

FORGOTTEN HERITAGE

REFLECTION PAPER

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Heritage and Architecture
Zutphen Sustainable City

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Figure 1
Overview of Zutphen (screenshot Google Maps, own editing)

CONTENT

1. Introduction
2. The relationship between research and design.
3. The relationship between the graduation project, the studio topic, and the master track architecture.
4. 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.
5. The relationship between the graduation project and the wider social, professional and scientific framework.

1. INTRODUCTION

This reflection paper is part of the graduation studio: “Zutphen Sustainable city”, which is part of the chair of Heritage and Architecture of the TU Delft. The studio is initiated in collaboration with the KaDEr Gelderland research project, which stands for Karakteristiek Duurzaam Erfgoed (Characteristic Sustainable Heritage).

The project focuses on the Nieuwstad, a neighbourhood to the North of the historical city centre of Zutphen (Figure 1). The Nieuwstad was founded at 1250 as a separate town to the North of Zutphen. In 1312 both the cities were merged. The Nieuwstad as we know it now is known for its large amount of schools and religious heritage known as the Klein Vaticaan area. When visiting Zutphen for the workshop week at the start of the first semester my immediate attention was put towards the Klein Vaticaan area. The ensemble of buildings seemed odd, the buildings had a special character to me, but I couldn't figure out what that character was at that moment. This made me even more interested in the area.

The Klein Vaticaan was part of the Roman Catholic community within Zutphen and consisted of an ensemble of different buildings. The area grew significantly throughout the years; at its peak it was roughly the whole eastern part of the Nieuwstad. This ensemble functioned as a whole, all being part of the Roman Catholic community and providing education, care, and activities for the inhabitants of Nieuwstad. In the more recent years the buildings within the Klein Vaticaan were sold. This resulted in the loss of coherence within the ensemble and the loss of connection with the Nieuwstad. The problem we are phasing is: How to restore the coherence in an ensemble, and restoring the connection with the surroundings, the neighbourhood and the city, without losing the historical characteristics of the place? This resulted in the following research question:

How can an ensemble of heritage buildings be transformed in order to create a coherent and resilient site, which reconnects with the city?



Figure 2
Aerial photograph of the Nieuwstad with the buildings of the Klein Vaticaan (regionalarchieftutphen.nl)

2. THE RELATION BETWEEN RESEARCH AND DESIGN

The aspects of research and design are ever present in the studio of Zutphen Sustainable city. The studio, as being part of the chair of Heritage and Architecture, focuses on the build heritage with its build environment. In which the task is set to transform and adoptively re-use the existing heritage and to preserve the values of the heritage by giving it a new function. In order to establish these values an extensive analysis and research has to be made of the existing. The cultural values, when present, need to be stated and have to be addressed in the design, as a designer you have to show how you deal with these values. This makes the documentation of these values very important, as they are the starting point for the design.

The research was very important for me; it was the starting point for my design. For example the research showed that Roman Catholic Community was very important for the area offering care, education and belief. Giving the area a very important spiritual value, which contributed to the spirit of the place. With this in mind I came to the conclusion to contribute to this spirit by creating a care Centre focussing on people with Dementia. The topic of dementia follows from a broader social context; this will be addressed in chapter 5 explaining the relationship between the project and the wider social context.

The topic of dementia introduced a literature research on the topic of Dementia related to architecture. Throughout the years a lot of research has been put into this topic and a lot of the conclusions from these researches were applicable to my design. This literature research was done briefly before P2, with the feedback after the P2 I did more extensive research on this topic, this resulted in an improvement of the design. Another method I used was the method of sketching. Sketching to me is a way of experimenting with different design ideas. Some ideas are based on research, some on references but sometimes also based on intuition. Designing by sketching is a very natural way for me. The problem with sketching is the abstractness, by creating a digital 3D model I tested the sketches into the design. The 3D model visualised the different design options. In previous projects of my master I also used the method of physical model making to test design decisions. During my graduation project I did not use this method quite often because of the ability to use the digital 3D model.

The danger of the digital model is the preciseness of the model; a small change has a lot of influences on other aspects, which take a lot of time to adjust. The preciseness also creates the tendency to lose the general overview of the whole project. Looking back at the process I think I should have been experimenting more with physical models in order to create a more abstract overview of the whole design.



