

# Graduation Plan

**Master of Science in Architecture, Urbanism & Building Sciences**

MSc Landscape Architecture 2023 - 2024

[Ana Paula Duarte de Oliveira Post]



## Graduation Plan

Submit your Graduation Plan to the Board of Examiners ([Examencommissie-BK@tudelft.nl](mailto:Examencommissie-BK@tudelft.nl)), your mentors and delegate of the Board of Examiners one week before the P2 date at the latest.

### I Personal information

Full name	Ana Paula Duarte de Oliveira Post
Student number	5832314

### II Studio / Lab information

Name / Theme	FLOWSCAPES / Design of the Urban Fabrics	
Main mentor	Gerdy Verschuure-Stuip	Landscape Architecture
Second mentor	Maurice Harteveld	Urbanism
Argumentation of choice of the LA graduation lab	<p>As an architect, I have spent many years creating and finding solutions for new or existing situations through design. For all the projects, besides gathering pragmatic information, the history and stories behind them always attracted me. Somewhat I could always use them in my projects.</p> <p>In landscape architecture, the historical narratives brings back stories, history and hidden information that help on the understanding of a determined place and its people. The meaning of the transformations through time also adds valuable content to the design, resulting in a project more close to the reality and with more identity.</p> <p>I also like to observe people and how they interact with places in the city. I always do that where I live and when I go visiting some new city. Cities do not exist without people and it is crucial to understand these interactions take place and how, for which purposes and uses. Urban spaces are shaped by people and I like to understand how they did it. Urban landscapes fascinates me.</p> <p>The combination of these facts made me choose the Urban Fabrics studio, where I “navigate” in a field of work where people, history, and urban landscapes are integrated and indissociable.</p>	

### III Graduation project

Title of the project	Symphony for the dike: orchestrating a soundscape ecology design for a city park on the Delflandsedijk in Maassluis
<b>Context and aim of the project</b>	
Location (region / area / site)	South Holland/ Maassluis/ Delflandsedijk
Problem statement	<p>In Landscape Architecture, the phenomenological approach is essential to investigate and understand a place, using our sensory capacities to extract and collect information. The posed problem of this research project is a result of a collection of experiences at the location, with a focus on sounds.</p> <p>The Delflandsedijk in Maassluis is parallel to the river <i>Scheur</i> (how river Maas is named in this part of the delta) and is located less than 450 meters from its nice boulevard, where many people walk or bike daily. It is obvious to imagine that these same people have to pass through this dike at some point, and somewhat, interact with it. However, this does not happen.</p> <p>This dike is a borderline of <i>Het Balkon</i>, a recent functional neighbourhood of Maassluis, whose residents are mainly kids and people between 35-50 years old. A neighbourhood with this profile is normally very vivid and a huge area of grass (the dike) seems to be the perfect place for kids to play and run freely, but instead, it is mostly used by dog owners to walk their pets, in different moments of the day.</p> <p>Walking along the Delflandsedijk is a disturbing and lonely experience. There are no people over there. There are no "sounds of life" such as conversations, laughs, screams or cries. Not even the dogs bark. Sounds of birds, insects or other non-human life are not significant and there are moments of almost silence. The proximity to the river and a small forest (<i>Sterrenbos</i>) brings flocks of birds and ducks through the area, but they never stay on the dike. The</p>

	<p>systematic sounds of the metro and its gates' alarm are very intense and combined with the traffic of vehicles, especially during rush hours, mask any other sounds. The airplanes that fly to and from Rotterdam Airport can be heard with no difficulty because they have low altitudes when passing over the area.</p> <p>In summary, the Delflandsedijk has a very poor environment, where sounds are reflected and reverberated since it is a flat area, with very few absorption surfaces and elements. It is an underused and under-vegetated public space, muted for social interaction opportunities. Merged into the urban landscape of Maassluis, it performs as a utilitarian element, emitting safety notes (not perceived by people) in a not-orchestrated urban landscape.</p> <p>The Delflandsedijk, as well as many other Dutch dikes, has the potential to offer higher urban landscape quality, such as promoting social interactions and well-being while improving the use of public space, as well as increasing biodiversity. Recent researchers are finally considering dikes as the new contributors to climate adaptation, since the engineered utilitarian character is not solving many important topics, such as climate adaptation. One of the most important issues is to understand the landscape dynamics through time and work with them.</p> <p>It is time to look at the dikes not only as an object/ machine but as a place where multiple uses and functions can happen, such as living, working, sporting, enjoying nature, recreating, playing, eating, resting or simply listening to its sounds.</p>
Research question(s)	<p>This research question aims to answer how the landscape potentialities of <i>Delflandsedijk</i> within Maassluis can be</p>

