

Reflection

Identity of place and heritage
in urban regeneration

Heritage & Architecture
Zutphen Sustainable City

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Aerial photo of Zutphen, 1985, Zutphen Archive

Introduction

Klein vanticaan, Nieuwstad, Zutphen

As one of the medieval cities in the Netherlands, Zutphen has the most typical identity of a stronghold city: the inner city is surrounded by layers of solid city wall, city moat and fortification. However, during inevitable city expansion, most walls were torn down and moats were filled up. The main target building in my project, St. Elisabeth elderly home, was built partly on the former position of the city wall and partly on its inner side with a short distance. The volume of the building cuts down the

connection between the city and the city wall. Thus, this valuable heritage on this site only serves as a hidden treasure, which is also a loss of urban land use in Zutphen. The building accommodates the elderly while it doesn't offer much quality in elderly living. Facing the ageing issue in Zutphen or even the whole Netherlands, one of its identity in urban tissue, traditional courtyard space, could be a trigger to create better living space and revitalize heritages in the regeneration of this historical area.

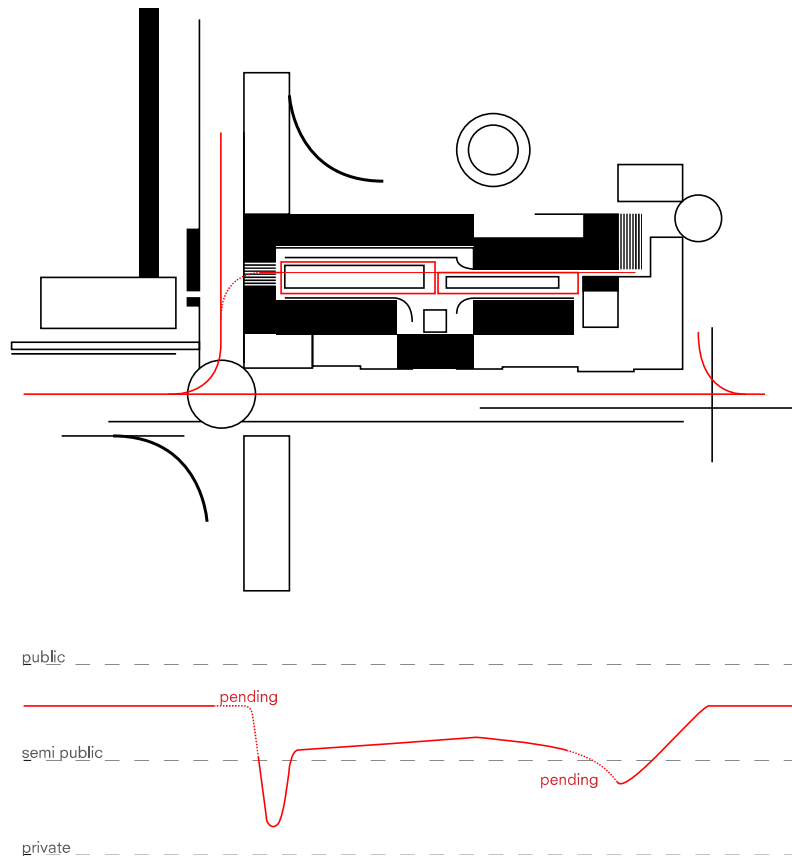
Aspect 1

relationship between research and design

In architectural profession, research is quite important and necessary for either theoretical study or practice. In terms of architectural practice, this profession is known as designing buildings in some certain places. For instance, the Primitive Hut which is believed to be the beginning of architecture, was built out of man's need for shelter from nature. Both user and site are still two main issues of architectural design projects. In order to fulfil the needs from users and respond to the building site, an architect must make a couple of design decisions. But how could we assure if those decisions are right, or to say the best option for a specific project? How could those decisions convince the client? In my point of view, research is the only

way to substantiate the design decisions and methodology provides a systemic and clear way of conducting researches. Therefore, research-methodological awareness should always be in the mind of an architect in his everyday practice.

