

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	Tam Shing Yat (Samuel)
Student number	5235928

Studio		
Name / Theme	Music Marvel	
Main mentor	Stefan Witteman	Architecture
Second mentor	Piero Medici	Building Technology
Argumentation of choice of the studio	<p>Having learnt the piano for almost two decades, I am always intrigued by the similarities between architecture and music regarding their compositional structure, together with the sensual experiences that they can offer. As music has shifted away from being a high culture and become increasingly popularized, I believe it is also time for architects to rethink how music venues can engage with the public differently in contemporary context. The studio therefore provides a valuable opportunity for me to delve into questions which are relevant to both my profession and my personal interest.</p>	

Graduation project	
Title of the graduation project	The Musical Promenade
Goal	
Location:	Binckhorst, the Netherlands
The posed problem,	<p>The diverse interior functions of Binckhorst's industrial architecture are often kept out of public sight by the building envelopes, giving rise to a uniform streetscape. Besides, sensorial elements or points of interests found along the strip are so fragmented and poorly structured that they fail to enrich urban experience. This suggests the need of a perceptual approach to renew visitors' impression of Binckhorst by means of introducing a processional</p>

	sequence of multi-sensory encounters that are specific to the site.
research questions and	<ol style="list-style-type: none"> 1. How does our movement in space liberate architecture from its static image? 2. What fosters the changes of perceptions of a building? 3. How do sounds function as integral space makers? 4. How may compositional and notational practices in music and films inform the design of the urban path? 5. How should the pathway engage with existing features of the site that are increasingly overwhelmed by the ongoing real estate development?
design assignment in which these result.	<ol style="list-style-type: none"> 1. Creating four animated passages through a building that is open enough to reveal its internal activity to the urban context 2. Extracting and translating choreographic techniques from music and film-making to dramatize spatial experiences 3. Reinforcing not only visual but also acoustic qualities of architecture 4. Defining the atmosphere of each segment of the journey 5. Accentuating the presence of two historical monuments at both sides of Binckhorstlaan

Process

Method description

Analogization

Each musical piece is characterized by a particular form and its phrasal organization, which create variations, tension and release. The technique of structural sequencing in music can be compared to and inform the arrangement of programs or curation of successive scenes in architecture.

Notation

In light of the inherent difficulty to express lines of motion in architecture with conventional plan and sections, a notation system is developed to conceptualize the sensory adventure and communicate the trajectories of the four main users of the building, namely the public, student artists, concertgoers and performers. Each layer has its own distinct atmospheric, programmatic, sound and spatial sequence which may be linear or form into a loop. Featuring hard cuts and soft transitions, they are expected to draw on the attributes of cinematic construction.

Cataloguing

To identify design opportunities for the pathway and the facilitate the structuring of senses, I am producing a catalogue of visual landmarks and environmental sounds near the chosen building ground. Two parallel street elevations, which are in fact photomontages of all existing buildings and future residential blocks on both sides of Binckhorstlaan, will also be made to reflect on the homogeneity of the industrial landscape and evaluate the impact of the music venue on Binckhorst's skyline.

Case Study

I will be focusing on architectural projects which have experimented with the idea of extending the public route in the music building, instead of treating it as a black box that completely conceals the dynamism of musical production. In the meantime, I will look into architectural precedents that make use of notational diagrams to explore the movement of people in space.

