Re-imagining Post-Industrial Space: A Dynamic Water Sports Center in Gorinchem

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AR3AH115 - Graduation Studio Revitalising Heritage

Heritage & Architecture

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1. What is the relation between your graduation project topic, your master track (A, U, BT, LA, MBE), and your master programme (MSc AUBS)?
[The relationship between the H&A graduation studio and the subject chosen within this framework.]

This maritime heritage studio deals with the relationship between water, industrial heritage, its built environment and history, and the related human activities.

In this framework, my research question is:

What is the value and vulnerability of Gorinchem's listed heritage in relation to climate risks? Furthermore, considering the climate risks it faces, how can a post-industrial built heritage in this context be revitalized to enhance its climate resilience?

Climate-related disasters such as rising sea levels, floods and drought are affecting the sensitive delta areas in the Netherlands significantly. The heritage sites hold different degrees of historical, social, functional, memorial, and aesthetic value, and their susceptibility to those climate risks varied. My research seeks to analyse a set of selected architectural heritage sites, and to rate them based on criteria developed from similar existing researches, in order to figure out the most vulnerable heritage sites to climate risks.

In this way, my research aligns with the studio's focus on the relation between water environments and heritage.

As for the location, this studio focuses on the Waterdriehoek heritage line region in the South Holland Province. Among the towns in Waterdriehoek area, I chose Gorinchem as my site of research and design. The town of Gorinchem is at the intersecting point of two heritage lines proposed by the South Holland Province government, that are the Waterdriehoek and Oude Hollandse Waerlinie. Other than that, it is also the border town of South Holland Province, neighboring North Brabant, Gelderland, and proximate to Utrecht Province. This means it is a very strategic location, and deeply intertwined with the local history and geography.

The choice to focus my research and design in Gorinchem is made from the collective typology study from the early stage of this studio. I noted the fact that Gorinchem possesses almost all the types of architectural heritage components that we have analysed in the range of the whole Waterdriehoek region. The richness in diverse architectural typologies allows me to select an intervention building for the design. What's more, in the group assignment of essence model, we chose to analyse the Mercon Montage B.V.'s industrial premises, which has historical origin with

another company, De Vries Robbé, that has already gone bankruptcy.

My design project site is a piece of land outside the old fortification of Gorinchem city center on the Linge River south side, where the old storage buildings of De Vries Robbé company locate. It has strong relation with the theme of the studio, and with the previous research processes of the studio.

2. How did your research influence your design/recommendations and how did the design/recommendations influence your research?

[The relationship between research and design.]

The relationship between my research and design is closely connected in many ways.

Historically, through my research, I gained a deep understanding of the history of Gorinchem, from the first human settlements in the 1100s to the city's gradual urbanization, and the future development plan. This historical knowledge guided my design, positioning it as both an entrance to the old fortifications and a bridge to new residential areas.

Logically, my research and design are relatable because the research gives clear direction to the design. My research identified which heritage buildings in Gorinchem are most at risk from climate issues like flooding, drought, or overheating. The same analysis is also applied on the design site specifically. It helped me to take into account the adaptation aspect for future environmental changes. In the climate design phase, I will incorporate climate-resilient features such as improved drainage, shading, and water management. Since my project is a water sports center, addressing climate impact and its connection to the natural water body became especially important.

3. How do you assess the value of your way of working (your approach, your used methods, used methodology)?

To assess the value of my approach, I look back into my research process.

I started by reviewing multiple research papers on similar topics, focusing on how historical heritage buildings' value and vulnerability can be evaluated in the face of climate risks. Using global examples and local studies, especially from Dordrecht, another city in the Waterdriehoek area, I developed a method for rating Gorinchem's buildings based on five dimensions: historic value, social value, functional value, memorial value, and aesthetic value. As for analyzing their vulnerability, I use mapping to visualize their risk to flood, drought, and overheating with the information from *Atlas Leefomgeving*, a Dutch official database.

This approach is particularly valuable for Gorinchem, as no similar study had been done for this town before. By establishing a baseline, my research provides a foundation for future studies and helps people understand the importance of protecting Gorinchem's heritage in a changing climate.

Although Gorinchem is a small town, this work holds real significance for local stakeholders and residents.

However, my way of working is worth improving in many ways.

First, on a great location with a lot of potential, my design seems not attractive enough. This is because I am afraid to make changes to the existing without knowing what is correct. I realized if I want to give new life to the existing, modifying is a must. Keeping, removing, adding, this has been the topic ever since the very first class. I do not know what is correct, so I am afraid to do things. I realized that I need to give "A" answer, not "THE" answer, and maybe there's no "THE" answer.

Second, my personal work mode is not active enough. When I was doing the collective works with other students like from the beginning of the studio, I am more passionate and active. But as for the individual part, I am a bit not as enthusiastic. Also some family issues influenced me for some time. I try to resume already, and will keep working my utmost towards the P4 and P5.

4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

[The relationship between the project and the wider social context.]

Academically, my graduation project provides a detailed study of Gorinchem's industrial heritage and its climate risks, contributing to research on preserving historical sites in vulnerable areas.

Socially, because of the new development plan of residential complexes on Linge river north side, this particular site with industrial heritage on has brought to a lot of discussion. Stakeholders including the real estate developer, the local residents, and a local conservation group called De Vries Robbé heritage foundation (*Stichting Erfgoed De Vries Robbé*) involved.

My collaboration with the foundation highlights the importance of this research to the community. The foundation provided valuable historical materials, showing that local people recognize and value the area's heritage. In turn, my research brings academic recognition to the site, supporting the foundation's goal to protect it against the developer's push for demolition to scratch and new construction of housing. This project thus plays a meaningful role in balancing heritage preservation with urban development.

5. How do you assess the value of the transferability of your project results?

I believe the research method I used is general and can be applied to other towns to analyze the value and vulnerability of buildings, with only few adjustments. This makes it transferable to different locations facing similar climate risks.

The project can be a reference functional wise for other transformations of post-industrial sites. However, the design itself is very specific to Gorinchem and to this particular site. The proposed water sports center is designed to meet the needs of the local community, providing a space for recreation and relaxation. The design tries to reflect on Gorinchem's unique history, the characteristics of the site, and its geographic position. These local factors shaped the project and gave it a strong connection to the town, the water and the land.