In the studio of Heritage & Architecture, research stands on an even higher level during every project as this studio always deals with conservation and transformation of the existing architecture, normally historical buildings. Under such circumstances, researches on both tangible and intangible aspects and from large scale to small scale have to be conducted for proper architectural decisions. Otherwise, irreversible damage could be produced into some valuable buildings or areas. In



courtyard space research, Sjoerd

the common methodological procedure of this studio, the initial phase of every project is analyses from urban scale to building scale where researches on multiple levels take place. In the project of “Zutphen Sustainable City”, the urban scale including morphology, typology, space, function, routine, use, light, materiality, atmosphere and economy were researched. These researches offer us plenty of information about this medieval city of Zutphen, Nieuwstad, and its “Klein Vaticaan”, which as I believe provides the overall background of this project. Thanks to those researches, I am quite impressed by its stronghold characteristic, its fortifications as an urban boundary and its peaceful and beautiful “hofjes” for high

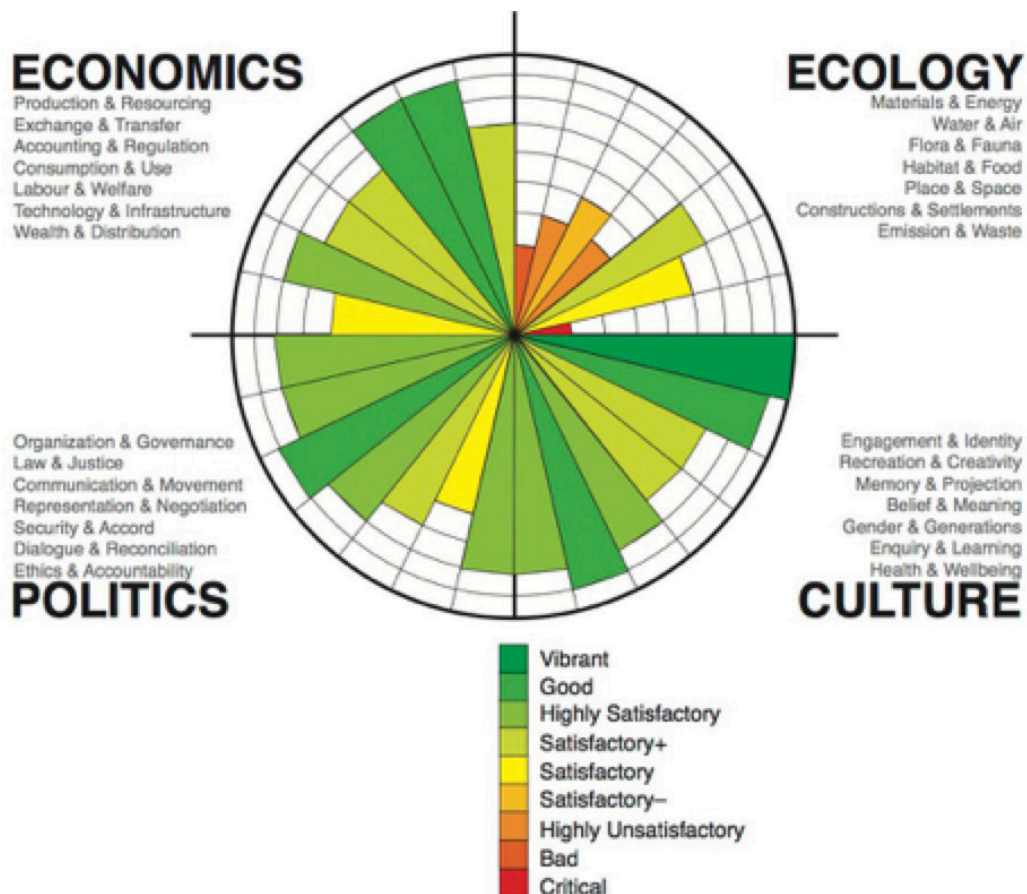
quality living, which serve the keynote and guidance in my design phase. What’s more, these researches reveal the historical development trajectory, following which we could distinguish uncontextualized urban areas for intervention work. Research on building level contains three aspects of the problematic buildings: architectural design, building technology and culture value. Trying to relate these aspects when shearing the layers of a building from site, structure, skin, services, space plan to stuff helped me to understand comprehensively what this building is before any design decisions were made.

