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**

<table>
<thead>
<tr>
<th>Name</th>
<th>Franka Fontijn</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
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**Studio**

<table>
<thead>
<tr>
<th>Name / Theme</th>
<th>Flowscapes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teachers / tutors</td>
<td>Nico Tillie, Stefan van der Spek</td>
</tr>
<tr>
<td>Argumentation of choice of the studio</td>
<td>Landscape Architecture</td>
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**Graduation project**

<table>
<thead>
<tr>
<th>Title of the graduation project</th>
<th>An active roadscape: Overcoming infrastructural barriers in order to reconnect to the Waterfront of Toronto.</th>
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**Goal**

<table>
<thead>
<tr>
<th>Location:</th>
<th>Toronto, Canada</th>
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<tbody>
<tr>
<td>The posed problem,</td>
<td>Waterfronts in cities are often cut off from the downtown core by infrastructural barriers with a purely utilitarian function of transport for cars. The infrastructure causes fragmentation of spaces, is unsupportive of active modes like pedestrians and cyclists which results in less livable areas in the city. The two major aspects of the problem are: 1. Infrastructure seperates 2. Infrastructure does not support active modes and deactivates life in the public realm.</td>
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*Active city’s and liveable city’s are connected. Active modes are crucial for a livable city, especially in high-density urban areas, where the car causes congestion and becomes less efficient. The negative impacts such as noise and accidents will have a negative effect on the liveability.* (Vuchic, 2017)
<table>
<thead>
<tr>
<th>research questions and design assignment in which these result.</th>
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</table>
| How can the waterfront and downtown core of Toronto be reconnected by transforming the infrastructural barrier in between, in order to establish a more active and liveable part of the city?  

Come up with a design solution that will reconnect the downtown core of Toronto with its waterfront benefitting the activity and liveability of the area.  

The infrastructural barrier needs to be transformed into a connective zone and connect to the new developments in the waterfront. (masterplan)  

On the scale of neighborhoods, a part of the connective zone will be designed in more detail (local)  

Important meeting places, important connections and the design for active modes will be designed in more detail focussing on the experience of the place and materiality. |

**Main Research Question:**  
*How can the waterfront and downtown core of Toronto be reconnected by transforming the infrastructural barrier in between, in order to establish a more active and liveable part of the city?*  

In order to answer the main research question, keeping in mind the two identified major problems,  
- Infrastructure seperates  
- Infrastructure does not support active modes and deactivates life in the public realm,  

the following sub-questions need to be answered:  

(understanding the site)  
1. How has the waterfront developed through time?  
2. How is infrastructure a barrier between the waterfront and downtown core of Toronto?  
3. Where is the network for different modes located?  

(designed principles)  
4. What design principles can be drawn from projects with similar problems of infrastructural barriers?  
5. What design principles can improve the liveability of the research location, on different scales?  
6. What design principles can help to activate life in the public realm on different scales?
7. How can the design principles be applied in order to transform the infrastructural barrier?

8. What lessons can be learned from the research - and transformative project?

**Process**

**Method description**

A theoretical framework helps to translate the objective (ambitions) into different design tools. The ambitions of connecting, active modes and liveability will lead to different design tools on different scales. For example, active modes will need a dense mixture of facilities, wayfinding is a tool that will help establish connections and design for social interaction is part of a liveable city. The design tools, together with the analysis on the research location are input for the design. The analysis will be done by literature study, mapping, overlay of maps, data resources and 3d experiences. When scaling down and up, more analysis needs to be done on different scales to be able to understand the situation.

Also from precedential research (in Toronto and New York City), design tools can be drawn and implemented on my own design.

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**Fascination** → **Problem field** → **Objective**

To come up with a design solution for the reconnection with waterfronts like Toronto, dominated by high-speed traffic, by designing a connective zone that will strengthen the connection with the waterfront, to promote active modes and contribute to the liveability of Toronto.

**Main RQ:**

How can the waterfront and downtown core of Toronto be reconnected by transforming the infrastructural barrier in between, in order to establish a more active and liveable part of the city?

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**Methods**

- **SQ1** How has the waterfront developed through time? understanding the site
- **SQ2** How is infrastructure a barrier between the waterfront and downtown core of Toronto? understanding the site
- **SQ3** Where is the network for different modes located? understanding the site
- **SQ4** What design principles can be drawn from projects with similar problems of infrastructural barriers? design principle elaboration
- **SQ5** What design principles can improve the liveability of the research location, on different scales? design principle elaboration
- **SQ6** What design principles can help to activate life in the public realm on different scales? design principle elaboration
- **SQ7** What lessons can be learned from the research - and transformative project? reflection
**Literature and general practical preference**

City of Amsterdam (2017) *The Active City*. Urhahn: stedenbouw & strategie
Donald Appleyard, Anne Vernez Moudon, et al (1987) *Public Streets for Public Use*
Jacobs, Jane (1961) *The Death and Life of great American cities*
Holanda: Eburon

**Reflection**

**Relevance**

The graduation project aims to research the potential of landscape architecture in the rethinking of infrastructure: from a utilitarian component of traffic management to a component of the landscape. In this graduation project, the case study is the high-speed traffic dominated waterfront of Toronto. A waterfront like this is found all over the world. Many waterfront have lost their function as a harbour for trade. Therefore, they got abandoned and replaced by other infrastructure for cars or trains. Now, waterfronts all over the world are being redevelopment because cities want to reconnect to it again. This graduation project is part of the revolution but aims to make a connection with the downtown core of the city, instead of only redeveloping the waterfront. The project has social -, environmental -, and spatial aspects.

**Time planning**

**P1:**
1. project idea, title and outline
2. theoretical and methodological structure
3. start glossary
4. first analysis on regional and local scale
5. precedent research and design principles

Site visit Kopenhagen: visit precedents

**P2:**
1. further development of theories and methods
2. continue site analysis in relation to first design
3. making first step towards conceptual design
4. make working model

visit Toronto after p2 for analysis and further development of design. Visit to New York will provide insights by using projects as references for my own design.
p3:
  1. conceptual diagrams and regional concept
  2. plans on large and small scale
  3. design principles
  4. detailed design
  5. work on model

p4:
  1. theoretical and methodological structure, integral report
  2. review analysis
  3. final design
  4. presentation model