The urban and architectural objectives of the reconstructions were to direct the city into a new paradigm. It is my opinion, that the most recent act of reconstruction (after the 2000 fireworks-factory disaster), has – as of yet - not reacted to the current societal and environmental challenges. In reaction, my research formulated a stratified objective for the design project: it should aim to prevent the city's current "brain-drain" by establishing a breeding ground for its creative talent. Simultaneously, the build should be an example of how to deal with impending ecological transformation. Therefore, the guiding themes of "creativity" and "climate adaption" are formulated. For both themes, the building should serve an exemplary role in redefining the city. By stratifying the objective into both a time and place related guiding theme, the project serves a multi-scale relevance. The specificity of place requires a cultural breeding ground to prevent the city's current brain drain.

A Cultural Breeding Ground

Academic and creative graduates need to be facilitated in their innovative and creative output by establishing a place for encounter. The guiding theme connected to this objective is formulated as "creative symbiosis".

Ecological transformation On a time-scale, the building aims to be a landmark for climate adaptation. In a time of impeding ecological transformation, the objective is to be resource independent and resilient towards intensifying climate conditions. The guiding theme connected to this objective is formulated as "urban climate adaptation"

Aspect 1:

the relationship between research and design.

I believe that the design project is a direct resultant of the research efforts. My research does a strong theoretical and site-specific dive into its historical characteristics and future requirements. The evaluation of the ongoing redevelopment project gave me a clear view of the challenges that it still has. From there I formulated two clear guiding themes that were very prevalent throughout the entire design process. The two formulated themes are a reaction to the most urgent requirements of place and time. Nevertheless, the research has also allowed me to discover other non-thematic potential of the location. For example: the centrepiece location of the redevelopment area is filled in with a large parking space that neglects any urban or architectural potential of the place. In reaction, I tried study a form that reveals these site-given qualities by completing the "cultural ensemble" and design a "wadable" structure.









Figure 4: Functional Pattern Study (R. Meijer)

Aspect 2:

the relationship between your graduation topic, the studio topic, your master track and your master programme. In this initial phase of the research project, the theme and direction of the research were reformulated countlessly. The research began with a location and a problem: the Roombeek redevelopment and an unfinished building site. In order to find a proper direction, I had to do a lot of exploring within the related subject-matter and the problems of place. I believe Explore Lab studio gave me space and opportunity to do a proper formulation of what I really wanted to achieve. Being a student of the Architecture master track, my design project was undeniable an architectural challenge. Nevertheless, since I conducted research within the frame of "urban resilience", I believe I acquired a lot of knowledge from the realm of Urbanism.

Aspect 3:

Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work. The applied methodology is adapted to the research-theme and objective. Simply put, the sequence of research-steps that enable answering my research question. It does not relate to any prescribed methodology of the graduation studio. Better yet, Explore Lab's absence of a fixed methodology forced me to unravel a wicked problem into a coherent series of questions and allowed me to understand the subject-matter a lot better.

Aspect 4:

Elaboration on the relationship between the graduation project and the wider social, professional and scientific framework touching upon the transferability of the project results.

The direct transferability of the project relates to the fact that almost every city in the world deals (or has dealt) with some sort of destruction. The post-disaster redevelopment of a city is a complex process that requires perspectives from urban, social, economic and even ecological sciences. Although a good portion of the research output has a site-specific character, the employed methodology reacts to all aforementioned complexities and can be superimposed onto any urban context that has dealt with de- and reconstruction.

Aspect 5:

Discuss the ethical issues and dilemmas you may have encountered in (1) doing the research, (2) elaborating the design and (3) potential applications of the results in practice.

The biggest ethical issue I encountered (especially during the research phase), was trying to express the flawed side of the Roombeek recovery. Even I obtained the scientific background to confirm my argument, I still found it difficult to critique the all-appraised project of my hometown. During the design phase I was able to distance myself from the critique, because it now became the objective to visually display my own perspective. The "landmark"characteristic of the project indicates its exemplary role in how the city should deal with its creative forces and impeding ecological transformation.



objectives, tools and qualities

A potential application of the project is **non**-architectural. My aim for the project is to spark a discussion on how future architecture should react to the urgent requirements of time and place instead of being close and short-sighted. A potential application of the project is non-architectural. My aim for the project is to spark a discussion on how future architecture should react to the urgent requirements of time and place instead of being close and short-sighted.

Design Process

After formulating two distinct guiding themes, the design process started. Initially, I tried to fully depart from all the written material and try to design without any of the preconceived notions from the research project. After doing numeral urban, pattern and morphological studies, several qualities started to emerge. In the scheme on the right, I tried to establish an overview of some of the design qualities that emerged, linked to the objective and the tool that should enable it. Although the scheme reads from left to right, the actual process did not go through this logical sequence. Sometimes the qualities emerged randomly, but I was able to identify them as being a quality due to its relationship with the formulated objective. In order instances, I purposely tried to use the objective as a directing design-force. Sometimes producing several options, sometimes having a singular but obvious solution.

Formulating two guiding themes instead of a single coupling theme initially worried me. I feared that the project would be pulled into two directions and the end product would fall somewhere in between. Throughout the process, I discovered that having multiple guiding themes gave me a richer design-toolbox to choose from and also enabled me to do a weighted evaluation for having two "assessors". I feel that the design decisions that serve both the "creative" theme as the "climate" theme, are the most significant.