Aspect 2

relationship between graduation topic, studio topic,
master track and master programme

“Zutphen Sustainable City” is the studio topic. As far as I am concerned, this topic is brought into being under the trend of sustainable urban development all over the world. It is easy to understand that sustainable development is in the growing need facing the energy crisis worldwide. Yet, sustainability is not only about energy neutral or reduce less carbon emission, its true meaning is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. Additionally, from the circles of sustainability, cultural sustainability has the

same importance as ecological sustainability, especially in Zutphen where its long history and its heritage values of the built environment are necessary to be taken into account in the current urban renewals. The city wall, the boundary to distinguish built environment from landscape, and “hofje”, the typical dutch urban fabric as a relieving space of dense living, are two important urban structural elements in this typical dutch medieval city. However, under during the urban densification in the past centuries, the defending function of the wall is gone and the “hofje” space lost its important role



CIRCLES OF SUSTAINABILITY

Circle of Sustainability, Melbourne, 2011, <http://www.circlesofsustainability.org>

in modern living. This is the reason why I name my graduation topic as “courtyard, carrier of identities and organiser in urban renewal”. The main intention under this topic is to discover the architectural and social capacity during the current urban renewal in historic dutch cities. This studio is held by Heritage & Architecture, one of the 13 specialisations within architecture track in the faculty. H&A is concerned with preservation and renewal in existing architecture according to the official introduction. In my opinion, it is one of the main branches in today’s

architecture field which focusing on both the historical assets we have and the future of them we are going to welcome. It offers one perspective to read the building, the city and the world from which we, as architects can make the building, the city and the world better. Meanwhile, this perspective from H&A is not limited within the conservation or transformation of heritage buildings. As far as I am concerned, it will also help architects to make right design decisions in totally new projects.

