

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	Hannah Carlotta Namuth
Student number	5044618

Studio		
Name / Theme	Urban Architecture Graduation Studio - Bricolage	
Main mentor	Paul Vermeulen	Architecture
Second mentor	Jelke Fokkinga	Building Technology
Third mentor	Leeke Reinders	Field + Research Mentor
Argumentation of choice of the studio	<ul style="list-style-type: none">- Not only designing a building but also the urban surrounding- The studio offers to work on very different scales.- The idea of adapting the concept of Bricolage – as a way of working, thinking and inspiration – to the design	

Graduation project	
Title of the graduation project	The 8 th Mountain of Nijmegen
Goal	
Location:	Nijmegen, Netherlands
The posed problem,	<p>Nijmegen is the oldest city in the Netherlands, new architecture will always be very visible in the historic context of the city. The context creates the necessity to intensely study the existing structure. The city dominant material, brick, has a story that is longer than the city itself. Through its connection to the river the Waal and nearby brick factories, the material is an essential part of the city and its history. What further makes Nijmegen unique is its topography, this is especially important in the urban plan. But it has to be integrated and will be visible on all scales.</p> <p>The inner city of Nijmegen is dedicated to shopping, but more and more</p>

	<p>commercial spaces remain empty. The shopping is often generic and lacks diversity. Especially the big Molenpoort is not properly utilized and integrated into the shopping grid. The valuable inner-city spaces need to be upgraded and refurbished to be able to reconnect to the city.</p> <p>Through the density of the Netherlands untouched nature is very rare and many animals have adapted to cities.</p> <p>The Studio topic "Bricolage" is challenging the way of creating architecture and offers a new approach to the research and design assignment.</p>
research questions and	<p>How can modern architecture be integrated into existing city structures that have a long history?</p> <p>The centre itself is focused on consumerism, which is leaving part of the dedicated shopping areas already empty – how can that be changed into more lively and cultural induced spaces?</p> <p>How to modernize the material - without losing its history and ability to blend into the cityscape?</p> <p>Not only humans live in the city, many animals dwell in hidden spaces in the city – how can they be integrated into a design?</p>
design assignment in which these result.	<p>A public building that facilitates multiple functions, including a museum, restaurant, café, workshop and interior public space. The façade will host spaces for different city-dwelling animals. To properly connect to the historic context the most prominent material in Nijmegen – the brick – should be integrated. The material also offers the change to create protected spaces for the city-dwelling animals.</p>
<p>The research in the first semester gave me a solid foundation of Nijmegen that was enhanced through literature and site visits. This research was guided through my interests and at the same time helped me find the topics I want to implement. The suggested book "Robinson Crusoe" by Daniel Dafoe helped to understand the idea of</p>	

a bricoleur and in combination with various texts, it helped to position myself in it. From the P1 I have a solid foundation of Nijmegen as we, in group work, intensively explored the city. Our impressions were captured in our video "Climbing Nijmegen". In the P1.5 the historic research helped me to connect further to the city itself. Our urban plan combines the wish to connect to the existing structure as well as the idea to implement new functions that change the image of Nijmegen as a consumer-orientated place. It frees the back of the church from the mall and divides the space with height differences in a podium for different spots. When entering the space, the new public function will be the focus point, but after crossing it and going up the stairs the church becomes the most prominent part of the space. The design connects to the Molenstraat but created a crossing that leads to a more residential area of the urban plan. The visitors will naturally follow the wider more public street and exit towards the Molenstraat.

The first 15 weeks were a group effort, after that the work was only individual. The newly created volumes gave me the impression of a mountain. Most of the new structures have the same height as the surrounding buildings, 2-4 floors, but the new public building will be significantly higher. I want to take this impression of a mountain further and not only emphasise on its rising height but also its layered functions. As an analogy of a mountain, which has different zones that define the flora and fauna – in my design presented as the function and its users – this is dependent on the latitude and altitude – here the floor where it is located on. Alexander Humboldt was the first who discovered that I also consider him as a bricoleur. He himself was the tool, much like Robinson Crusoe on this island. I adapted his sketched of mountains to emphasize on the layers. I want to create a new public and culture spot that would function as the 8th mountain of Nijmegen. The façade will host a variety of animals and each of the layers will correspond to different kinds. The brick material offers to create a porous structure that offers more than enough space for all kinds of different sized spaces.

