

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	Savvina Megalovasili
Student number	5859034

Studio		
Name / Theme	Public Building Graduation Studio 2023-24 / The Vertical Campus A Public Hub of the Future in The Hague	
Main mentor	Henk Bultstra	Architecture
Second mentor	Ger Warries	Building Technology
Third mentor	Sien van Dam	Theory & Delineation
Argumentation of choice of the studio	During MSc1 Public Building studio, we got to see how the building can function as a node of development for a territory that has already a given context. The addition of new elements as well as the choice of maintaining some of the existing ones, was both challenging and beneficial for future strategies and thinking. Furthermore, what has been important for my choice, is the fact that students of this studio can study and reflect on all the scales of the project, from the region and the urban scale to that of the program and the materials, resulting in a more comprehensive understanding of architecture as a “tool” and its significance in everyday life in the cities.	

Graduation project	
Title of the graduation project	Interwoven realities as catalyst for integration
Goal	
Location:	The Hague, Central Station District
The posed problem,	In the rapidly evolving landscape of contemporary cities, densification has emerged as a pivotal urban planning strategy to address the challenges of population growth, resource scarcity, and increasing land value. As cities seek to adapt to these new circumstances and re-imagine their future self, they turn to

the development of the so-called “mega blocks” and “super-tall buildings”. These super structures usually create a complex internal world that has limited connection to the outside environment and even less connection with the surrounding buildings. The city becomes an amalgamation of these separated entities that appear as objects floating between the open streets.

Urban densification, characterized by the intensification of land use and the vertical expansion of structures, is the main goal for the city of The Hague for its 2050 vision, focusing especially on the Central Innovation district. Part of that district is the zone that is located directly around the Central Station and is predominantly a pedestrian area. The core of this zone consists of a dense area with large institutional buildings such as the National Library, the (temporary) parliament building, the National Archive and the Leiden University building, combined with the renovated New Babylon. However, the visitor ends up wandering around these monumental solids, unable to engage with the interior life and users of the buildings, disoriented and uneager to stay and engage with the area.

The addition of a new object/building will fail to address the needs of the area, which are those of a porous environment and three-dimensional public space that engages with the existing built forms.

At the same time, the attempt to integrate the future campus with the city challenges the idea of openness and accessibility. In order to achieve the creation of a public campus and at the same time preserve the spatial needs for the educational purposes, the dipole of public and private emerges. The Nolli map is a primary example of

	<p>documenting the relation between the public and the private domain in the city, using two colors to describe this binary division of urban spaces and buildings. In terms of accessibility, the city experience appears as a continuous journey, until hard barriers of property and privacy or even a hard facade are encountered.</p>
<p>research questions and</p>	<p>The project will investigate how the development of a strategy for a new campus building can bring forward possible connections between separated entities, which will eventually form the new campus by using the potential of weaving visible and invisible aspects and dynamics of the existing environment together.</p> <ul style="list-style-type: none"> - How can the open campus act as a catalyst for these closed-off realities and establish a new three-dimensional connecting layer on the site? - How can the design for the campus act as a node for development and reconfiguration of the existing building context? - How can the future campus be connected to the city through a network of collective (learning) spaces both on the ground floor level and vertically? - How can the citizens relate to the university as a public space and integral part of the urban experience?
<p>design assignment in which these result.</p>	<p>As stated in the studio brief, we are firstly asked to develop an urban capacity plan for the central station area of The Hague that will highlight the potential developments and new relations in the site and a new hybrid building for lifelong learning. The first step towards this proposal would be to fully assess existing</p>

infrastructures, buildings, and public spaces, determine possible reuse of spaces and potential relations and connections that have not been facilitated yet. I observed that the buildings on the site are functioning as distinct entities, yet they possess significant potential to be interconnected and utilized by various stakeholders due to their program and structure.

My proposal aims to intervene in the closed, separated building entities of the area by connecting them with the new campus building. Focusing on the edge conditions that characterize the existing environment, a system of collective spaces on multiple levels connected to the ground floor and expanding on the surrounding buildings can offer a new perception of the area as an entity, and not a concentration of objects. Placing the new building between the station building and Leiden University will lead to the development of a central educational 'spine' on the ground floor level - a publicly accessible strip that extends from the station to the library. The idea of an open campus will then foster a stronger relationship with the community, and the new design will become part of the new urban constellation. Knowledge is meant to be discovered and explored by the visitors of the campus, and the city is meant to be part of the student experience.

Process

Method description

In order for this thesis to be developed it is necessary to approach the topics in question through a set of research methods.

Research-by-Design

In Research-by-Design, the traditional boundaries between research and design are blurred, allowing for a collaborative and iterative exploration of ideas. This process was important for the first stages of qualitative research, the problem-statement, and the formation of initial intentions. Observations, interviews and theory and delineation

assignments help us construct the theoretical framework of our research, explore different concepts, and test them through simple design attempts.

Literature review

A comprehensive literature review can be used as a tool to identify existing knowledge and theories about new approaches to learning spaces as well as a historic overview of the typology, so that past spatial elements and relations can be reevaluated and adapted to contemporary practice. Furthermore, to fully comprehend the notion of hybridity and multiplicity, literature research is employed.

Site Analysis

The research may encompass both qualitative and quantitative data, including an extended site analysis that documents how the existing buildings integrate with the public space and how they define the edges between public and private use. When investigating the conditions of the site area, it is important to assess possibilities for re-use or re-purpose whole buildings or parts of them.