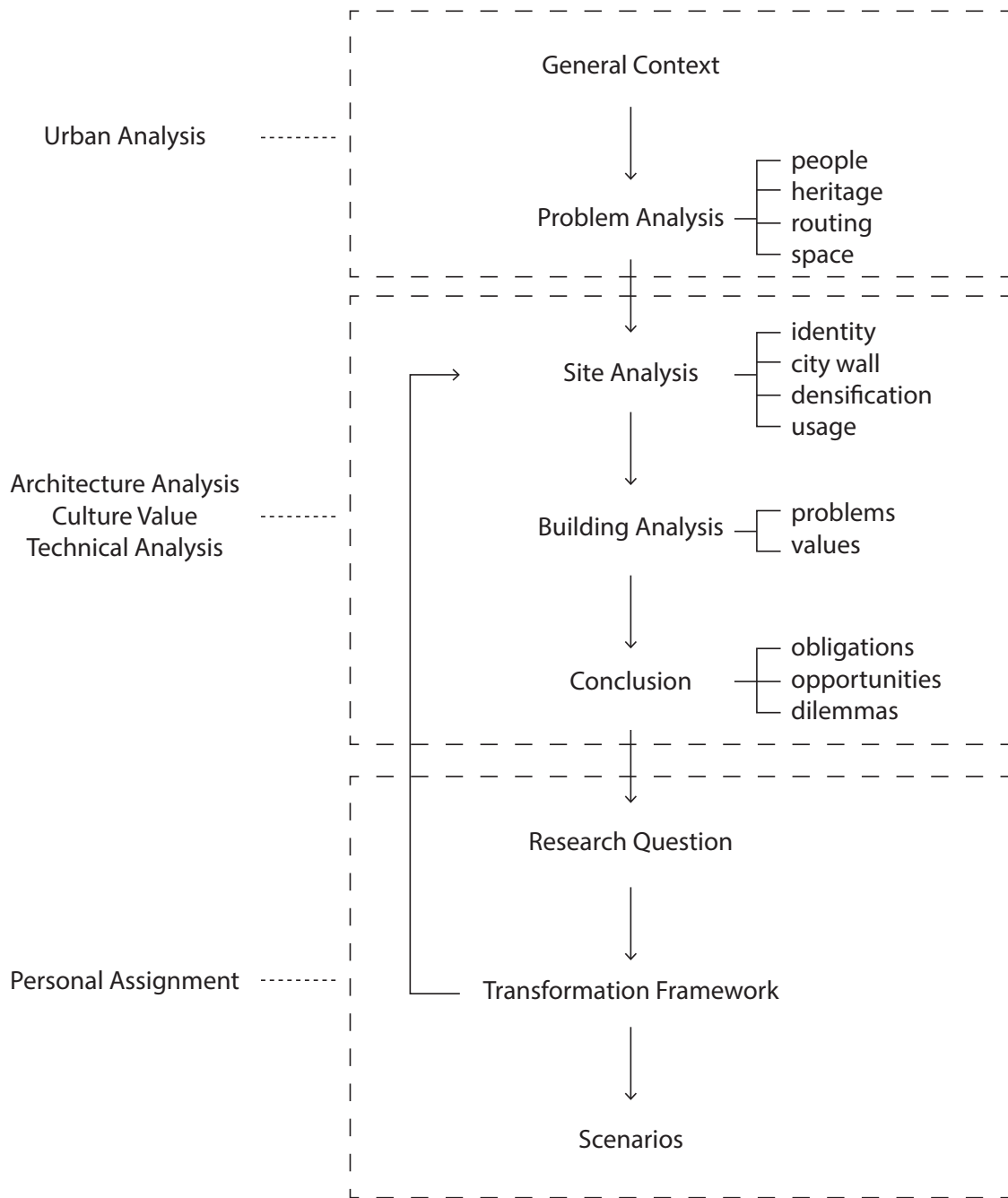
Aspect 3

relationship between chosen research method & approach
and methodical line of inquiry of the graduation studio

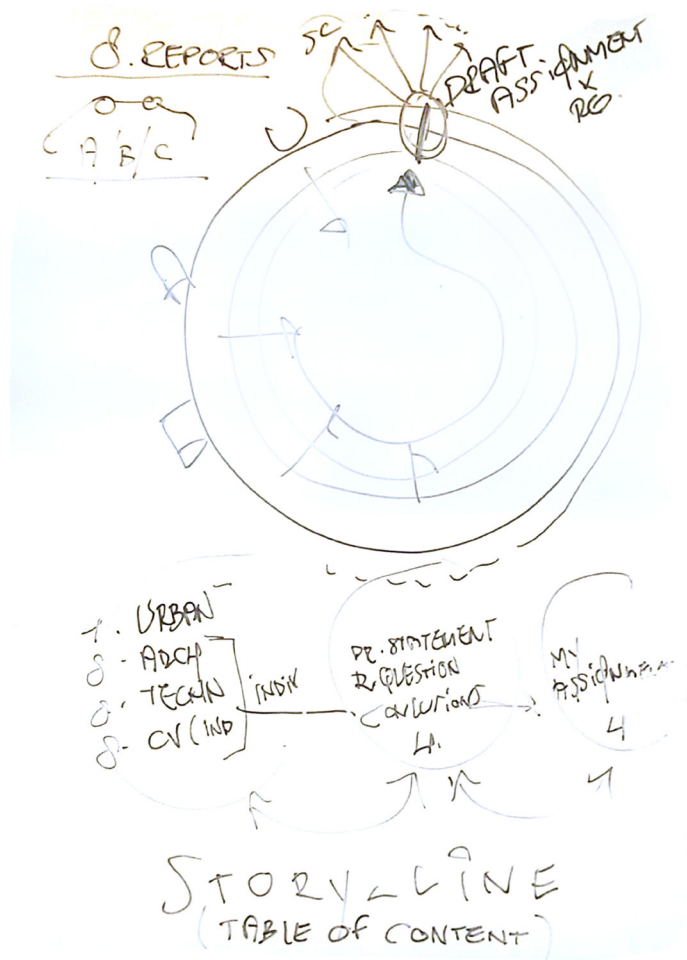
The methodical line of Heritage and Architecture is in general from research to design in a spiral way. In the first stage, we tried to research in all aspects from urban level to building level which concern mainly in architectural design, building technology and cultural value. After the first round of research, we have our own conclusion to the target building, the further research theme and the personal assignment. Further on, more specific research are required for specific project and topic. Gradually, after rounds of research, personal assignment would also reach a distinct level. The method in analysis on building scale is mainly to understand the heritage values of the target building by using and adapting Brand-Riegl matrix.