Figure 3
Floor plan of the design at P2 (Own Image)

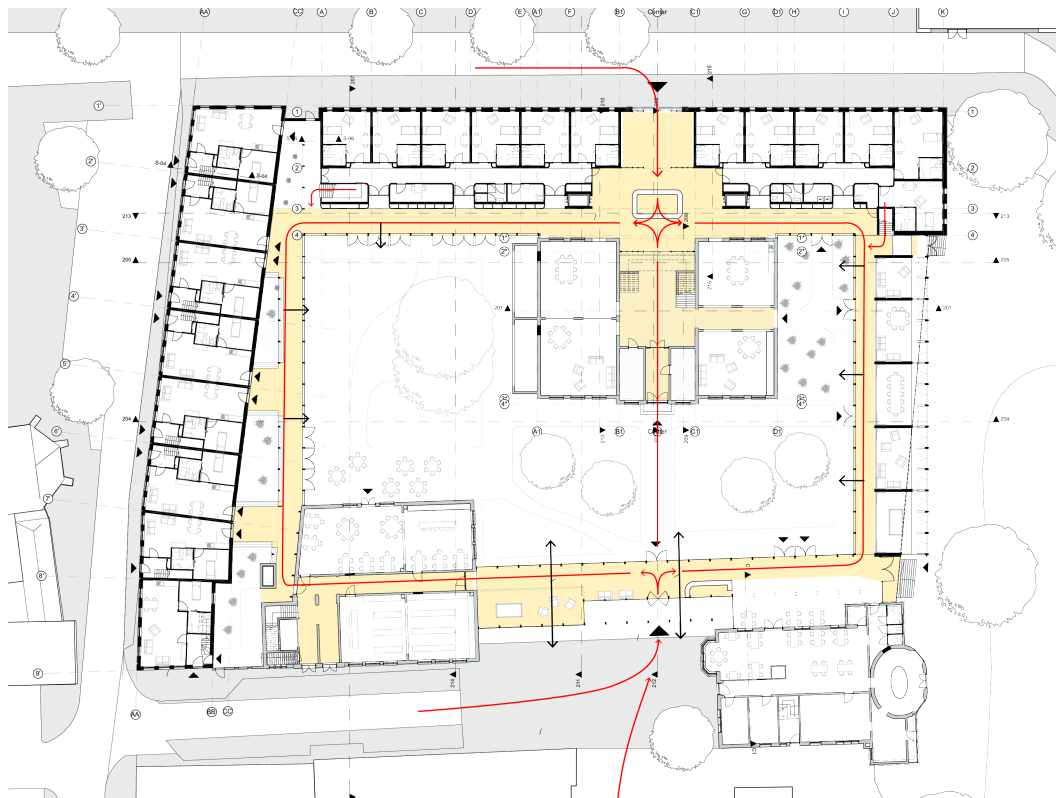


Figure 4
Floor plan of the design around P4 (Own Image)

3. THE RELATIONSHIP BETWEEN THE GRADUATION PROJECT, THE STUDIO TOPIC, AND THE MASTER TRACK HERITAGE & ARCHITECTURE.

The graduation project is part of the chair Heritage and Architecture. The theme of the studio is Zutphen Sustainable city, which is linked to the KaDEr Gelderland research project. As a student within this studio I am faced with the task to redevelop the Nieuwstad area of Zutphen in a sustainable way. This topic off sustainability has a very broad viewpoint. It can range from technological sustainability to a social sustainability. This gave us as students a very broad way to look at the topic and creating various designs. The theme of the studio together with the analysis of the cultural values of the Klein Vaticaan area inspired me to make a contribution to the social sustainability of the Klein Vaticaan. I have done this by creating a care centre for people with dementia, following the social and caretaking heritage of the Roman Catholic community.

The chair of Heritage and Architecture balances between cultural values, design and technology. (Figure 5)¹. Finding this balance was quite a difficult task to me. The cultural values formed the starting point for my design on a more social level with the spirit of the place. This led to my function, as mentioned before. Researching into the topic of dementia in relation to architecture resulted into a lot of design characteristics, which are quite restrictive. This makes finding the balance between the three aspects on a building level more difficult. The focus was mainly put on the design in creating a pleasant environment for the user, following the design characteristics. The cultural values and technology were less explicit in the design. After the P3 I shifted my focussed more on the aspects of cultural value and technology, enhancing the character of the place. The cultural values of the buildings were contributing in the design in creating the desired environment and securing the design within the city fabric. The technology part was the supporting element of bringing the heritage and the design together, which also contributed to a more sustainable project on a technical level.

