Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-</u><u>BK@tudelft.nl</u>), 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	Stefan Heuvelman
Student number	4490355

Studio			
Name / Theme	Interiors Buildings Cities	/ City Hotel (Palace)	
Main mentor	Sam De Vocht	Architecture	
Second mentor	Matthijs Klooster	Architectural Engineering +	
		Technology	
Third mentor	Daniel Rosbottom	Architecture	
Argumentation of choice	There are several reasons why I chose this studio. Firstly,		
of the studio	I was attracted to the studio's notion of the city palace as		
	a collective space; as a gesture to the city's citizens. I was		
	also triggered by the studio's emphasis on the social		
	responsibilities of buildings. Furthermore, I want to		
	deepen my knowledge and experience in designing		
	interiors. The implied close relations between the scales of		
	interior, building and city in this studio appealed to me in		
	this respect. These reasons combined contributed to a		
	strong intuitive interest i	n this studio.	

Graduation project		
Title of the graduation project	Urban Forest Hotel Amsterdam	
Goal		
Location:	Artis Parking at the Plantage Kerklaan, Amsterdam	
The posed problems,	The brief of this year's studio is to design a city hotel that responds to the challenges raised by Amsterdam's forthcoming transition to the Doughnut Economy. The goal of the Doughnut Economy is to get our economy and society in the socially just and ecologically safe space. I believe the transition to the Doughnut Economy will deeply impact all aspects of society, and people may have legitimate concerns about how this will affect them, or they may have questions about how life will be in the world of the Doughnut. Moreover, the Doughnut Economic model addresses the issue of biodiversity. The municipality of Amsterdam has set	

	the explicit target of making 'Amsterdam a city for people, plants and animals; with green spaces in all neighbourhoods, and well-kept parks and forests.' ¹ In a city that is becoming ever more densely built, the question is how to reach this target.	
research questions and	 How can the hotel play a role in the creation of trust in the forthcoming transition towards the Doughnut Economy? How can the hotel contribute to a positive imaging of life in the Doughnut Economy? How can the proposed forest hold the buildings and functions of the hotel? How can the hotel promote engagement with the surrounding nature? How to build using local/native natural materials? How can the hotel provide a low to zero-footprint stay to its guests? 	
design assignment in which these result.	The design of a hotel and its surrounding landscape on the current parking lot of Artis. The hotel and the landscape will be designed in close relation to each other, with the aim of creating a forest where people can stay and experience living on a low footprint in close connection with nature. The forest will have intrinsic ecological value through the planting of native trees and plants according to the principles of Tiny Forests, allowing ecosystems with rich biodiversity to emerge. My hypothesis is that a stay in a profoundly natural setting within the city can contribute to a positive imaging of life in the world of the Doughnut, and inspire people to live with consideration and care for our environment.	

Process

Method description

Previous collective research

Research on Amsterdam: the study of Amsterdam's urban development over the centuries through literature research and the analysis of historic maps and images, with an emphasis on how the city's development has been influenced by societal developments and civic unrest. Research on the city's forthcoming transition to the Doughnut Economy through the analysis of the city's targets and interviews with local initiatives related to the Doughnut Economy.

Typological research: research on various hotel/hospitable building types throughout the centuries, through the analysis and redrawing of plans and sections, and literature research in combination with the analysis of images.

The results of our studio's collective research are compiled in a set of books that will serve as a constant point of reference throughout the graduation project.

Preliminary design/research project

The development of an individual and preliminary design/research project based on the outcomes of the research on the Doughnut Economy in Amsterdam, presented through additional research and a series of drawings. This preliminary project has strongly influenced my graduation project.

Individual research

In the first ten weeks I have studied a series of books on the theme of atmosphere and the experience of architecture. These books have influenced my the course of my graduation project and constitute my general theoretical framework, addressing topics of materiality, light, scale, place, and the human sensory perception of (architectural) environments.

Furthermore, I have done research on the historical development of the Plantage – the neighbourhood in which my project is located – in order to develop a profound understanding of my project's context.

I plan to continue working through iterative cycles of sketching, drawing and model making. I want to explore different strategies for the design of the landscape, one of which for example is to hypothetically rewild the plot and to 'carve' spaces out of it, which then may hold the buildings and functions of the hotel. To answer questions of design I will use literature as well as perform case studies, especially pertaining to landscape design, natural building and living on a low footprint.

Literature and general practical preference

Theoretical framework:

Havik, K., Teerds, H., & Tielens, G. (Eds.). (2013). Building atmosphere [Special issue]. *Oase,* 91.

Norberg-Schulz, C. (1980). *Genius loci: Towards a phenomenology of architecture.* New York, NY: Rizzoli.

Pallasmaa, J. (2005). *The eyes of the skin: Architecture and the senses.* Chichester: Wiley-Academy.

Rasmussen, S. E. (1962). *Experiencing architecture.* Cambridge, MA: M.I.T. Press, Massachusetts Institute of Technology.

Further research:

Jolles, A. (1992). *Plantage: Stedebouwkundig historisch onderzoek.* Amsterdam: Dienst Ruimtelijke Ordening, Afdeling Binnenstad.

Konijnendijk, C. C., Nilsson, K., Randrup, T., Schipperijn, J. (Eds.). (2005). *Urban forests and trees: A reference book.* New York: Springer. https://doi.org/10.1007/3-540-27684-X

Mallgrave, H. F. (2010). *The architect's brain: Neuroscience, creativity, and architecture.* Chichester: Wiley-Blackwell.

Mostafavi, M., Doherty, G. (Eds.). (2010). *Ecological urbanism.* Lars Müller Publishers.

Roegholt, R. (1982). *Wonen en wetenschap in de Plantage: De geschiedenis van een Amsterdamse buurt in driehonderd jaar.* Amsterdam: Universiteit van Amsterdam.

Waldheim, C. (2016). *Landscape as urbanism: A general theory.* Princeton University Press. https://doi.org/10.1515/9781400880546

Wanek, C., Smith, M., & Kennedy, J. F. (2015). *The art of natural building: Design, construction, resources*. New Society Publishers. Retrieved from: https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=5180757.

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 project encompasses the design of several buildings that will constitute a hotel. The buildings will host a variety of functions, with an emphasis on the hotel's function of providing lodging. Regarding technique I aim to design the buildings using natural materials. My project has a strong landscape architectural component that I will develop in close connection to the architectural component. In my project I will therefore apply a multidisciplinary approach that fits within the broader academic context of Architecture, Urbanism and Building Sciences.

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

Urban nature is often compromised as cities become increasingly densely built, despite its intrinsic importance for the environment and biodiversity and its benefits for the urban climate. With my project I aim to create a new paradigm for building within cities: a way of building in close conjuncture with nature where the presumed dominance of culture over nature may be completely reversed. My project is specific in its integral design approach to the building and its environment and in its focus on creating urban forests of native trees and plants, which are seen as important weapons against climate change.²

References in this Graduation Plan:

- 1 Doughnut Economics Action Lab. (2020). *The Amsterdam City Doughnut: A Tool for Transformative Action.* Retrieved from: https://www.kateraworth.com/2020/04/08/amsterdam-city-doughnut/
- Lewis, H. (2020, June 13). Fast-growing mini-forests spring up in Europe to aid climate. *The Guardian.* Retrieved from: https://www.theguardian.com/environment/2020/jun/13/fast-growing-mini-forests-spring-up-in-europe-to-aid-climate