Categorizing and prioritizing the various values in both tangible and intangible elements of the target building helped me to understand the building before any design decision-making. The methodical line in my graduation project mainly follow this approach. Moreover, when elaborating the design, I chose typological research as a primary approach to understand the context and make better design decisions.

To understand a historical city, we should not only look at the current situation, but also dig deep into the history of the sites and the buildings where the changes happened. Sometimes there are a couple of valuable information which are missing in today's building. For example, St. Elisabeth elderly home, the target building in



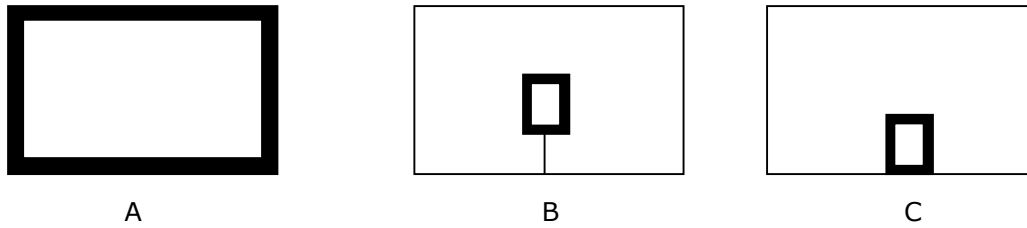
methodology framework in the project, author



work flow by Job Roos

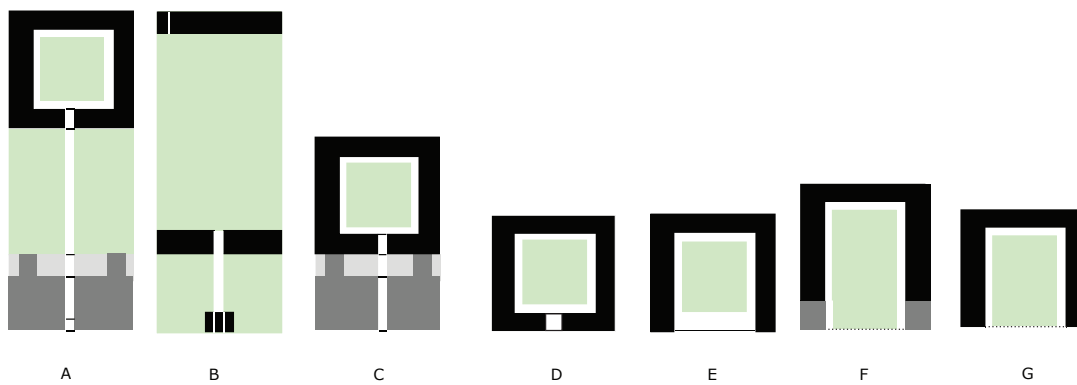
my project, was built in 1991 after the demolition of the old building from 1855. The historical building footprints could reveal the reasons for some design decision of the new building. By typological research in the space plan of the old building, I found that the old building had a corridor structure in space plan where there are rooms on both sides of the corridor. The current building today also follows such a plan to accommodate the elderly. Besides, the courtyard space in-between the building and the remaining wall can also be found in

the current building. It is by this typological study of the historical footprint that we can understand how the new building came into being. The methodology of typological study can benefit most of the analysis of either the building or the area, or even the whole city. The approaches driven by this typological research were carried out by several elements which are urban fabric of Nieuwstad of Zutphen, the typology study of city block, building form, exterior and interior space, thresholds, etc.



