

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	Linda Neumer
Student number	

Studio		
Name / Theme	AR3AH115 – Revitalising Heritage: Maritime Heritage	
Main mentor	Arnold Hermkens	Heritage & Design
Second mentor	Thjis Bennenbroek	Heritage & Technology
Third mentor	Marie-Therese van Thor	Heritage & Values
Argumentation of choice of the studio	My choice for the heritage studio was straightforward. Since my bachelor studies and the introduction to architectural history, I developed a broad interest in the historical past and the stories embedded in architectural structures. I therefore chose the heritage studio to further educate myself and contribute to the topic.	

Graduation project	
Title of the graduation project	Vanished matter(s) – An investigation into authentically reconstructing absent structures.
Goal	
Location:	Kinderdijk, Netherlands
The posed problem,	<p>In today's world, we are confronted with more and more destruction. This might happen due to natural disasters, acts of war or deliberate demolition. No matter the reason, with the destruction we are facing the loss of historically significant buildings and consequently the embedded history.</p> <p>One way of dealing with architectural losses and creating a bridge between the past, present and future is the process of reconstruction. Reconstruction allows architects to reimagine, restore and revitalize architectural structures, allowing us to preserve our cultural heritage.</p> <p>Reconstruction however is a difficult topic that raises a multitude of questions. First and foremost, should we reconstruct? How should we reconstruct? Is it justifiable to reconstruct the original? Is it justifiable to not reconstruct</p>

	<p>the original? Could an abstract version represent the same values as an original? All those questions asked can be linked through one topic: authenticity.</p> <p>While the process of destruction poses a significant threat to the commemorative memory and social identity, the lack of authenticity in reconstruction is threatening to falsify history itself.</p> <p>This leads me to question:</p>
<p>research questions and</p>	<p>How can we ensure authenticity in reconstructive projects, of structures that have been lost, to remind us of the history that once was?</p> <p>In order to fully explore this question, a set of sub questions was formulated to define and structure the steps needed for the research to be complete:</p> <ul style="list-style-type: none"> - What are official regulations and guidelines for reconstruction? - How can authenticity be defined in the reconstructive field? - What are the applied and common methods and perspectives on the reconstruction of lost architecture?
<p>design assignment in which these result.</p>	<p>The assigned site is close to the entrance area of the UNESCO World Heritage Site of Kinderdijk and presents itself as the perfect exemplary site for this research.</p> <p>In 1997 Kinderdijk was announced to become a UNESCO World Heritage site as a functioning water management system. This included the nineteen mills, the Wisboom pumping station, locks, board houses and so on. However, a crucial part of the development of the mills was missing. The site once known as the Gebroeders Pot Shipyard, developed into the main producer and supplier of iron rods that were used for windmills throughout the whole of the Netherlands.</p> <p>However, the Pot shipyard lost its function with the development of steam engines and other inventions and ran out of business. Consequently, the structures that represented a significant part of Dutch development got demolished around 1944.</p>

	<p>Today this destruction of parts of the shipyard causes a physical lack of built heritage, which could have reminded us of the history of the Pot shipyard. Because Kinderdijk was only established as a UNESCO World Heritage site in 1997, this consequently means, that there was never a chance to protect that side of contribution to the water system because it was physically missing from the place. One could even argue, that would the shipyard have remained established on the site, it would have gained world heritage status as well.</p> <p>The significance of the history that was once embedded in the structures is therefore clear and a reconstruction seems like a valid action.</p>
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The design task will be to authentically reconstruct the Pot Terrain to actively remind visitors of the historic relevance of the site.

Process

Method description

Research and design are the two entangled parts of this graduation project and will go hand in hand with each other.

The first part, research, can also be divided into two separate steps.

1. Based on predominantly **literature research**, the framework of the paper will be set by reflecting on the historic roots and developments within the heritage system. This will create an understanding as to why there is a general aversion against reconstructive projects and why the topic of authenticity is crucial within the field. From that, the research will lead seamlessly into the general regulations and guidelines that have been put into place by official organisations like UNESCO and ICOMOS.
2. From the historical and academic foundation, I will create a matrix that determines the degree of authenticity within the reconstructive field as per UNESCOs definition. The matrix will be used to evaluate exemplary cases through **comparative analysis**, based on **archival research, plans, photography and secondary literature**. Comparing the results of the degree of authenticity to public opinions on the matter will result in an open discussion about the topic of authenticity in the reconstructive field.

Like mentioned previously the end goal is to define an approach to reconstruction which can lead to a reconstructed site that is reminding visitors of the historic relevance. The results from the research will provide the starting points of the design.

Literature and general practical references

A shortened list of the literature that is used to gain the knowledge for the research:

Bulletin *KNOB* 119, no. 4 (January 1, 2020).

