# P5 Reflection

Jan Huis in 't Veld

## P5 Reflection paper

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### **P5 Reflection paper**

#### Introduction

In this paper a reflection upon the process of the research- and design semester of the graduation year will be made. The paper will go into the following four topics:

- research and design;
- heritage & Architecture and the project;
- the method and approach;
- the social relevance and context.

The different topics have initially been discussed in the P2 Graduation Plan, which will be used as a central tool in the reflection. The GP first discussed the posed problem, which the design project was based on. Observations were made of an abandoned, decayed and isolated Katoenveem warehouse. The building was once part of a complex, which had been designed as a system for the transhipment of cotton. Although the building is situated at a prominent waterfront location in the Rotterdam Harbour, previously existing connections with the water and the city have been lost. The area around the Keilestraat, where the Katoenveem is located, will be redeveloped into a predominantly dwelling- and working district. Culture and leisure were, in my view, still missing from the equation. In that regard, the working- and living area needs a culture- and leisure centre at the high potential waterfront site of the Katoenveem. Based on these observations, the following research questions were formulated to reach solutions to existing problems:

How did the historic system function and what is the cultural value of the building and its site? How did the Katoenveem complex develop throughout history? How did the original Katoenveem systems operate? How did the structure, skin and space plan related to the function? How can the Katoenveem be reconnected to city, water and complex? What potential qualities can be found in the existing building? What phenomenological tools can be utilised for redevelopment?

The following assignment was formed on the basis of the aforementioned research questions: "[...] to design a cultural and leisure centre that services as the heart of the redeveloped neighbourhood around the Katoenveem. A new complex must be introduced with a contemporary network of water, people and city. The experience of the built space must play a defining role in the design."

The design solution was later described as: "[...] a cultural- and leisure centre with a modern interpretation of the Katoenveem as part of a more extensive complex. A public domain, at the heart of the redeveloped Merwe Vierhavens (M4H), housing a multitude of functions united by experiential zoning, clear routing and material expression within a waterfront urban park enabling the central gathering of inhabitants and workers.

The first chapter will reflect upon the relationship between the research, resulting from the research questions, and the design. Furthermore, the transition between the two semesters will be discussed, as well as the role of design in the research semester and research in the design semester.

#### **Relation research and design**

Two main parts of the graduation year can be distinguished: the research- and the design semester. It was meant for the objective research on Rotterdam, the Katoenveem and the research questions, combined with personal fascinations and ideas, to lead to a valid design proposal. Towards the end of the research semester, a certain subjectivity was introduced as the conclusion of the research semester was not exclusively an extensive report, but also an initial design proposal. At this moment, the comprehensiveness of the required group- and personal research and the processing thereof meant the P2 proposal was a rapid translation of a semester's worth of exploring. Being required to come up with an initial proposal without extensively drawing towards this design can be a very useful tool to take a significant step forward in the process. Creating a design that is, due to a limited time window, not yet in a well-rounded coherence with the research, and evaluating it provides a valid starting point of the design semester.

Personally however, it took two tries to create a basis that was acceptable to start the second phase with, as the first try was not grounded in the research enough. In retrospect a more focused approach towards P2 would have been better. Research and design should have started to coexist in an earlier stage of the first semester. A more pragmatic approach towards addressing the research questions would have been a way to improve the connection between research and design.

All three legs of the stool that is Heritage & Architecture; architecture, building technology and cultural value are important. For the transition from research to design the cultural value research proved to be most useful. Since cultural value concerns process control and quality assurance of complex transformation assignments it was essential in the development of the project<sup>1</sup>. Finding the values in the old contributes significantly to a stronger concept for the new. Looking at all different aspects of the building; surrounding, site, skin, structure, space plan, surfaces, services and stories, from a cultural value perspective helped forming a well-rounded design concept from the research. Or simply put, it answered the question: why?

A clear relationship between the research and the design can also be observed within the domain of architecture. In the process of architectural research and design the key phrase has been quality. What architectural qualities do the current Katoenveem building current house and, combined with the program, as well as personal ideas and fascinations, which qualities can the building have in the design. Qualities can be found in balancing the existing- and the new architectural aspects of the building derived from the research; shape, texture, colour, layering, sequences, composition, etc. Or in other words: what?