Configuration of courtyards in blocks

- A. courtyard as large as a block
- B. courtyard inside a block
- C. courtyard on the border of a block



Connections between street and courtyard arranged according to length and accessibility

- A. alley, path
- B. alley
- C. alley, corridor
- D. gate, gate, hall
- E. wall
- F. fence
- G. fence

Aspect 4

relationship between the project
and the wider social, professional and scientific context

Our urban analysis shows that not only Zutphen area but also the whole Netherlands is facing the ageing population. Especially in Zutphen, proportion of young people, in particular 20-34 years, is smaller than the national percentage which is partly caused by the absence of higher and university education. Meanwhile, the large group of 60-70 years indicates that Zutphen will face a further ageing in the coming years. Thanks to the improvement of living quality and modern medical support, it is obvious to see the rise in average life expectancy in the Netherlands. Furthermore, many other countries all over the world are facing the similar trend. According to WHO, number of people over 60 years set to double by 2050, and major

societal changes are required. Thus, within the profession of architect, what could we do to contribute to this issue?

In this target area in Zutphen, Klein Vaticaan, a great amount of senior citizens are accommodated in an apartment building built in 1992 on the former location of medieval city wall. However, the building itself has a floor plan of middle corridor structure which stacks elderly people on both sides. The space is tight and boring without architectural quality. Secondly, the huge volume of this building doesn't match the intimate context in this historical urban area. It also block the connection between the city and the historical wall which can be seen as abuse of heritage. Thirdly, this building is also like an enclave isolated from



Photo of lonely elderly, Xuan Li

the other part of the city. Isolation obviously doesn't help to the health of those old people.

Thus, in my project, the vision of the total plan is to build an elder-centred community where the senior citizens are the dominating target users and stand the most important position. Meanwhile, vibrant various generations will be introduced to contribute a mixed age community. In the language of architecture, the traditional “hofje”, as courtyard in dutch, will serve as the carrier of historical urban identities and the organiser in forming urban dynamic public spaces. Those courtyards will be endowed with some specific atmosphere according to the existing buildings around and a certain degree of publicity or privacy. In this case,

not only better urban spaces will be formed providing a better living quality for the elderly, but also the heritages will meet a better relation with the new where their values can be fully realised in today's life. In this way, this project could serve as an attempt to tackle both the ageing issue and heritages in historical urban context.

Aspect 5

ethical issues and dilemmas in research, design and potential applications in practice

This project of urban regeneration in Zutphen has a complicated situation in both research and design phases. The heritage site, the historical identities, the timeline of the target buildings, the current users in this area, all have a lot to do with this project. In fact, a couple of ethical issues and dilemmas have been met in research and elaborating the design. In my study, the historical urban boundary, evaluations and transformation framework and the meaning of courtyard are mainly these issues.

1 Historical urban boundary

As a stronghold town from medieval age, the inner city are always protected by its fortifications layer by layer which leave a magnificent mark in the later urban development. When the defensive function of the city wall is gone, it is indeed a

dilemma whether to keep those “useless” walls or tear them down for higher usage of land in urban expansion. From the research of the development on city boundary, we found that, a great part of the outer fortifications have already been demolished and the inner city wall only has a little part left as well. Fortunately, the layer of this inner city wall can still be distinguished thanks to the green area around the city. When overlooking other medieval cities in the Netherlands, this kind of green belt could also be found around the first layer of city wall. Thus, my conclusion for this historical urban boundary is to keep it as it was. The city wall should be recognised and the green area can also serve as a relieving space for highly densified urban areas inside. If new construction is necessary, then they should also accept the form of underground architecture which will not block the view



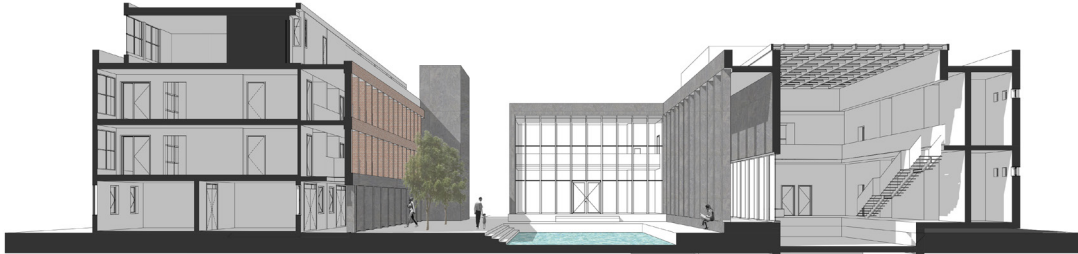
conflict of city tower and recreation room, photo by author

to the heritage city wall. I believe that this attitude helps the identity of medieval city.