Process

Method description

The first two quarters primarily are focused on research and the remaining two on the architectural design. I try to connect them more thoroughly, as it is easier and more logically to go forth and back from research to design. Research and architecture need to be connected, but the proportional distribution is changing throughout the year. First, the focus was on research and the architectural part was limited, the long the semester continues the more the research steps back and the architectural design takes over.

In the first quarter, P1, the research was very mixed. The historic analysis of Nijmegen was conducted with historic maps, photos and literature. The city was analysed, based on its existing structures with maps to create a better understanding of the traffic and walking routes. Since our group was mostly focused on topography and typology a lot of the research was created through site visits that were documented with drawings, photos and videos. In our video, we mostly compared similar spaces to give a better understanding of the city and its unique spots, patterns and structure.

In P2 the historic aspect of the city growth became a more important factor and old maps help to clarify it. A range of case studies about urban spaces around the world and in Nijmegen, that we created, became a base for understanding what type of spaces the city needed. We compared them by size, users, functions and location. Further the book "The Art of Building Cities: City Building According to Its Artistic Fundamentals" by Camillo Sitte became a guideline for the urban proposal since it describes historic city planning rules that help us adapt to the old centre and this set the guidelines where new buildings should be located. As this city building tied the location together with the rest of the architecture, it is becoming freer in its expression.

To immerse myself in the topic of bricolage I read different texts regarding bricolage and architecture as well as read "Robinson Crusoe". To fully grasp the concept of bricolage, I tried to image Robinson in different situations – mind experiments so to speak – to see how he would fare in a more modern surrounding and how bricolage could adapt to it.

To deepen my design ideas about modern brick facades, I would like to build and experiment with brick facades. I would achieve this by building small models and doing research on existing project – looking into form, texture and construction methods. The knowledge can be directly applied to the design process of my master thesis. For the architectural research, it is irreplaceable to find case studies that help me understand how complex buildings with multiple functions can work. Already realised projects are especially helpful as they are fulfilling already existing laws regarding stability, thermal insulation as well as fire safety regulations. The next important step is to compare them and to combine them in my thesis.

Literature and general practical preference

The Art of Building Cities: City Building According to its Artistic Fundaments by Camillo Sitte

Robinson Crusoe by Daniel Dafoe

Brick: A World History by James W.P. Campell

Collage City by Colin Rowe

The Architect as Bricoleur by Irene Scalbert

The first Guide to Nature Inclusive Design

Typology: Building for Animal by Tom Wilkinson

Animal Architecture by Ingo Arendt

Reflection

1. I am following the Architecture track in the TU Delft MSc Architecture, Urbanism and Building Sciences Program. The Graduation Studio Urban Architecture seamlessly ties into the education. It does not only offer to design a building up to its details but also to structure and organize the surroundings. The project like most course within the architecture track combines research with creative processes and through architectural work.

2. My project aims to enhance the city structure and reconnect the site better with its surroundings but to also to add value to the inner city of Nijmegen. My project offers more functions that will attract people that are focused on more than just shopping. The future city centre will offer cultural spaces that until now can only be found distributed in the outer parts of the city. Further, it creates a new public space that reconnects various streets together. Next to the spaces the historical context, especially the church will not be visible again after being obstructed for so long. Another important element is that my design is not only aimed at humans but also at animals. Bats, birds, mammals and insects already live in the city. But since their natural habitats are slowly disappearing the city is often their only refuge. By urbanizing, instead of trying to green everything, both humans and animals can live closer together without interfering with each other. The unused spaces in the city, if carefully designed, can offer good living conditions and help them survive and thrive inside cities. To research more habits of animals could help others to easily adapt their architecture to turn unused façade spaces into hiding spots.