¹ Kuipers, M., & De Jonge, W. *Designing from Heritage, Strategies for Conservation and Conversion*. (Delft: TU Delft - Heritage & Architecture, 2017), 11.

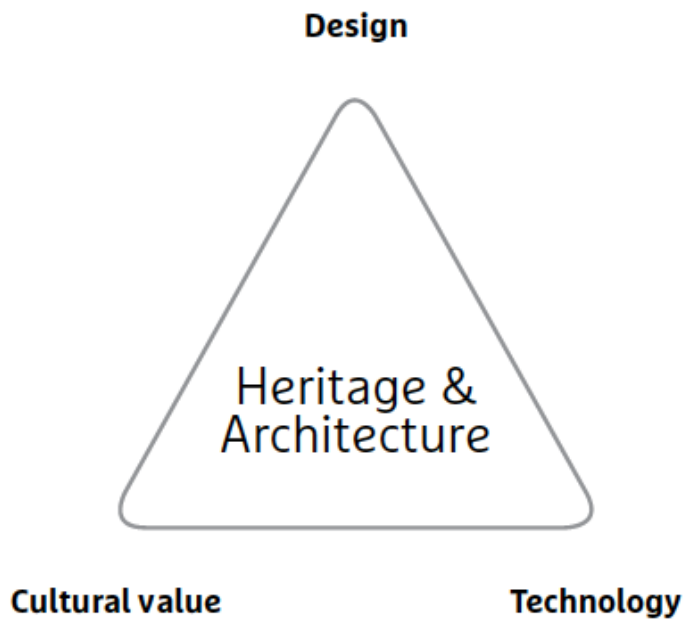


Figure 5
The Heritage and architecture triangle

4. ELABORATION ON RESEARCH METHOD AND APPROACH CHOSEN BY THE STUDENT IN RELATION TO THE GRADUATION STUDIO METHODOLOGICAL LINE OF INQUIRY, REFLECTING THEREBY UPON THE SCIENTIFIC RELEVANCE OF THE WORK.

The chair of Heritage & Architecture combines the aspects cultural value, technology and architectural design. These aspects are visualized in a triangle, which symbolises the correlation between the three aspects in order to create a coherent and stable whole. These three aspects have to be taken into account when participating within the studio.

Cultural value is the starting point for the design and the research. The research on the cultural value is based on two theories, both aim to objectify the evaluation of the cultural heritage. The first theory is based on the framework formulated by the American writer Steward Brand. The second theory is by the Austrian General Conservator, Alois Riegl. Both theories are put into a matrix, which will result into a summary of the values within the different aspects. Even though the cultural value is the starting point it is important to find a balance between the cultural values, the design and the technology.

My personal approach is similar to the method used by the studio. During the first quarter of the graduation studio the buildings, site and surroundings have been analysed. The architectural, technical aspects have been analysed and also the cultural values have been put in the cultural value matrix to give an overview of the different aspects. With these aspects in mind I started designing. I used the method of the Transformation Framework to summarize my process. The conclusions of the analysis and the cultural values, together with my own brief formed the input for my Transformation framework. The framework creates the basis for scenarios. These scenarios are the basis for the design (Figure 6).

It was difficult at first to find the balance between the different aspects. Especially in combination with my brief related to dementia, which needed to be researched. This research resulted in a lot of design aspects, which had to be taken into account. This resulted in a shift of balance of the heritage triangle; it was shifting towards the design part. This resulted in loss of focus on the cultural values and the technical aspects of the whole. After P3 I shifted my focus to restore this balance.