2 Evaluation and transformation framework

The understanding of various heritage values and its corresponding transformation framework is the common methodology of the studio heritage and architecture. However, there is not absolutely right or wrong, but a balance one should control to reach the most appropriate solution. In the decision making of what to demolish, transform and conserve, the values of each part or each layer of the total project have also brought about a few dilemmas. For instance, in my project, the city wall is obviously the oldest asset in this area with important historical value while the recreation room built in front of the wall

with a panorama of the garden serve as a great space for the elderly to enjoy their collective life. In this case, although the recreation room is also valuable, it has to be demolished in my plan to reveal the values of the city tower to the whole city and other meeting spaces with good quality will be designed as a compensation. Additionally in another case, the huge volume of the current elderly home accommodates a great amount of elderly people but this volume is a disaster to the intimate urban fabric of Zutphen. In such an important location, necessary demolition must be taken to fit the traditional identity where appealing urban spaces would be brought back with good quality. In this case, quality of living space is more important than quantity of users it can serve.



Chapel courtyard design, author

3 Meaning of courtyard

From the analysis in city and building scale, the “hofje”, a dutch traditional courtyard typology offers a trigger in re-densification of this urban area. The research of this typology teaches me its formation, development, configurations and many other characters. Nevertheless, during the elaboration of design, this typology of space has to be interpreted into new situations. The dimension of the courtyard, the elevations around, the threshold between the interior and the exterior, all have to be tested and evaluated elaborately for the most proper solution in certain case. For example in the chapel courtyard design in my new plan, the configuration and finishing of elevations and the permeating space from outer courtyard to inner courtyard is indeed an important issue where I spent weeks of work on.

Although I am exploring the new meaning and form of traditional dutch courtyard space in urban re-densification in this graduation project, this project still works in a certain situation with some certain functions and for a certain group of users. I have tried my effort to bring more quality in this project while I made one sacrifice in the capacity of the new elderly home. The results of the potential applications have to cut the number of the elderly people, which means a number of them have to be moved away. Although they might be suggested to live together with younger generations in the new family housings for the first years, it is still a difficult plan to be carried out. In addition, in many cases higher quality results also in higher costs, the finance and management of the total plan would also be an ethical issue in practice.

Planning

After P4 (week 4.6) presentation, there would be four weeks in total before P5 (week 4.11) presentation. Here is the planning for the final period below:

Week 4.7: final design of the total project corresponding to the feedback from P4 presentation

Week 4.8: drawings and illustrations for the presentation slides

Week 4.9: model making in urban scale 1:500, building scale 1:100 and detail scale 1:20

Week 4.10: presentaion slides for P5 presentation

Sources

Books:

1. Lyppens, G. (2018). Het hofje. Bouwsteen van de Hollandse stad 1400-2000. Bulletin KNOB, 51-53.
2. Brand, S. (1995). How buildings learn: What happens after they're built. Penguin.
3. Brundtland, G. H. (1987). Report of the World Commission on environment and development: "our common future.". United Nations.
4. Feiten en Cijfers. (2017). Retrieved May 6, 2018, from https://www.zutphen.nl/Bezoekers/Feiten_en_cijfers.
5. World Health Organization. (2015). World report on ageing and health. World Health Organization.

Websites:

1. <https://www.tudelft.nl/en/education/programmes/masters/architecture-urbanism-and-building-sciences/msc-architecture-urbanism-and-building-sciences/master-tracks/architecture/programme/studios/heritage-architecture/>
2. <http://www.circlesofsustainability.org>