The building technology aspect in research and design has been more separated in accordance with the semester division than the other two. The research on the building technology of the Katoenveem was done in an historic and a contemporary sense. In what way was the building originally constructed and what is the current state of that construction? During the design phase, building technology was later introduced then desirable. This was mainly because a large part of the process was concerned with a typological analysis of the desired program. In retrospect this took too much time. BT should have been more directly involved in making design decisions from P2 onward. After P3 this changed, the structure became in integral factor in the process, playing a decisive part in the design. During the research phase and during the design after P3 building technology played an important role in answering the question: how?

The main aspects to be taken from this chapter for future reference in heritage assignments are: to look at cultural values for concepts, to start looking at the architectural design as soon as possible during the research phase and to involve building technology not just in the research- and the second half of the design semester but continuously. In other words, integral research and design as one uninterrupted process, without trivial distractions. In the next chapter the validation of the design project within the domain of Heritage & Architecture is reflected upon.

<sup>&</sup>lt;sup>1</sup> cited from: https://www.tudelft.nl/bk/over-faculteit/afdelingen/architectural-engineering-and-technology/organisatie/leerstoelen/heritage-values/

#### Heritage & Architecture and the project

The studio Heritage & Architecture studio focusses on buildings or ensembles in the Rotterdam harbour area. Historically, cities were constructed in significant places near rivers or seas, or both in the case of Rotterdam, in order to have access to prominent transport position. Later the prominent waterfront was used to built one of the largest ports in the world, until the economic growth of countries like China. Due to technological development and quantitate demands former harbour warehouses do not suffice any longer. More recently the opening of the 'Maasvlakte 2' has resulted in more harbour buildings to be left without proper use. A few of the most prominently located buildings of the city, or maybe even the country, are therefor available to be re-used. The approach that is chosen is to give industrial sites back to the inhabitants of the city to be used as public spaces, increasing the community value of the new M4H.

The chair of Heritage & Architecture concerns itself with the research and design on every scale; buildings, complexes, landscapes or urban structures<sup>2</sup>. The interesting aspect of the Harbour Heritage studio is the integration of all levels. The second aspect which makes the studio attractive is the freedom that is provided. Not having a mandatory program or building provides a liberty in designing that is quite unique. However, it also creates a strange, unrealistic situation. Limitless options could offer great difficulty as well. In architectural practice a situation like this does not occur; being the designer and the municipality or the client. Early in the process a decision about the program was forced through the means of a workshop. To keep moving forward, after the decision no alterations were made to the desired program. The program was chosen in coherence with idea of giving the city waterfront back to the inhabitants of the city of Rotterdam. The area should be redeveloped without losing its historic or contemporary value and qualities. In the case of the personal design, buildings are added to the area and volumes are added to the Katoenveem. Everything had to be balanced in accordance with the selected program and the 'tolerance for change'. These interventions within the Katoenveem context could only have been made with a strong set of principles derived from the cultural value research.

The main theme of the graduation studio: architecture, urbanism, structure and interior in their relation to architectural history and current questions on sustainability has been considered throughout the project. Social sustainability within the community has been an important factor in the proposed solution, while the integration of different scales level has also been present due to the incorporation of the neighbourhood in general and the redevelopment of the quay in specific.

The main aspects to be taken from this chapter are the contemporary relevance of the project, the (dis)advantages of the provided design liberty, the importance of considering all scale levels and the significance of balancing the program and 'tolerance for change'. The following chapter will discuss the method and approach that have been used to reach the final design.

#### Method and approach

The GP handed in at the P2 contained a section related to the method and approach of the research and the design. The official research phase had finished and therefor the GP provided quite an extensive description of the method and approach of this phase. The design was only just beginning, so a reflection could not be made at this point. Instead a desire and expectation of the method and approach were discussed.

