Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-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	Ina Ilianova Ilieva
Student number	6050875

Studio		
Name / Theme	AR3AP100 2024-25 Public Building Graduation Studio "Public	
	Condenser, Copenhagen"	
Main mentor	Henk Bultstra	Architecture - Project Design
Second mentor	Florian Eckardt	Technical Building Design
Third mentor	Sien van Dam	Research - Theory & Delineation
Argumentation of choice of the studio	Public architecture offers a balance of creative freedom and responsibility, as it presents critical issues that must be addressed through creative solutions in the design process. Designing spaces focused on the people, such as inclusive and accessible places, is essential in today's society, which increasingly faces challenges of social disconnection and separation.	

Graduation project		
Title of the graduation project	Fostering Social Inclusion	
Goal		
Location:	Amager-Vest, Copenhagen, Denmark	
The posed problem,	Amager-Vest, Copenhagen, Denmark The city of Copenhagen, such as other big cities around Europe, has a significant separation between communities, especially in the outskirts of the city. Such is the region of Amager-Vest in Copenhagen and more specifically the area of Sundholm, which is described as a marginalized neighbourhood where certain problems prevail, such as crime, safety concerns, and mobility. Social issues are also dominant in the area, signified through the segregation of the community, which is magnified through the lack of inclusion and lack of meeting spaces in the neighbourhood (Andersen 2023). The neighbourhood has been previously placed on the "ghetto list" which presented the area with a bad reputation that remains to this day. Separation between the people of Copenhagen retains on the economical differences between areas and the ethnical background	

of the population. This problem is magnified in the Sundholm area, as it characterized as a low-income area with a significant percentage of the population having a non-Danish background (City Population 2024). Hence, my research problem will be regarding in what ways this social exclusion can be minimized through creating accessible public architecture that provides basic public functions and improve the quality of life of the neighbourhood.

The area of Amager-Vest, especially Sundholm, is described as unsafe and one that people tend to avoid. The area consists of multiple social housing projects, homeless shelters, juvenile detention centre, educational institutions and residential buildings. Hence, it contains a very diverse mix of amenities, however taking a closer look at the public amenities and public spaces, the neighbourhood does not provide much variety in that aspect. After researching the area and conducting interviews, it was found that one of the biggest issues in the neighbourhood is the lack of safe meeting spaces and connections through the area. Hence, it is crucial to design a public condenser that provides space for people to come together despite their differences, and which would strengthen the identity of the neighbourhood. Such public intervention could bridge the physical gap between the vital necessities people need in their daily lives, improve the overall quality of life and promote healthiness.

Thus, the objective of this research mainly relies on creating accessible spaces, improving the interactivity and engagement of the community, hence, improving the relation between the building itself and the pubic, while also lowering the physical boundary of using essential and public facilities.

research questions and

MAIN QUESTION

How does the design of a Public Condenser contribute to the establishment of social integration and inclusivity in a community, while promoting a healthy environment and accessibility?

SUB-OUESTIONS

- 1. What are the design strategies that contribute to the improvement of social inclusivity within a neighbourhood?
- 2. How can the Copenhagen principles, such as reuse, resilience and modular design, be implemented in the design of the public building?
- 3. What is the role of adaptation and transformation in establishing a future proof public building?

design assignment in which these result.

The aim is to investigate how a public condenser building can be designed to integrate a marginalized and separated community, where they could all come together, and improve the overall cohesion of the area.

Hence, the public condenser intends to improve and revitalize the area through introducing communal and social spaces where people of the neighbourhood would be incentivized to go, as it will include essential public functions, as well as green spaces. The Public Condenser plays a vital role in fostering a healthy environment, highlighting key needs, such as clean air, stable climate, proper sanitation, safe spaces, and the preservation of habitats.

Process

Method description

The design of the public condenser, conducted through research, aims at following the five architectural pillars: multiplicity, hybridity, resilience, sustainability, and healthiness, while implementing the Danish principles of design. The design approach would be to limit the resources used and provide sustainable and resilient solutions. Hence, certain parts of the site can be reused or readapted, such as the factory building, occupying a significant area of the plot, which would be reused. The temporary school, which is made of modular containers, can be reassembled in different places.

Through interviews conducted in the area it was established that the people of the area are very separated with one another, as each stay in their own area, as they lack incentive to do otherwise. In research conducted by the Rasmus Andersen, who is part of a team currently redeveloping and revitalizing the area, conclusions were drawn that the majority of the residents of the area state that there is a lack of meeting spaces and greenery, which greatly influence the cohesion and collectiveness of the neighbourhood (Andersen 2023).