Literature and general practical preference

1. Appleyard, Donald. "Motion, Sequence and the City." In *The Nature and Art of Motion*, edited by Gyorgy Kepes. New York: George Braziller, 1965.
2. Buck, David Nicholas. *A Musicology for Landscape*. New York: Routledge, 2017.
3. Cain, Rebecca, Paul Jennings and John Poxon. "The Development and Application of the Emotional Dimensions of a Soundscape," *Applied Acoustics* 74 no. 2 (2013).
4. "Casa Da Musica.," *El Croquis* no. 134 (2007).
5. Clarke, Joseph. *Echo's Chambers: Architecture and the Idea of Acoustic Space*. Pittsburgh: University of Pittsburgh Press, 2021.
6. Handel, Stephen. *Perceptual Coherence: Hearing and Seeing*. New York; Oxford: Oxford University Press, 2006.
7. Jormakka, Kari. *Flying Dutchmen: Motion in Architecture*. Basel: Birkhäuser, 2002).
8. Karandinou, Anastasia. *No Matter: Theories and Practices of the Ephemeral in Architecture*. Burlington: Ashgate Publishing Company, 2013.
9. Kleine, Holger. *The Drama of Space: Spatial Sequences and Compositions in Architecture*. Basel: Birkhäuser, 2017.
10. Locke, John. *An Essay Concerning Human Understanding Book II: Ideas*, edited by Jonathan Bennett.
11. Mavash, Kourosh. "Site + Sound: Space." In *Essays on the Intersection of Music and Architecture*, edited by Mikesch Muecke and Miriam Zach. Ames: Culicidae Architectural Press, 2007.
12. McLuhan, Marshall. "Visual and Acoustic Space." In *Audio Culture: Readings in Modern Music*, edited by Christopher Cox and Daniel Warner. New York; London: Bloomsbury Publishing Incorporation, 2017.
13. Rasmussen, Steen Eiler. *Experiencing Architecture*. London: Chapman and Hall Limited, 1959.
14. Terlouw, Erik. "Gemonteerde Ruimte," *OASE* no. 18, 36-49 (2013).
15. Thiel, Philip. "A Sequence - Experience Notation: For Architectural and Urban Spaces," *Town Planning Review* 32 no. 1 (1961).
16. Thiel, Philip. *People, Paths and Purposes: Notations for a Participatory Envirotecture*. Seattle and London: University of Washington Press, 1997.
17. Tschumi, Bernard. *The Manhattan Transcripts*. New York: Academy Editions, 1994.
18. Tschumi, Bernard. *Bernard Tschumi: Architecture: Concept & Notation*. Edited by Migayrou Frédéric. Paris: Editions Du Centre Pompidou, 2014.
19. Venturi, Robert. *Complexity and Contradiction in Architecture*. London: Architectural Press, 1977.
20. Venturi, Robert, Dennis Scott Brown and Steven Izenour. *Leaning from Las Vegas: The Forgotten Symbolism of Architecture Form*. Cambridge, Massachusetts; London: The MIT Press, 1977.
21. Veugen, Chrit. "Het Geluid van de Architectuur," *OASE* no. 18, 50-51 (2013).

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)?

The outcome of my graduation topic will be a building which addresses the topical and theoretical concerns about a specific architectural type dedicated to music making. It also involves the proposition of an urban strategy that reacts to the current transformation of Binckhorst from an industrial area to a new residential suburb, which echoes with the goal of the master track to "develop creative and innovative building projects that use design as a means to deal with the technical, social and spatial challenges encountered in the built environment."

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

First, I am reaffirming the role of spatial movement in altering one's perception of architecture and the city. Through the creation of multiple pathways, the music venue is no longer bound by its inanimate built form and can be experienced to its full extent from different perspectives. With the incorporation of external sensory stimuli, a more active dialogue with the site can also be achieved, which enables visitors to discover its hidden heterogeneity.

Secondly, I am reinstating hearing as a fundamental constituent of an architectural experience, calling for better coordination rather than isolation of human senses. This signifies a break from the visually exclusive cultural practice and expands the sensory realm of architecture.

Last but not least, I am using music and cinematography as an analogical model to conceive and represent the circulation of the music venue, which establishes a bridge between architecture and other art domains.

Time Planning

19/1/2022 - 10/2/2022:

Finalizing the massing
Revising design position based on comments

10/2/2022 - 28/3/2022:

Carrying on with structure and façade development
Applying material concepts to individual spaces
Studying the atmospheric changes with 1:100 test models
Formulating sustainability strategies
Addressing acoustic and other mechanical requirements
Landscape design

28/3/2022 - 12/5/2022:

Detail design (joints, railing, fenestrations)
Interior design (layout of each room, furniture expression)

12/5/2022 - 13/6/2022:

Updating 1:500 physical site model
Constructing 1:200 presentation model of the building
Producing rendered perspectives for the designed atmospheres
Representing the latest spatial sequences with notation
Completing all plan, sectional drawings
Creating money shots for the project