Hubel, Achim. *Denkmalpflege: Geschichte - Themen - Aufgaben. Eine Einführung*, 2019.

Kalman, Harold. *Heritage Planning: Principles and Process*. Routledge, 2014.

Khalaf, Roha W. "A Viewpoint on the Reconstruction of Destroyed UNESCO Cultural World Heritage Sites." *International Journal of Heritage Studies* 23, no. 3 (December 26, 2016): 261–74. <https://doi.org/10.1080/13527258.2016.1269239>.

Mager, Tino. *Architecture RePerformed: The Politics of Reconstruction*, 2016. <https://doi.org/10.4324/9781315567761>.

The Venice Charter: International Charter for the Conservation and Restoration of Monuments and Sites, 1964.

Thoor, M.T Van. "Authenticity, a Credible Concept?" *Bulletin KNOB* 119, no. 4 (January 1, 2020).

Tussenbroek, Gabri Van. "Authenticity, a Credible Concept?" *Bulletin KNOB* 119, no. 4 (January 1, 2020).

Unesco, and World Heritage Committee. *Operational Guidelines for the Implementation of the World Heritage Convention*, 1977, 1980, 2023

Three examples that are used in my research for a comparative analysis:

Frauenkirche (Church of our Lady), Dresden, Germany

The Frauenkirche in Dresden, also known as the Church of Our Lady, was originally built in the 18th century. Designed by George Bähr, the impressive Lutheran church characterized the skyline of Dresden for 200 years. Unfortunately, the building suffered extensive damage during the bombing of Dresden in 1945 and eventually collapsed due to the intense heat generated by the fires. Many years after the bombing, the ruins of the Frauenkirche served as a reminder of the devastation and loss caused by the war. In the 1990s, after nearly five decades of the Church of Our Lady lying in ruins, the decision was made to reconstruct the church true to its original form on the initial site. Based on historical plans and documentation of the restoration works from the 19th and 20th centuries, the original form and design were established with some minor adjustments to the load-bearing structure. While some surviving fragments could be salvaged from the ruins, the rest of the material for the reconstruction originated from the same quarry guaranteeing an appearance that would be as identical as it could get.

Berlin City Palace (Humboldt Forum), Berlin, Germany

Berlin's City Palace, better known as the Humboldt Forum, is a reconstruction project in which the original construction dates back to the late 17th century, a design by Andreas Schlüter and Johann Friedrich von Eosander. In the Second World War, the building was heavily damaged. As a result, the East German government decided to demolish the remains and construct a new building in the same place. Because of asbestos, the latter building was no longer usable and ended up being demolished as well. In the early 21st century, the decision was made to rebuild the Berlin City Palace at its initial location, featuring three baroque façades of the original palace including the dome. Based on preserved fragments, historical photos and plans, figures and sandstone elements resembling the original design were created. The function would house modern amenities and functions, a cultural institution that should combine, museum, exhibition spaces and educational facilities.

Franklin Court, Philadelphia, USA

A vastly different approach to reconstruction has been applied in the reconstruction of Benjamin Franklin's former home. The original structure was constructed in the heart of Philadelphia's Old City and housed the parts of the Franklin family until 1794 and rented it out afterwards until the house was torn down and the land sold due to increased value in 1812. Nevertheless, the site is associated with the life and achievements of one of America's Founding Fathers and therefore holds historic value. While creating the Independence National Historical Park, which was located on and around the former Franklin property, archaeologists found the outline and basement feature of the original Franklin house. In preparation and celebration of the bicentennial of American independence, the decision was made to recreate a representational design of Franklin's former home. As the building vanished decades ago, and little to no architectural details could be found, the architectural firm of Venturi and Rauch designed a steel structure which followed the archaeological outlines and dimensions found in Benjamin Franklin's property insurance.

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)?

The relation between the graduation topic and studio topic can be found in the definition of both words. While the overall studio topic is the 'Revitalising Heritage' understood as restoring something to life or give it a new life, my graduation topic of reconstruction is defined as building something again. In my case

I will rebuild the structures of the Pot Terrain and through that give revive the memory of a historical site.

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

Within a future-facing practice like architecture, in which we design in the present for the future, it is very important to recognize the significant social responsibility of an architect to shape the world we live in. In reconstructive processes of vanished structures, the responsibility becomes even greater as architects are then not only restricted to shaping the present and future, but they are also shaping the physical matter of the past as the project becomes one of new construction. Rules and guidelines provided by official organisations like UNESCO or ICOMOS have always provided a sense of what is right or wrong within the heritage preservation field.

The crucial point of the development of those doctrines and even in the complete historic development of heritage preservation, is that each generation has revised, added, supported or opposed the principles and guidelines. This is what heritage is about, our structures but also our practices evolve with society and reflects changing values over time. This graduation work is aiming to add to this.