A literary review of the book "Whose Public Space" includes a study that was conducted in a similar marginalized neighbourhood, as to how to improve the collectiveness and inclusivity. An observed perspective was that "when public spaces allow differences to be expressed, they can contribute to a sense of well-being in the resident population", emphasizing the need to create public spaces that embrace the differences of a community, rather than gentrify it (Madanipour 2010).

Through an analysis of various projects and their themes, the Barcelona Pavilion by Mies van der Rohe emerges as a key reference for this research project. The design of the public condenser aims at reducing the boundary between exterior and interior, creating a more inclusive and inviting environment. This aligns closely with the pivotal themes of Rohe's project – transparency and fluid spatial connections (Mies van der Rohe 1929).

Literature and general practical references

- 1. Andersen, Rasmus. Interview with members of the community of Sundholm. *Research and Interviews in Sundholm, Copenhagen*. Conducted in 2023.

 Rasmus Andersen and his team conducted multiple surveys and interviews with the community of the Amager-Vest area in which they asked the people of what they would like to improve in the area. These data were presented to us, which presents changes they want implemented, what they find unsafe and other ideas.
- 2. City Population. "Amagerbro Vest (Suburb, Denmark)." Accessed November 8, 2024. https://www.citypopulation.de/en/denmark/copenhagen/admin/amager_vest/21201_a magerbro vest/.

The website provides statistics of Copenhagen and its different regions. The data used from the website is the ethnic background of the different neighbourhoods and getting an overall perception of the socio-demography of the region.

- 3. Dosen, Annemarie S., and Michael J. Ostwald. "Prospect and Refuge Theory: Constructing a Critical Definition for Architecture and Design." *The International Journal of Design in Society* 6, no. 1 (2012): 9–24.

 This research paper provides good insight into the prospect-refuge theory and how it translates into the architectural design. The prospect-refuge theory describes the necessity of presenting social spaces where people can connect with one another, while presenting a sense of security and comfort. Hence, it is essential to design spaces with different levels of privacy, where people can retreat to.
- Lotz, Katrine, ed. Forming Welfare: Design in a Nordic Context. Copenhagen: Danish Architectural Press, 2022.
 This book presents the essential items into the Danish context and their principles. Giving an insight into the Welfare state, which is crucial in their living and building policies.
- 5. Madanipour, Ali, ed. *Whose Public Space? International Case Studies in Urban Design and Development*. New York: Routledge, 2010.

 This book gives an insight into the nature and design of public areas, while providing different examples of redevelopments and revitalizations of different problematic areas. Two case studies stand out, such as the investigation of the different marginalized neighbourhoods around Europe, and of public spaces in low-income neighbourhoods in Mexico.
- 6. Mies van der Rohe, Ludwig. Barcelona Pavilion. Barcelona, Spain, 1929.
- 7. Statistics Denmark. "Statbank Denmark." Accessed November 8, 2024. https://kk.statistikbank.dk/statbank5a/SelectTable/omrade0.asp?SubjectCode=303&PLanguage=1&ShowNews=OFF.

This website provides statistics for the different regions of Copenhagen, such as annual income of the regions, ethnical background and overall data for the population of Denmark.

Reflection

 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 project presents the integral points and core principles of architecture, including sustainability, human-centred design, fostering healthy environments, and creating spaces that bring people together. Designing with sustainability in mind is one of the foundational pillars of the TU Delft's architectural philosophy, which is intricately translated in the design concept of the project.

Designing public architecture is essential in understanding the broader discipline of architecture. It challenges the designers to examine strategies that improve social inclusivity, while ensuring safe and accessible spaces.

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

The studio and the graduation project address the essential issue of integrating vulnerable and marginalized neighbourhoods through the introduction of a public condenser. This presents us, as architects, with a significant responsibility of establishing ways to design inclusive and safe public spaces, where people can integrate into society and come together as a community.

Important part of the project is establishing a research framework, which analyses similar projects and identifies effective design strategies tackling similar issues. Incorporating design interventions within existing buildings is crucial in today's framework, as sustainability and reuse are focal. Hence, by combining sustainable strategies – such as adaptive design and incorporation of sustainable materials – the project presents the importance of environmentally conscious and socially inclusive architecture.