



Reflection

The final chapter of this thesis involves reflecting on the past year and the project that has been developed. As the Delta Interventions studio had the theme North Sea this year, locations of the projects where pre-determined. Because of my personal interest and motivation to work on a project involving New York City, I wanted to be able to select my own study area. Since the theme of the Delta Interventions studio had my absolute preference, I still decided to graduate in this research group. Thankfully, the flexibility was offered to select your own location if accompanied by a strong personal motivation. This allowed me to work on detaic challenges in the city of my choosing.

Since the research group Delta Interventions focuses on detaic challenges, developing a project in New York City fits perfectly within this studio. Situated in the Hudson river delta and directly next to the Atlantic ocean, New York deals with various water related challenges. The city has always had a close relation with the water, but will have to adapt to be prepared for the challenges in the coming century. In the master track of Urbanism, projects usually deal with complex problems. Rarely it is the case that solid interventions are proposed without understanding the dynamics of the specific context. After carefully analysing the conditions on different scale levels, proposals are made. This proces of getting to know the area and studying all relevant dynamics is something I personally really enjoy, and is essential to develop a successful project. This project has taught me a lot about Red Hook, and made me focus not only on the deltaic challenges of New York city, but also the demographic ones. This complexity makes that I have felt challenged throughout the year to propose the best possible solutions, and is something I relate closely to the field of Urbanism.

Throughout the development of this project there has been a close relation between research and design. The majority of design decisions, have been based on research. For example the design of breakwater to maximize ecological value has been studied in Rebuild by Design projects. By analysing these projects and applying the concepts in my thesis, there is a close link between the research and design. Also the marshland has been developed according to the research done on salinity and waterlevel difference between the tides. Finally, interviews with experts and local inhabitants have

provided insight in the design for the waterfront, keeping in mind what the local community needs and values most.

Early on in the project, the strategical framework was established. Although it slightly developed over time, the three components of flood risk, publicand ecological value have remained the same throughout the process. This approach gave solid guidelines for the direction of the project. Another methodology that provided support for design decisions has been descriptive research. Luckily, there was ample data available on the conditions found in and around Red Hook. This enabled me to not only map the current conditions, but also make evidence based decisions on information from trustworthy sources such as municipal documents.

As this thesis addresses highly relevant challenges of the coming decades, it makes a useful contribution to the academic field of urbanism. By developing an ecological approach, rather than solving flood risk with traditional hard man made infrastructure, the thesis tries to explore the benefits of more unconventional ways of urban development. As our understanding of the importance of ecological value in urbanized areas increases, this approach could become more common in the near future.

One of the most challenging factors concerning the situation in Red Hook are the societal and ethical aspects. As the analyses have shown, the neighbourhood deals with several demographic challenges, such as a high unemployment rate and low incomes. While housing prices have been rising out of control in most parts of New York City, Red Hook has seen surprisingly low rates of gentrification in the last years. Considering it is located close to Manhattan, it is one of the last neighbourhoods which hasn't seen the extreme rise in housing prices. The analyses showed several reasons that possibly contribute to this fact. The high flood risk and isolation in terms of public transit of the area are likely to be the biggest contributing factors. These factors are both being addressed in this thesis. With that being said, it is not unthinkable that housing prices will start to rise and the area will see an increase in gentrification, if the proposed design is being implemented. When reducing the flood risk in Red Hook and improving both public- and ecological value successfully, this scenario is very likely.

Although new affordable housing units will be realized to accomodate the low income community, it could still mean that current inhabitants of the Red Hook houses project can no longer afford to pay the rising rent. By providing additional job opportunities the local community also benefits in an economical way of the urban regeneration in Red Hook. Whether these economical benefits will be enough to steer the gentrification of Red Hook in a controlled way remains to be seen. This is an ethical dilemma which proved to be hard to solve.

As the project aimed to address both Surges of the 21st century, it should combat floodrisk and socio-economic pressure in an equal way. Although both aspects are addressed through interventions in the proposed design, flood risk seems to have played a more dominant role in the development of this thesis. Reflecting on the amount of attention both the aspects have received, the social part of the project could have been stronger.

The transferability of the projects results plays a large part in this thesis. After all, the strategical framework to guide development in urbanized coastal areas has to be applicable in various locations. Although the three components of the framework can be researched and developed in all urbanized coastal areas, every situation will be unique. The three development areas with the nearshore, waterfront and inland area might not be feasible in other delta cities for a variety of reasons. In general, the strategic framework proved to be successful for developing the neighbourhood of Red Hook. For this reason, addressing the three components of flood risk, public- and ecological value will most likely be an effective framework for guiding development in urbanized coastal cities elsewhere in the world too.