Overwelving

Plan of Overwelving, Ettiger, 1886
(Regionaal Archief Zutphen SZU006000461)

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Introduction

The following paper which will reflect upon and discuss my graduation project up until now, before the P4, and how I dealt with this project, what I did, what questions I tackled during this project and how my process has gone until now. Starting with a brief introduction of the graduation studio, I will continue to explain the method(s) that I used within this project to come up with my design, and reflect upon the relationship between research and design, related to my personal design process.
The Project

The heritage studio of 2017-2018 which I choose as my graduation studio has its case in Zutphen and focusses on Nieuwstad; an area of the city which was established in the mid-13th century as a separate city next to the city centre of Zutphen, just across the Berkel river. In the late 13th century Zutphen and Nieuwstad merged and became one city. During the following centuries Zutphen expanded, but to a certain extent always within its city walls and fortifications, causing for a continuous change in the border conditions of the city. As in many cities, the past has left its blemishes in the city of Zutphen which can be seen in several parts of the Nieuwstad, mainly on the borders of the city.

The area within Nieuwstad which I chose as my site to redevelop is located on the Overwelving, shown on the map of Nieuwstad (right) below. This area is located along and over the Berkel river, the area that links the historical city to Nieuwstad. This area has seen a lot of change over time, some of which is still evident in the urban fabric today. The developments and historical interventions on this location have caused for an enlargement of space, both in the built urban fabric and in the public space. In this area different architectural styles are present and come together at the Overwelving, causing for a complex functioning of the area. The loss of urban elements, clashes of time, enlargement of space and different uses of the area are aspects that have caused the area to lose its purpose of place. One of the buildings on this location that has withstood some of the changes of time is the Dullaert building, later extended by the C&A building. The building, as the Overwelving, shows the different layers of time, and these layers relate to important developments of the city in history.

Zutphen & the Nieuwstad

The layers of time present in this part and the somewhat malfunctioning of this part of the city is what intrigued me to choose this location as my case study for my graduation project. During our first weeks of visiting Zutphen I saw the opportunities that this location had but was not using to its full potential. I had this idea of improving and enhancing this area, to give it the opportunity to regain its purpose. Later, through analysis and research I came to understand the importance of this area for the city, and this supported my initial notion.

The project was both focussed on improving the public space around the Berkel, as transforming the Dullaert building to densify the area, as a part of the restructuring of the area to create a better connection and a place of arrival. With this project I hope to show a way of reviving/reactivating this part of the city, creating a better scenario for future use by giving back its purpose as an entrance towards the city, as a place of arrival in the centre.
The Process

I. The relation between the graduation studio and the chosen subject

The official name of the graduation studio is ‘Zutphen – Sustainable City’ and questions how the heritage within Zutphen can be dealt with to be sustained in the future. This question was applied to a larger area within Zutphen, the Nieuwstad, and allowed for some freedom to work within this theme. Therefore, this theme of Sustainability within the studio was interpreted quite broad; from sustainable measures regarding “green” and “durable” to a more social type of sustainability. During the analysis in the first quarter it became evident that a social coherence was present in Zutphen, especially amongst the elderly population, and became an aspect that was incorporated into my project. This however has less to do with the elderly population, and was more about focusing on the younger generation, between 20-30, to focus on how part of this age group could stay in Zutphen after they finish high school. Zutphen has seen a lot of its young generation leave the city due to the lack of higher educational study options. For this reason, I chose to design a hospitality institute on this location on the Berkel, near the entrance of the city. With this, the theme of tourism and hospitality has also been incorporated, as Zutphen had a niche for crafts shops and restaurants. My project would also relate to this topic, creating an additional place for guests of the city to stay at a relatively cheap price, being a learning hotel.

The other important theme within this studio is the future, and how the heritage in Zutphen can sustain in the future. Zutphen is dealing with the question of vacancy in many of its buildings and with a monotonous area of functions. This affects the liveliness of places in the city and left Zutphen asking how this problem could be tackled for the future.

The theme of this studio is quite broad and can be interpreted in several ways, and therefore it may be easy to say that I have touched upon the theme of the studio. However, reflecting on this aspect has made me aware that perhaps the theme of this studio, regarding sustainability, could be incorporated better, and earlier into my design and research project. Being in the phase between P3 and P4 there is room for incorporation of sustainable measures and I am still investigating ways to do this. During my design process I considered ways how the environment, especially the Berkel, could be incorporated into the sustainability of this area, to generate energy from hydropower. Unfortunately, the flow of the river was not enough, and would, in reality, not be cost-effective in the long term. I soon left this idea of energy generation and didn’t come back to sustainable measures until my design for my building had taken shape. Now my design for a large part is already set in this stage of the design project, and therefore I will try to incorporate sustainable measures as much as possible into the existing design. The possibility of designing with and around sustainable measures to create an integrated design has become more difficult, however as said before I am still investigating ways of doing this. During my design process I did not completely leave out sustainable measures and I did think about possible ways of incorporating them, in facades or rooftops for example. However, I believe that if I had done this in an earlier stage the theme of sustainability of the studio would have been stronger within my project.
II. The relation between the methodical line of approach and the chosen research method