The research has been conducted in a typological, phenomenological and praxeological manner, to construct a well-rounded idea of the building and its surroundings, both physical and theoretical. The city of Rotterdam was covered in a large group of 10, while the Katoenveem was analysed in a

<sup>&</sup>lt;sup>2</sup> cited from: https://www.tudelft.nl/onderwijs/opleidingen/masters/aubs/msc-architecture-urbanismand-building-sciences/master-tracks/architecture/programme/studios/heritage-architecture/

smaller group of 5 people, who had all selected the building for their design. A significant advantage of a group analysis is the amount of information that can be processed in a relatively short period of time. A personally experienced drawback in researching Rotterdam was the fact that everything anyone finds interesting is divided and analysed, resulting in a substantial amount of time analysing aspects that will not be integrated in the personal project in any way. An earlier concept development could result in more direct research in future projects. The research of the Katoenveem was more specific and therefor more useful. All aspects of the group analysis integrated in the design have been derived from this part of the process. In combination with personal ideas and fascinations an appropriate basis was covered. Sufficient information was gathered to start designing.

In the GP the desired method for the design phase was described: "[...] through a combination of sketches, models, 2D drawings and 3D drawings. A continuous back and forth between these tools will bring the design to its final stage step-by-step."

Looking back on the second semester the conclusion can be drawn that this method was indeed used. The main tools that have been used are 2D and 3D drawings as my method is computer centred. Model making is something normally used quite frequently in processes like this, but due to the significant number of adaptations made during the project, 3D modelling was a more compatible tool to use.

The approach can be seen as an all encompassing one. Despite some tutors' advice to shift focus to a smaller part of the building and proposed design I have tried to incorporate the entire proposed complex in the P4. This idea for the quay was one that included not just a part but the entire area, all parts of the Katoenveem have been transformed continuously in accordance with the most recent conceptual changes. In the detailing, specific parts of the project have been chosen to display. Especially the parts where the old and the new meet have been selected.

The main aspects to be taken from this chapter are contentment with the approach of analysis conducted, criticism on the group analysis and the design concept determining the level of working out the design. The final chapter will discuss the social relevance of the design studio in the contemporary era and architectural assignment.

#### Social relevance and context

In my opinion the studio of Heritage & Architecture – Rotterdam Harbour Heritage is high relevant in the contemporary architectural assignment. All around the European continent old harbour and its buildings are renewed, revitalized and redesigned in order to adapt the waterfront to the contemporary societal needs. The industrial harbour activity is relocated to newly built harbour outside the city centre. This is not only the case in Rotterdam, but also in city with a similar industrial history like Antwerp and Hamburg. The project is therefor relevant on a large scale. There is no one way to approach the transformation of historical harbour areas. The manner in which I handled the historical context can not be considered as the way to deal with these transformations. It does however provide an example of the way harbour heritage can be revitalized in order to provide a centre for a new community to flourish around it.

Since the industrial revolution the sense of community has declined. Before that individuals, families and communities had been organised around traditional values and practices (Prescott-Steed 2013). In the contemporary society a need has developed for re-establishment of a *sense of place*. This is also true for Rotterdam, where different parts of the city experience a lack of social cohesion (Walraven 2013). The newly developed neighbourhood around the Katoenveem has an opportunity to address this problem from the beginning. Within the area the Katoenveem centre will be a place for the people to meet in their spare time. A place for the community to come together, in this case through culture- and leisure, is essential for every socially viable neighbourhood.

Close to the theme of social cohesion is the central theme of my graduation project; experience. The notion that good architecture receives the visitor and enables the experience of the building is one that I agree with. Only be achieving this objective can a building be successful (Zumthor 1998). In order to create a centre of community where people can come together the user experience needs to be at the core of the design. In my opinion there is a lack in phenomenological architecture. Providing the users with an experience in relation to the existing structure, the new functional input and the 'genius loci' of the harbour is what the design is about.

#### Literature

Prescott-Steed, D. (2013). <u>The Psychogeography of Urban Architecture</u>. Irvine, California, Universal-Publishers.

Walraven, G. (2013). <u>Binding en buurtschap. Betrokkenheid in Rotterdam en Den Haag.</u> Apeldoorn, Garant-Uitgevers.

Zumthor, P. (1998). Thinking Architecture. Basel, Birkhäuser Architecture.