

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

| Personal information | |
|------------------------|------------|
| Name | Yanwen Zhu |
| Student number | 4799852 |
| Telephone number | |
| Private e-mail address | |

| Studio | | |
|---------------------------------------|---|--------------|
| Name / Theme | Urban Architecture / Spolia | |
| Main mentor | Eireen Schreurs, Els van Meerbeek, Paul Vermeulen, Aurelie Hachez | Architecture |
| Second mentor | Leeke Reinders | Research |
| Argumentation of choice of the studio | Context is an important factor influencing architectural design. I am always interested in the different explorations of architecture responding to its surroundings. The graduation studio of Urban Architecture offers me the opportunity to design architecture from the view of the city. In this case, architecture is not only a building <i>in se</i> but also a means of redesigning the environment in the city. The theme of the studio is 'spolia' this year. 'Spolia' means the remnants of a building which are placed in a new environment. The theme offers me the material and historical approach to the relationship between architecture and the city. I come from China where the construction of modern cities goes rapidly and some physical and cultural remnants are wiped out. The question is raised how the tradition is kept. My self-interest in architecture and cultural background make me fascinated in the issues that the studio is about to tackle – the tension between architecture, the city, culture, material and history. | |

| Graduation project | |
|---------------------------------|-------------------------------|
| Title of the graduation project | 'Young' and 'old' |
| Goal | |
| Location: | Anderlecht, Brussels, Belgium |

The posed problem,

Brussels was built on the archipelago formed by the river, Senne. The history of the river intertwined with the history of the city. Until nowadays, the river has caused unique conditions for the urban environment. The river passed through the urban blocks, and it either created empty spaces within the blocks or divided the blocks solidly.

This situation also happens on the site. The site is a mixed-used block located in Anderlecht, one of the municipalities of Brussels. There is a curved wall dividing the whole block, which was shaped by Senne. The river was covered in the 20th Centuries and was no longer there. Currently, the wall follows the shape of the river and it was composed of the rear walls of different buildings. Roughly, the block is divided by the wall into three parts, productive area, housing area and mixed-used (housing and working) area. The three parts barely interact with each other. The wall represents the ghost of Senne and witnesses the development of the block. Therefore, the urban design chooses to keep the wall as 'spolia' and reverse the situation of segregation.

The site is situated in a high-density residential area in Anderlecht with a multicultural population. The area is faced with the housing shortage and lack of public facilities. Consequently, the intention of the urban design is to increase communal activities, create a lively environment and energize the community. The design returns the wall to the community, turn the back wall into the front wall, creates a wall park passing through the whole block and place public facilities against the wall. In this way, the location of the productive area no longer suits its original function and is transformed into the housing area. The housing area is kept; the housing in the mixed-used area is also kept while the offices are removed.

Excluding the offices leaves a promising plot against the wall. The plot is part of the wall park and is situated in the middle of the block between the housing and a park, which is suitable for community-oriented facilities. The facilities near the site are only schools and parks. Due to the possible growth of population in the future, there will be more needs of child daycare and elderly health institution. Thus, the plot offers a quiet introverted and enclosed place for children and elderly people.

Combining children and elderly people is an undergoing experiment in many countries, such as Huis Perrekes in Belgium, Kids Town Ukima Nursery and Elderly Nursing Home in Japan, Intergenerational Learning Centre in the US, etc. The proper combination can benefit both generations. Elderly people will not feel isolated and it helps to teach the young about care for others. The system can additionally help to unite the community.