The methodical line of approach used in the studio of Heritage and Architecture is shown in the diagram below. Heritage and Architecture relies on three aspects: Design, Technology, and Cultural Value. These fields are brought together in a holistic approach. Cultural value and Technology, and the analysis of these with regards to the chosen site and building provide a basis for further design.

The cultural value analysis is one that is of importance to this studio and is used as a tool for decision-making and reflection. The cultural value assessment looks at the existing qualities of the site and buildings and allows you to assign a certain value to a certain aspect in the matrix. This matrix is designed to highlight the essential qualities of the existing building and allows you to understand what the value of this object or aspect is, and with what reason it is valuable. The matrix is based on the model of Riegl and Brand, and allows you to focus on the different types of values, ranging from historical and art values to use and spiritual values within the different layers of the built environment; from site to detail. These assigned values within the matrix can be used as arguments for interventions, and can help you make your design choices. However, they should not be limiting, but should help as a tool within your design process to come up with a transformation framework.

![Figure 1. Layers of the cultural matrix elements based upon Riegl & Brands model](Designing from Heritage, 2017, M. Kuipers, W. de Jonge)

![Figure 2 & 3. H&A method triangle vs. my adapted H&A triangle for this project](Designing from Heritage, 2017, M. Kuipers, W. de Jonge)

Comparing my methodical line of approach to that of the studio I would say that it is very much in line with one another to begin with. The Urban, Historical, Cultural Value and Technical assessment are important to take on as they form a large base of information and knowledge of the city, the location and the building. From this research I could create a stable base on which I wanted to continue to create my design from. However, this research was not enough to sustain throughout my entire design process, which seems logical as throughout the process you incorporate new topics such as possible programs, sustainability, and research into materiality, which is related to design. I altered the existing H&A triangle to show what aspects I missed within the research phase and how these aspects fill in the gaps to create
a complete design. I see them as a second layer of research and information to complete and enhance the design of the project, related to the theme of this graduation studio.

III. The relation between Research & Design

In this graduation studio I think my design was very much lead by the research conducted in the first quarter. The research regarding the cultural value aspects gave a very large scope of what is valued and what isn’t and why, and gave us a good set of conclusions to create our transformation framework to start our design process. However, proceeding further in this graduation project I think that a balance between ‘research by design’ and ‘design by research’ was reached. In the early stages of the design process I struggled quite a bit in creating a vision for the urban plan of the Overwelving. Using my conclusions from the historic and cultural value analysis gave me ‘handles’ to create a plan, however I struggled a lot more when it came to the shape, size and volume of the building. Using models in this stage, physical as well as computer models helped me a lot to visualize the building volume, to see and compare buildings volumes and dimensions. What would fit in this area? How high can a building volume go in relation to the existing buildings? How far should a building volume extend? The images below show some of the scenarios I created using mass studies to visualise the dilemmas and search for answers to these questions.

![Figure 4. Photographs of mass studies of the Overwelving during my design stage.](image)

During the design phase of this graduation project I tried to every now and again go back to my conclusions and transformation framework to see how my design fitted, and if it still did fit my conclusion statements. Taking these steps back in my design project made me realize that I was still searching for a possible answer for the transformation of this area and building. Although it made me feel as though I was falling behind here and there by taking steps back, I also think it helped shape my storyline of the development of this area, how I came to conclusions and how I transformed these conclusions into a design. Going back and repeating this storyline within my design for myself was crucial for me in understanding what and why I was making certain design decisions, and helped me forward with my next steps in the design.