Case studies

Several case studies that integrate learning spaces and city functions were analyzed and compared. Design paradigms that focus on the transition between public, collective and private spaces will also be studied to later influence the design choices as well as examples of built projects that implement the notion of hybridity and mixed use. Further paradigms of sustainable structures models will serve as case studies for the technical building design phase of the graduation studio.

Although literature review, site analysis and case studies as research methods are mentioned separately, they remain an integral part of the research-by-design process. Throughout the research and the preliminary design phase, it was crucial to maintain a reflexive and iterative approach, allowing for adjustments and refinements as new insights emerge.

Literature and general practical references

Literature

Avermaete, T., Hooimeijer F., & Schrijver L. *Stedelijke formatie & collectieve ruimten*, Oase 71, Rotterdam: NAI Uitgevers, 2006.

Boys J., *Towards Creative Learning Spaces: Re-Thinking the Architecture of Post-Compulsory Education*, Abingdon, Oxon, New York: Routledge, 2011.

Clemens Steenbergen, Henk Muhl, Wouter Reh, and Ferry Aerts, *Architectural Design and Composition*, Bussum: THOTH Publishers, 2002.

de Solà-Morales M., *Public and Collective Space: The Urbanization of the Private Domain as a New Challenge*, Oase 33, Rotterdam: NAI Uitgevers, 1992

den Heijer A.C., *Campus of the Future: Managing a Matter of Solid, Liquid and Gas* (Delft University of Technology, 2021).

Goodwin, Richard. *Porosity : The Architecture of Invention*. Melbourne: RMIT University Press, 2011.

Mathews, Stanley. "Cedric Price: From the 'Brain Drain' to the 'Knowledge Economy.'" *Architectural Design* 76, no. 1 (January 2006): 90–95.

Per Aurora Fernández, Javier Mozas, and Javier Arpa. *This Is Hybrid : [an Analysis of Mixed -Use Buildings by a+t]*. Vitoria-Gasteiz: A plus T Ediciones, 2011.

Rowe, C. "The Present Urban Predicament." *Cornell Journal of Architecture*, no. 01 (February, 2020). <https://cornelljournalofarchitecture.cornell.edu/issue/issue-1/>.

Scheerlinck, K. *Collective Spaces Streetscape Territories Notebook*. Vol. 2. LUCA School of Arts; Brussels, 2013.

Sendra P., & Sennett R. *Designing Disorder: Experiments and Disruptions in the City*, London-New York: Verso, 2022.

Technische Universiteit Delft. *Universiteit en stad. OverHolland : Architectonische Studies voor de Hollandse Stad*. 18/19. Nijmegen: Uitgeverij Vantilt, 2016.

Why Factory, Winy Maas, Adrien Ravon, Tihamér Harja Salij, Ania Molenda, Arend Van Waart, Richard Sennett, and Paola Viganò. *Porosity : Opening Up Solidity*. Edited by Javier Arpa. of *Future Cities Series*, Eleventh Book. Rotterdam: Nai010, 2018.

Case studies

Bernard Tschumi Architects - Parc de la Villette (Paris, France) - 1983

Cedric Price - Potteries Thinkbelt Project (Staffordshire, England) - 1966

Cedric Price - Fun Palace for Joan Littlewood Project (London, England) - 1961

Constant Nieuwenhuys - New Babylon - 1959-74

MVRDV – The Podium (Rotterdam, Netherlands) - 2022

MVRDV - Vanke 3D City (Shenzhen, China) – 2018

Stan Allen, Rafi Segal - Block/Tower (New York, USA) - 2013

Steven Holl Architects - Visual Arts Building at the University of Iowa (Iowa City, USA)
- 2016

Steven Holl Architects - Linked Hybrid (Beijing, China)- 2009

RCR architectes - The Edge (Dubai, UAE) - 2007

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 project, which focuses on the transformation of the existing conditions of the dense Central Station area in The Hague, relies on the research done through the Public Building Graduation Studio sessions and is based upon the studio's main investigation goals of multiplicity, hybridity, sustainability, and densification. The TU Delft community, and the MSc Architecture, Urbanism and Building Sciences program in particular, are at the forefront of developing solutions for current global issues such as the ones mentioned above. My project approach aligns with the objectives and context of my master track in Architecture, by developing a strategy for a sustainable, self-sufficient, and responsive architecture.

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

The interdisciplinary character of the MSc AUBS program is evident in the approach of my project. It blends perspectives from social dynamics, environmental considerations, and architectural design, thereby adding to the wider scholarly conversation about the connections among urban spaces, societal requirements, and advancements in architecture.

Time planning

P2 presentation: Schematic design

Phase 1: The first week after P2 involves reviewing and reflecting on the feedback obtained during P2 presentation and assessment. This stage is crucial for gaining a deeper insight into potential modifications of the strategy and the planning of next steps towards the design.

Phase 2: In this stage, the schematic design proposal from P2 will be transformed into a developed architectural design proposal. During this phase, plans, sections and elevations should include further detail, elaborating on the ones proposed for P2, going from the 1:500-1:200 scale to that of 1:50. Furthermore the technical aspects of the building will be examined and incorporated into the design.

P3 presentation: Design proposal

Phase 3: Once again, during this week it is necessary to contemplate the feedback received during P3 presentation and plan the next weeks accordingly.

Phase 4: These weeks revolve around refining and concluding the design proposal. This phase should bring the project's technical specifications (materiality, structural details in scale 1:20-1:5, climate conditions diagrams etc.) into sharp focus.

P4 presentation: Final proposal

Phase 5: During phase 5 the final modifications and refinements to the materials and models should be made, while preparing the final presentation (P5).