	<p>used in the design of a city park, using Soundscape ecology, a phenomenological scientific approach, to improve the liveability of a place, promoting well-being, social interactions, and bringing more biodiversity.</p> <p>Research question:</p> <p>How can the landscape potentialities of Delflandsedijk in Maassluis be transformed into a vibrant and quality urban landscape as a city park, using soundscape ecology as a design approach?</p> <p>Sub-research questions:</p> <ul style="list-style-type: none"> <li>- How is the urban landscape of Delflandsedijk regarding its potentialities? How is it being used nowadays?</li> <li>- What are the sounds of the Delflandsedijk?</li> <li>- Can these sounds promote social interactions and well-being of the people, and contribute to biodiversity?</li> <li>- How can soundscape ecology design be relevant to the design of the park and contribute to future climate adaptive design/solutions?</li> </ul>
Design assignment	<p>The design assignment is a city park at the Delflandsedijk in Maassluis, using Soundscape ecology as the design approach. The park will bring many benefits to the city, to the people and the nature.</p>
<p>[This should be formulated in such a way that the graduation project can answer these questions. The definition of the problem has to be significant to a clearly defined area of research and design.]</p>	
<b>IV Graduation process</b>	
<b>Method description</b>	
<b>Research Methods</b>	

A mixed-methods approach was used to build the work. Fascination and the Landscape Architecture approach of human experiences and perceptions of sounds demanded firstly **Field work** and **Site analysis** research methods.

The posed problem indicated a research question and sub-questions, which led to the establishment of a theoretical framework for a **literature review**, in which the dike is the landscape element in evidence and therefore, will be analysed as such. As a theory which will guide this research project, Soundscape will be presented with a special focus on Soundscape Ecology, to help building a base and guidance for the **design** thinking process and the **design** product.

Case studies are also analysed to contribute to design argumentations.

Inductive and deductive analysis are used for critical reflections.

### **Research techniques**

Research Techniques for **Field Work**:

- Photographing
- sketching
- mapping sensorial experiences with sounds, using the "Getting lost" approach.
- sound recordings

Research Techniques for **Site Analysis**:

- Biography of the place ('sounds in history')
- Photographing
- Sketching
- Mapping the landscape through time; urban elements; green and blue structures; soil; sound disturbances
- Ethnography: pictures of the dike taken at different hours of the day, since 2022, to observe the changes performed on the landscape when considering fixed and non-fixed elements, based on the theory of Amos Rapoport, "The meaning of the built environment".
- "Soundwalk scoring" with recordings, based on Saskia de Wit's method of "Walking and scoring"
- Readings of municipal planning, policies and visions

Research Techniques for **Design**:

- resident's opinion through simple online questionnaire about the area for the city park
- sketching scenarios using the information gathered during Fieldwork and site analysis, using various representation ways (hand drawings, digital drawings, physical model).

## Literature and general practical references

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## V Reflection on the project proposal

1. What is the relation between your graduation topic, the lab topic, and your master track?

My graduation project is consistent with the Master track of Landscape Architecture and the master programme of AUBS since it is a design project for a city park (urban landscape), in which historical biography, landscape transformations through time and analysis of the urban fabric where it is located will be carried out. The design assignment will cover all the main topics approached during the compulsory courses on the Master track (Sensorial and spatial analysis, Dutch landscapes, mapping, working through scales, for example).

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

### Social relevance:

My graduation project is working on a very relevant topic for the city of Maassluis: the social interaction of the people. A city park has all the elements to promote these social interactions, especially considering the area, which has a strategic location.



This city park can be a key element within the approved future urban redevelopment of Maassluis, in which three main areas were chosen. The city park can make the planning stronger and enhance not only the social-economic aspects but also the green-blue structures, history, tourism and especially making better use of the public space.

Scientific Relevance:

My graduation project supports the recent researches which point out that the dikes can offer much more than only utilitarian functions. Working with the Delflandsedijk is an opportunity to contribute to this scientific approach, broadening it to regional and national scales.

Soundscape is also a relatively recent scientific approach and not usually used on daily practice of landscape architecture offices. There are few urban landscape projects implemented worldwide using this theory. Soundscape ecology has been proven to also be a relevant solution for landscape design. In my graduation project, I intend to enforce it through the design. New ways of elaborating a landscape architecture project are needed to deal with different and challenging contemporary problems. Soundscape ecology is filling the gap between a very objective way of thinking from soundscape (precise measures) and phenomenological thinking (holistic approach).

Professional relevance:

The graduation project is a sum of everything that was learned during the Master's, combined with some previously acquired experiences. The professional relevance states the fact that I am working as if I were in a commissioned team. Although it is academic work, I am developing the project as if I were in practice.