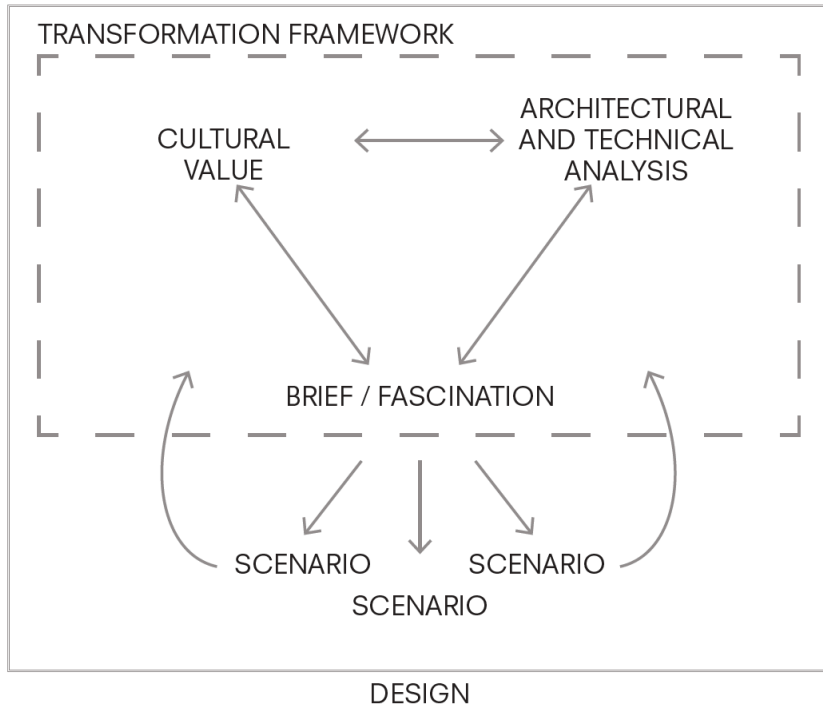


Figure 6
Transformation framework (Own Image)

	Age	Historical	Commemorative	Social	Use	Spiritual	Aesthetical
Surroundings	Dark	Dark	Light	Dark	Light	Dark	Light
Site	Dark	Dark	Light	Dark	Light	Dark	Dark
Skin	Light	Dark	Light	Light	Dark	Dark	Dark
Structure	Light	Dark	Light	Light	Dark	Light	Light
Space plan	Light	Light	Light	Light	Dark	Light	Light
Surfaces	Dark	Dark	Light	Light	Dark	Dark	Light
Services	Light	Light	Light	Light	Dark	Light	Dark
Stuff	Light	Dark	Light	Light	Light	Light	Light
Spirit of the place	Light	Light	Light	Dark	Light	Dark	Light

Figure 7
Cultural value matrix (Own Image)

5. THE RELATIONSHIP BETWEEN THE GRADUATION PROJECT AND THE WIDER SOCIAL, PROFESSIONAL AND SCIENTIFIC FRAMEWORK.

Dementia is a growing problem in the Netherlands. According to the CBS is dementia the number one cause of death in the Netherlands, with lung cancer and heart failure on the second and third place. The growing amount of elderly people ('vergrijzing') is the reason of this. Expectations are a growth from 270.000 people with dementia in 2016 to a staggering 538.000 people in 2040. This demographic is also visible within the city of Zutphen, where the amount of people with dementia is expected to grow from 760 in 2016 to around 1.700 people in 2040.

The analysis made at the start of the graduation project showed that the Roman Catholic ensemble was very important to the society of Zutphen, offering care, education and belief. In the current situation this community is gone, but the heritage is still visible. To reactivate the ensemble the search came for a social function, which is resilient towards the future. The solution was found in creating a care centre for people with dementia. Inspired on the communal thought of the Roman Catholic community.

The location of the Klein Vaticaan gave me the opportunity to create a care centre that connects with the park and the city. Giving the patients a vibrant environment, which stimulates the patients' senses. Contributing to a positive living environment.



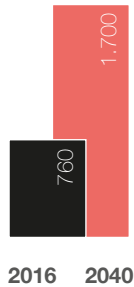
1 out of 7 men and
1 out of 3 woman get dementia



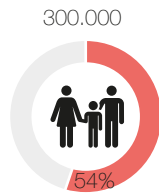
**5 people/
hour**

Average rate of people getting
dementia in the Netherlands

Zutphen



Family Care



54% of the 300.000 Family care
givers are under high pressure
4% is under extreme pressure



**20 hours/
week**

Time spent on giving care by
Family Care givers

Figure 8
Diagrams showing the demography of dementia (Own Image)