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	Sara Tesselaar
Student number	5443172

Studio		
Name / Theme	Architectural Engineering]
Main mentor	Thomas Offermans	Design tutor
Second mentor	Nico Tillie	Research tutor
Tirth mentor	Pierre Jennen	Building technology tutor
Argumentation of choice	What drew me to the studio, is that it gives students the	
of the studio	space to broadly and creatively pursue their own ideas. While combining architecture and the engineering towards a graduation project. Which let to my fascination about the topic emotional architecture and the connection between humans and nature. And creating awareness for climate change.	

Graduation project				
Title of the graduation project	Reconnection: Exploring emotional architecture in dense environment and the call of nature.			
Goal				
Location:	Bangkok			
The posed problem,	At this moment modern life is a 24/7 society where humans are always busy, reachable and employable. It seems that the connection between humans and nature is changing (Kesebir & Kesebir, 2017). Cities are typically characterized by a relative lack of natural environments, and there is growing concern that busy urban lifestyles are contributing to a disconnection from the natural world. This disconnection is reflected in both the quality and quantity of experiences individuals have with nature (Uhlmann et al., 2018). Technological change, such as the prevalence of mobile devices and video			

	games, is also contributing to disconnection, in addition to urbanization (Kesebir & Kesebir, 2017). According to Chong (2023), while technology facilitates greater flexibility and global connectivity with loved ones, being constantly connected can have negative impacts on human well-being. It is projected that by 2050, most of the humans in the world will live in cities. Despite advancements in technology, urban design has become soulless and lacks a human touch. This has led to an increase in social isolation, burnout and feelings of being overwhelmed. However, it is becoming more apparent that designing buildings and urban spaces with emotion in mind is crucial. In 2023, cities will start to recognize the importance of emotional value in architecture and design. Architects and designers will begin to understand how the aesthetics and diversity of buildings can deeply impact our emotions, lift our spirits and stimulate connection (Heatherwick, 2023).
research questions and	 Thematic research question: "What can strengthen emotional architecture, - with a focus on natural aspects- and what are the related design principles?". Sub questions: What is emotional architecture? Can emotional architecture be used for architecture? Can spaces evoke emotion? What types of design characteristics could stimulate positive emotion in a built environment? On what scale are architectural interventions necessary that increase the sense of the human scale?
design assignment in which these result.	Design question: "How does the new urban oasis in the future look like, where

	a reconnection between people and the natural environment is stimulated in a dense city? "
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The project aims to incorporate the strategy/ design tool (resulting from the research) in an area of the dense city Bangkok.

The overall goal is to create a multifunctional 'urban oasis' which stimulate raising awareness of climate change and mental health. By using the humans' senses to create a better understanding of the climate systems and natural elements used in the project. The main themes in the project will be multi-sensory spaces, human centered design and the relation between humans and nature. Multi- sensory spaces refer to designing an experience in the urban oasis and floorplan while using the human senses. Human centered design refers to bringing back human scale in the building, users experience and program. Other keywords are well- being, mixed use, social interaction and transitions in scale levels. The relation between humans and nature refers to the design tools (resulting from the research) that stimulate the relation between the users and the landscape. Keywords here are local materials, vegetation, indoor and outdoor connection.

Process

Method description

The thematic research used literature studies and a case study of emotional architecture tools focused on natural elements.

The methodology in this research paper consists of qualitative literature study, deeper discussions of the term emotions in the architectural world, case study which resulted in design parameters and an overview of how natural elements can strengthen emotional architecture.

For the design: Firstly, the design parameters are drawn up, resulting from the research paper and the case study projects. Which led to a general concept for the building. Second in the following weeks there will be a site visit, interviews with companies in Bangkok, mostly about traditional building techniques and materials. In order to get a complete picture of the entire project. Then there will be a complete analysis of the materials and building technology used in Thailand. To be able to create fitting facades.

Literature and general practical preference

Literature studies with the following keywords: emotional architecture, multi-sensory experience, emotions, human scale, connection humans and nature and biophilic design. Books written by Thomas Heatherwick, Don Norman, Juhani Pallasmaa and Charles Montgomery. And case studies from reference projects who can have an experience and mixed -use projects.



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

The pandemic created more awareness for the mental health of the users. However also the connection with nature is getting more faded especially in cities. A key element here is raising awareness, with the help of emotional architecture/ design you can connect to humans on an emotional/ deeper level. Which could help to send a message and receiving this message clearer and help with raising awareness of climate change and mental health.

Recent studies have shown that it is becoming clear, that when you're designing buildings or urban spaces that emotions of the user's matter. Since cities keep increasing and climate change keeps becoming more urgent. It is important to look for other solution, like for instance emotional architecture as a tool, to tackle these problems.