Faced with these conditions, my architectural design assignment should consider these problems:

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| | <ul style="list-style-type: none"> - SPOLIA: How can the wall ('spolia') be integrated into the architectural design? What does the wall mean for the design and the community? - URBAN ISSUES: How can the design tackle the relationship between the plot and the surrounding (the park, the housing, the entrances)? - SPACE: How can the design combine daycare and health institution? What can the two facilities share? |
| research questions and | <ul style="list-style-type: none"> - How can we deal with the memory of the city, specifically the memory of the Senne in Brussels? - How do people perceive the wall: How do people move around the wall? |
| design assignment in which these result. | Child day care and elderly health institution |
| <ul style="list-style-type: none"> - SPOLIA: The wall which is kept is a solid boundary separating two sides. Boundaries create zones. There will be more zones. Babies and elderly people need a zone for safety. Architecture needs to define the indoor and outdoor spaces. The complex needs a zone due to ownership. Therefore, new 'walls' (boundaries) will be added. Together with the new 'walls', the remaining wall redesign the private and public realms. - URBAN ISSUES: There will be two entrances for the project. The main entrance faces the park. The side entrance faces the north opening of the block. The park will be the front garden of the project and be redesigned. - SPACE: The living area of daycare and health institution will be separated, but they will share both indoor (common rooms) and outdoor spaces. | |

Process

Method description

The research can be divided into two parts. The first part is a group work to investigate the influence of Senne on the city. The research includes literature study, case study, fieldwork, mapping, typology and model making. The second part is to investigate people's movement along the existing wall. The process involves fieldwork, collage, model making and drawing.

The design is closely related to the research. The results of the research offer information to the design. The design will be conducted through case study, model making and drawing.

Literature and general practical preference

Literature

- Beltzig, Gunter. *Kindergarten Architecture*. Barcelona: Loft, 2001.
- Colquhoun, Alan. "Typology and Design Method." *Arena, Journal of the Architectural Association*, June (1967): 71-74
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- Durand, Jean-Nicolas-Louis. *Recueil et parallèle des édifices de tout genre*. Paris: 1800
- Eisenstein, S. *Towards a theory of montage*. New York, United States: LB. Tauris, 2010
- Gropius, Walter. *Scope of Total Architecture*. New York: Collier Books, 1955
- Güney, Yasemin. "Type and Typology in Architectural Discourse." *BAÜ FBE Dergisi*, 9, 1 (2007): 3-18
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- Klanten, Robert, and Lukas Feireiss. *Build-On : Converted Architecture and Transformed Buildings*. Berlin: Gestalten, 2009.
- Krier, Rob. *Urban Space*. London: Academy Editions, 1979
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- Moneo, Rafael. "On Typology." *Oppositions*, no.13 (1978): 23-45
- Perkins, Bradford, and Perkins Eastman Architects. *Building Type Basics for Senior Living*. Building Type Basics. New York: Wiley, 2004.
- Rossi, Aldo. *The Architecture of the City*. Cambridge: MIT Press, 1982
- Stierli, Martino, and Graham Foundation for Advanced Studies in the Fine Arts. *Montage and the Metropolis : Architecture, Modernity, and the Representation of Space*. New Haven: Yale University Press, 2018.

Projects

- Huis Perrekes by NU Architectuur Atelier

- Kids Town Ukima Nursery and Elderly Nursing Home
- Intergenerational Learning Center

Reflection

1. What is the relation between your graduation (project) topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

My graduation topic comes from the position and the theme of the studio. 'Old' represents both health institution and the existing wall. 'Young' represents not only daycare in my project but also the newly-added 'walls' which creates a new environment for the existing wall. In terms of the studio topic, 'Urban Architecture' asks us to tackle urban issues by architecture and 'spolia' requires us to place the leftovers in the new environment. My project is part of the urban wall park. It is not isolated but tightly connected to the wall park, the existing park and the surrounding. The remaining wall is the 'spolia' in my project. I keep the wall but redesign the surrounding. Thus, the remaining wall is put in the new context. Following the track of architecture, I work in an architectural way to explore solutions to the built environment.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

My graduation work responds to both the studio and the ageing society. The theme 'spolia' and the position of urban architecture reveals the concern about the current issues in both traditional European cities and Chinese modern city: How to deal with the remnants which are unlike heritage and how to integrate the new buildings into the context. The ageing society raises concerns about the living conditions of elderly people. They don't want to be isolated and they still want to interact with the world. Combing children and elderly people is one way to enrich their daily lives and benefit both generations. Moreover, the system can also help to unite the community.