Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

June 5th 2025

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	Noud van de Mast
Student number	5081033

Studio		
Name / Theme	Explore Lab	
Main mentor	Suzana Milinovic	Urban Design
Second mentor	Rufus van den Ban	Architectural Engineering & Technology
Argumentation of choice of the studio	The choice for this studio comes from my fascination of how people live in the city and how they interact with each other, and my interest in both Architecture and Urbanism. In general, people nowadays live more anonymous, but the loneliness in city is also high. This raises the question on how coexistence can be improved, and social cohesion can be increased. This is complicated to answer, because people have different characters and needs, and it touches different scales and disciplines. I believe this question should be explored from the combined fields of architecture, urbanism and social sciences. The Explore Lab studio makes it possible for me to do this and to fulfill my ambition of working on an interdisciplinary research and design project.	

Graduation project	
Title of the graduation project	From Smooth City to Porous City: The Role of Spatial Interventions to the Porosity of Public Space in hyperdiverse the Hague (Original: *Van Gladde naar Poreuze Stad: De Bijdrage van Ruimtelijke Interventies aan de porositeit van Openbare Ruimte in Hyperdivers Den Haag*)
Goal	
Location:	The Uniper Power Plant in the neighborhood '*Rond de Energiecentrale*', the Hague.

The posed problem,	The way our cities are designed and governed increasingly excludes people, limits their freedom of expression in public spaces, and undermines the spontaneous social interaction necessary for a vibrant democratic society. Especially in hyperdiverse cities like The Hague, it is important that these differences are not further smoothened, but remain visible, audible and tangible. The Smooth City makes that difficult. It avoids conflicts and imperfections, and makes public space primarily functional and controllable.
research questions and	Which spatial elements contribute to the porosity of the public space in a hyperdiverse city, like The Hague? (Orginal: *Welke ruimtelijke elementen dragen bij aan de porositeit van de openbare ruimte in een hyperdiverse stad, zoals Den Haag?*)
design assignment in which these result.	The aim of this research is to find out which spatial elements challenge which behaviour, and in which groups of people. The relationship between the social and the physical domain is central. The expected outcomes are spatial conditions, patterns or elements that promote 'porosity' in public space. In other words, aspects that enable openness, spontaneous interaction, experiment and even conflict. This does not only concern generic observations, but also significant deviations. These results can be converted into design principles. Thus, the design assignment is to develop a public space – both indoor and outdoor – with these guidelines, that serves as a catalyst for porosity to stimulate co-existence, inclusivity and social cohesion in the hyperdiverse city. The space serves public functions, where people from the neighborhood can come, recreate and express themselves with respect to others.

Process

Method description

This research departs from a broad and multifaceted understanding of 'public space', with the aim of resisting the idea of the smooth, over-organized city. Instead, it focuses on the porosity of the urban fabric – the layered and interconnected nature of public space, both outdoor and indoor – as a system that enables and accommodates hyperdiversity within contemporary urban societies.

Various literature offers a critical framework on the relation of public space with porosity, inclusivity and social cohesion. These sources are supplemented by more practice-oriented readings on the design of inclusive and adaptable public spaces. The literature review thus serves both as a theoretical grounding and a way to identify or confirm relevant spatial concepts that can be tested through observation and later translated into design tools.

As mentioned before, the literature study also prepares for the following part of research: systematic observations at three carefully selected locations in The Hague. The locations may differ in scale, form and function, but always function as public space in a hyperdiverse, urban context. The aim of the observations is to identify spatial patterns, elements or systems that contribute to the porosity of the space. This is supported by spontaneous observations in public indoor spaces and informal conversations with users, residents and community centers.

Ethnographic mapping is used to document observations. This is a method that records and visualizes behavioral patterns and interactions of people within a specific time and space (Kuznar & Werner, 2001). The observations are spread over different times and days of the week to obtain as complete a picture as possible of the use and behavior in the public space. In addition to these maps, (annotated) photos are taken and added to the research report. The conversations with users take place informally. Therefore, there is no fixed questionnaire, and the results are not processed systematically. This information is used to support the observations but does not form a primary source of conclusions.

The research concludes in a set of spatial conditions and interventions that can be translated to a toolbox of design principles. These conditions form the basis of the design. An additional result is that the researcher (and designer) develops a better understanding of the existing porosity in the neighbourhood and its residents. This intuitive insight is valuable for the design process.

In the design phase, a public space will be developed – both indoor and outdoor – that stimulates porosity within the neighborhood. The design explicitly acknowledges the diversity of users in a hyperdiverse society and therefore, proposes a variety of spaces that respond to different needs, behaviours and expressions. Transitions between spaces are seen as crucial moments of negotiation, encounter or conflict. As such, the section drawing will be a key design tool to explore spatial thresholds, layers and connections. To further inform and test these transitions, physical

sectional models can be constructed, allowing for an understanding of scale, materiality and context. These sections will also serve as a medium to integrate and anchor the design within the broader urban and social context of the neighborhood.

Finally, the design is situated in a former factory building. As part of the preliminary site research, the archive of the building – consisting of 36 boxes of drawings and reports – is available for study. The existing building adds a technical and constructive dimension to the challenge, pushing the project further into the interdisciplinary scope.

Literature and general practical references

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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 situates itself within Architecture – and the Explore Lab studio – as a critical and design-driven exploration into the role of public space in enabling coexistence in the hyperdiverse city. Architecture is approached not only as the shaping of physical environments, but as a societal practice capable of influencing and facilitating social structures. By placing the relationship between spatial form and social behaviour at the core, the project questions the overly controlled, efficient and uniform public space in the so-called 'Smooth City'. The smoothening of cities through architecture is sometimes promoted in other graduation studios. Explore lab allows me to instead, seek spatial conditions that allow for openness, appropriation, spontaneity, and even conflict. Which should not only come from the discipline of Architecture, but also Urbanism and Social Sciences.

   Within the *Architecture, Urbanism and Building Sciences* Master's programme at TU Delft, this project fits within the emphasis on social relevance, interdisciplinary collaboration, and research-by-design as a mode of knowledge production. It contributes to ongoing academic and professional discussions on inclusivity, the right to the city, and the role of architecture in shaping social interaction. By bridging theory, observation, and spatial analysis with a speculative and reflective design approach, my project becomes an active and critical contribution to the debate on the future of public space in increasingly complex urban contexts.

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

   My project is socially relevant, because social cohesion and urban well-being are increasingly under pressure. Especially in hyperdiverse cities such as The Hague, it is important that no one is excluded. Public space plays a crucial role in this. It is the place where people, in all their differences, can encounter and meet each other. A porous public space contributes to the social well-being of the users.

   In addition to this social urgency, the project is also scientifically relevant. It ties in with a growing, interdisciplinary debate on inclusive, diverse and socially sustainable cities. By combining insights from sociology, philosophy, architecture and urban planning, this project aims to contribute to understanding and shaping

public space. Moreover, the integration of spatial elements creates a possible bridge to a design in which the insights from this research can be translated and applied.

Finally, public space was deliberately chosen as the centrepiece of this research. Jacobs (1961) and Gehl (1971) previously emphasised the importance of public space as a place for spontaneity, social interaction and a sense of community. This line is continued and deepened in more recent studies, such as that of Ali Madanipour (2017), who argues that public space – with soft transitions – contributes to tolerance in diverse cities. In today's hyperdiverse society, this function of public space is essential. Not to resolve differences, but to make them visible, to accept them and possibly to appreciate them. It is the social and spatial aspects of public space that make this research a current and urgent contribution to thinking about inclusive cities.