I feel that my process within this project was not linear, as is usual for creative design processes. I tried to illustrate my design process in the following diagram. Naming key stages of the design process and relating them back or forward to other stages, and inputs. This graduation project started with research; analysing the urban context, the history of the city, its demographics, and later the more specific aspects of the chosen building relating to its technological aspects and its cultural values. From this analysis and research conclusions and valuations of the state of the site and building where taken and used for input to create a transformation framework of this area. In this stage, my ambitions and personal fascinations where also incorporated into the transformation framework. What do I want to do with this area? What do I think, and why, will be of additional value for this area? From this a concept arrived, which was in the beginning of my design process strongly related to the program that I wanted to incorporate: a learning hotel. The reason for choosing this program came from the initial analysis done with the group; to attract
or keep the younger generation in Zutphen while addressing and enlarging the options of hospitality in Zutphen. Once I chose this program, I conducted additional research into existing hotels and learning hotels, such as ‘Leerhotel Amersfoort’ and the Hospitality institute in The Hague, to create my own program of requirements. This additional research went parallel to the designing process, where I gained knowledge and input for each. Initially I created a concept from a programmatic point of view. I wanted the learning actions of the learning hotel to be visual and centred in the design of the building, therefore centralizing the guest so that he or she could see this whole learning process of the students. I created an initial design for this, and presented this plan at my P2. After the P2 I got the comment that the relationship between my design of the building and the reasoning for my design was missing, and therefore I took a few steps back to return to my concept, and essentially to my transformation framework; what do I want to do with this area? From taking these steps back I improved my concept for the building and for the vision I had for the area: connecting the different fabrics of the city by giving the area back its purpose of place. From this, the concept of a ‘shackle’ came; connecting the existing fabrics of different time periods by means of the transformation of the Dullaert building. This change in concept for the building but also for the area made it clear for me what I was doing, why I was doing it and what tools I was using to get there. This cleared up my story line a lot which was noticed during the P3 presentations. From this point on I could continue with my design and elaborate on technological, material and sustainable measures for which now I have developed concept for implementation. Again, in this stage, additional research was conducted into the materiality by means of case studies and reference projects. A few images of small scale studies are shown on the following page.

Figure 5. Diagram of my design process.
These studies consisted of pattern creation using to 1:10 scale bricks, with the influence of light fall. The search into materiality came from the vision for the project to create one new ‘whole’ with the existing Dullaert building. The existing building has, throughout the different periods of which is was restructured, kept a relation between different floors using ornamentation in the windows or at the height of floors to connect these levels. My idea was to use this notion of an ornament as a connecting element around the entire building between the ground floor and its upper floors to emphasize its unity, and relate it to the existing, translated into a contemporary addition of the Dullaert Building.

The first image shows the ¼ standing bond of the existing building, an ornament that is subtly present in the existing façade of the Dullaert building from 1950. Using the ¼ standing bond as a base I tried to implement different reliefs with the brickworks, testing it with light fall which created interesting views and added depth to the brickworks.
IV. The relation between the project and the wider social context

Zooming out again of my project and the design, there are several larger topics or themes that are present in my graduation project and its location of the Overwelving, that are of importance and relate to a wider social context within the Netherlands.

The Overwelving and the Dullaert building are located near the station of the city, along an entrance artery towards the city centre. In addition, it is on the border of a post war development plan that was implemented during the 1950s. Many cities in the Netherlands where struck by the second world war, and, in particular, points of transportations; train stations. These areas were often reconstructed with a modern vision, focussing on different ways of living, consuming and transportation by car. This in turn caused for a scale enlargement within the city, creating complex encounters between old and new. These areas are often also the artery toward the city center, with a mix of functions, such as shops and residential housing. However, starting in the recession many of these shops within these streets have become vacant. The question of how to reactivate these arteries is a question many cities are dealing with, to enhance activity, and go against vacancy and other consequences that arise with it.

During the research phase of the gradation project we discovered that Zutphen struggles with an age gap, where young adults leave Zutphen after their high school to attain their diploma in a higher education. This results in the loss of variety and diversity of people, and in addition activity and innovation. This movement of young generations leaving to study or work in the Randstad is evident in many other parts of the Netherlands, creating certain voids in the activity in these parts, and leaving age gaps in its population.

These social themes of populations age gaps, vacancy and reactivation, were present in Zutphen and were also a motive for me to choose the Dullaert building and the Overwelving as my graduation project. My ambition to activate the entrance towards the city center of Zutphen, to allow for a place of arrival, in combination with a possible function to attract younger generations hopefully is shown in my final design of my graduation project.
Planning

Throughout this graduation project I tried to work within different scales and methods to come to my overall design for which I am currently creating architectural drawings. Model making, both by hand and using programs, hand drawn sketches, reference projects and textual information have helped shaped my decisions. Although mostly helpful, I have noticed that over the last few weeks coming up to the P4 I did have troubles making decisions based on my research. Considering time, some decisions were made quite swiftly with uncertainty, mainly within the details of the building and its interior materiality final atmosphere. For this reason, I may take these steps and work on them a bit more between the P4 and P5. For the P4 I will focus mainly on the story of the design, what decisions were made and how these translated into my current design, supported by the required drawings for the P4.

For the P5 I would like to further develop these drawing to make the aesthetically presentable, finish my urban model and create a building scale model (1:200) with a section fragment (1:50).