

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	Amrita Sen
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Studio		
Name / Theme	Advanced Housing: Ecologies of Inclusion	
Main mentor	Robbert Guis	Design
Second mentor	Alejandro Campos Uribe Stephan Verkuijlen	Research Building Technology
Argumentation of choice of the studio	The studio for 2023/24 focused on the theme of co-existence of working, learning, and living by re-assessing dwelling design. This sparked my interest in the need to pay close attention to the design of un-built spaces, as essential to maintain a balance between society, nature, and architecture. The overarching theme of living with water in Midden Delfland further provides the opportunity to investigate resilient ways of designing for the future.	

Graduation project	
Title of the graduation project	The transience of society: Through the lens of a post-war neighbourhood in The Netherlands
Goal	
Location:	Westwijk, Vlaardingen The Netherlands
The posed problem,	(Main studio problem) In order to allow (from ZUS plan) Midden Delfland to remain as a protected green-zone, and act as a water sponge for the neighbouring cities, it is important to densify the edges of this green zone to accommodate the growing urban centres of Rotterdam, Schiedam and Delft. Westwijk, a typical post-war neighbourhood of the 1960s is situated at the edge of Midden Delfland and possess the potential to be densified for

	<p>current and future housing requirements.</p> <p>(Personal Research) Post-war housing neighbourhoods in The Netherlands are facing a spatial and social decay in the form of high vacancy rates, crime, vandalism, and physical defects due to poor planning strategies. In order to further densify such neighbourhoods, it is important to look at the reasons for the failure of these neighbourhoods and find solutions to improve the lived experience of residents.</p> <p>Such built environments were designed as an expression of permanence through solidity and mass. However, nature, people, and the lands they inhabit are constantly changing. The traditional 'structures' of the past have become increasingly uncertain, with individuals, states, technology, relationships becoming porous and subject to change.</p> <p>How can we then design our living environments to accommodate this flux, the changing needs of society and of nature? This calls for the need to rethink our current ways of living and the permanence in our ways of buildings. This research looks at living environments as not just the built, but also the spaces that exist around it, the unbuilt, that possess the ability to self-regenerate.</p>
<p>research questions and</p>	<p>How can living environments (built and unbuilt) be designed, to adapt to and facilitate the constant flux (or change) in our societies and in nature?</p> <p>Can these solutions be implemented in post-war neighbourhoods to improve their social and spatial atmosphere?</p>
<p>design assignment in which these result.</p>	<p>Through research of the concepts of adaptability and transience, I aim to</p>

formulate a housing scheme that can enhance the deteriorating social and spatial condition of post-war neighbourhoods, with the example of Westwijk. The design aims to grow and adapt with the changing needs of society while enhancing the built environment, the community, and the natural environment.

Process

Method description

Mapping & fieldwork: The research starts with analysing the neighbourhood of Westwijk, from its original master plan from the 1960s to its present day condition, looking at some of the issues in the planning strategies. Studying behavioral spaces gives an insight into the lived experience of residents and how they differ from the envisioned plan of urban planners.

Precedence Study: By studying and analysing post-war neighbourhoods I aim to categorize some of the key reasons behind their failures. This is done to set a precedence for the future design and development of such neighbourhoods. Looking next at traditional structures of residential neighbourhoods of The Netherlands gives an insight into the changing nature of dwelling designs over the last century.

Literature study: Understanding the concepts of adaptability, transience, temporality and the unbuilt may then be applied to the 2 overlapping spheres of the built and the natural environment in order to create a design that grows and changes with the flux in society.

Literature and general practical references

- Brand, S. (1995). *How buildings learn: What Happens After They're Built*. Penguin.
- De Jonge, D. (1985). Problems of Post-War Flats in The Netherlands. In *Post-war public housing in trouble* (pp. 133–146). Delft University Press.
- Farhady, M., & Nam, J. (2009). Comparison of in-between concepts by Aldo van Eyck and Kisho Kurokawa. *Journal of Asian Architecture and Building Engineering*, 8(1), 17–23. <https://doi.org/10.3130/jaabe.8.17>
- Harnack, M., Heger, N., & Brunner, M. (2021). *Adaptive Re-Use: Strategies for Post-War Modernist Housing*. Jovis Verlag.
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- J.M. Nelissen, N. (1985). Post-War Neighbourhoods in Trouble. In *Post-War Public Housing in Trouble* (pp. 121–132). Delft University Press.
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- Strauven, F. (1992). The Dutch contribution to Team 10, Bakema and Van Eyck. *Rassegna*, 14(52), 48–57.
- Strauven, F. (2007, May 24). *Aldo van Eyck: Shaping the New Reality From the In-between to the Aesthetics of Number*. CCA Mellon Lectures, Montreal, Canada.
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- Wassenberg, F. (2021). Conservation or Replacement of Large Housing Estates? Experiences from Bijlmermeer, Amsterdam, the Netherlands. In *Adaptive Re-Use: Strategies for Post-War Modernist Housing* (pp. 95–104).
- Wietzorrek, U. (2014). *Housing+: On Thresholds, Transitions, and Transparencies*. Birkhauser.

Reflection

1. The graduation project 'The transience of society: Through the lens of a post-war neighbourhood in The Netherlands' aims to find a solution to rejuvenate the living environment of a post-war neighbourhood as a solution for densification in the future. It situates itself within the overarching proposal of Midden Delfland as a productive park, that can only be realised if the edges of the green zone are densified, and living with nature is integrated into our living environments. The project intends to find architectural solutions for housing design in the current scenario in The Netherlands, and supports the urban proposals and research of 'Redesigning Dutch Deltas' that the BK is currently engaged in.

2. Societies, and the landscapes they inhabit are ever-evolving, whether it be in a matter of a few months, decades or centuries. How is this change related to the way we build? The socio-economic metabolisms that exist between the built and the natural environment are important to maintain in order to create a resilient and sustainable society. For many decades now, this metabolism has been ignored, resulting in the social and spatial decay of living as well as natural environments. The project aims to re-establish the social sphere in architecture that can co-exist with the natural environment, allow for change and future growth.