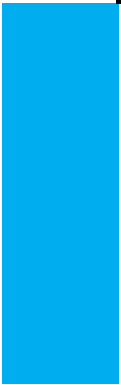# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

# Graduation Plan: All tracks

The graduation plan consists of at least the following data/segments:

| Personal information | |
| --- | --- |
| Name | Thomas van Daalhuizen |
| Student number | 4598105 |

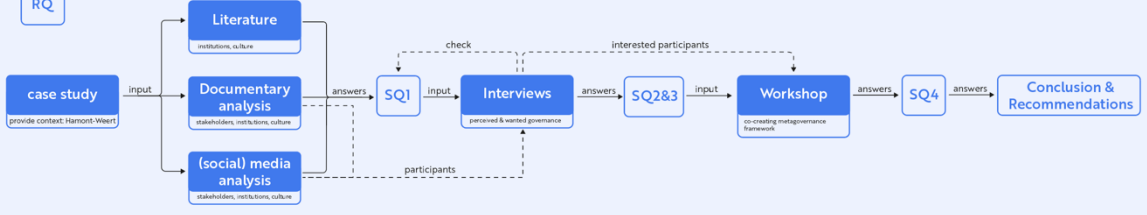| Studio | |
| --- | --- | --- |
| Name / Theme | Sustainability transitions and the transformation of port cities | |
| Main mentor | Paul W. Chan | Design and Construction Management |
| Second mentor | Karel Van den Berghe | Spatial Planning and Urban Development |
| Argumentation of choice of the studio | The studio is the only one within the graduation lab of MBE that focusses on larger scale transitions. | |

| Graduation project | |
| --- | --- |
| Title of the graduation project | Crossing Border Sustainably: Using metagovernance to activate stakeholders to facilitate sustainable mobility transitions in a cross border |
| **Goal** | |
| Location: | Dutch-Belgian Border |
| The posed problem, | There have been efforts to decrease the use of cars that emit a lot of greenhouse gasses. This translates to a new trend of transitioning to electric cars. Electric cars might help reduce the CO2 emission but bring a new problem to table as it creates demand for scarce raw materials such as cobalt to produce the batteries, inevitably creating a new cycle in which use materials from a non-renewable source for our new way of "sustainable" transport (Kherdeen, 2021; Tabuchi & Plumer, 2021). Stepping away from using a car as preferred transportation method is difficult as entire cities, regions and countries have been planned so that every resident may travel by personal automobile (Kherdeen, 2021). However besides polluting the surrounding environment cars also present several other challenges in terms of health hazards and the use of urban space for infrastructure which is a scarce commodity (Ding et al., 2022). The European Commission has therefore set a |

| | |
|---|---|
| | goal to transition to a zero-carbon mobility network with the first milestone, a 75 percent reduction in the number of car trips, in the year 2050.

Despite, political commitments made and the high investment in the physical space to promote Sustainable Urban Mobility (SUM), there is some inability to achieve the ambitious decarbonization targets through incremental planning methodologies. A solution provided for this problem is metagovernance, which allows for a combination of different governance styles that together create the best framework to support transitions (Meuleman, 2019). While policy making is mostly about incremental change, metagovernance aims at system change.

Barriers such as differences in institutional and administrative difference, that occur in border regions and often prevent the sustainability transitions pose an opportunity to test the abilities of metagovernance. Furthermore, border regions are particularly vulnerable to changes in accessibility to services and job opportunities when changing transportation mod es. This is due to a lack of public transport infrastructures as well as agglomeration benefits. These conditions highlight the validity of cross-border regions as a case for the implementation of metagovernance.

In 2001, the concepts of metagovernance were introduced in Dutch legislation (Bosch-Ohlenschlager, 2010) associated with the sustainable development debate and complex social issues derived from unsustainable and persistent problems in order to accelerate systemic and disruptive changes.

However, since the introduction of metagovernance no such systemic/disruptive changes have taken place in connection to sustainable mobility. Therefore, it is relevant to research the operationalisation of metagovernance and its applicability in sustainable mobility transitions. This is in line with current knowledge gaps concerning the difficulties of policy development that support sustainable mobility changes (Nikulina et al. 2019) |
| research questions and | To what extend can **metagovernance** activate stakeholders to facilitate **sustainable mobility transitions** in cross-border regions? |

| | |
|---|---|
| design assignment in which these result. | Development of overview of perceived and needed govenrnace styles and guidelines to co-create metagovernance frameworks for cross-border mobility transitions |

## Process

### Method description

The thesis utilises a range of research methods to investigate the role of meta-governance in cross-border regions and stakeholder collaboration for sustainable development.

Firstly, a case study approach is employed to gain an in-depth understanding of specific cross-border regions and their governance structures. This method allows for a detailed analysis of real-world scenarios, highlighting the challenges and opportunities in implementing meta-governance practices.

A literature study is conducted to review existing scholarly works and theoretical frameworks related to metagovernance, cross-border regions, and stakeholder collaboration. This helps to establish a solid theoretical foundation and identify gaps in the current knowledge.

Documentary analysis is employed to examine relevant policy documents, reports, and other official sources. This analysis provides valuable insights into the existing governance frameworks, policies, and strategies employed in cross-border regions.

(Social) Media analysis is utilised to explore the online discourse and public opinions related to cross-border mobility, sustainable mobility transitions and governance. This method helps to capture the perspectives of various stakeholders and understand their engagement and concerns in the digital sphere.

Interviews with key stakeholders, such as policymakers, public transport operators, and community representatives, are conducted to gather first hand insights and perspectives on perceived governance styles. These interviews provide valuable qualitative data, allowing for a deeper understanding of the challenges, successes, and best practices of governance in the Dutch Belgian cross-border region.

Additionally, a workshop approach is employed to facilitate interactive discussions and collaborative problem-solving among stakeholders in order to co-create a metagovernance framework. Workshops provide a platform for participants to share their knowledge, experiences, and ideas, fostering dialogue and collective decision-making.

To what extend can metagovernance
activate stakeholders to facilitate
sustainable mobility transitions in
cross-border regions?

**RQ**

**case study**
provide context: Hamont-Weert

input

**Literature**
institutions, culture

**Documentary analysis**
stakeholders, institutions, culture

**(social) media analysis**
stakeholders, institutions, culture

answers

**SQ1**

input

check

participants

**Interviews**
perceived & wanted governance

answers

**SQ2&3**

input

interested participants

**Workshop**
co-creating metagovernance framework

answers

**SQ4**

answers

**Conclusion & Recommendations**

# Literature and general practical preference

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## 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 relation between my graduation project topic, the studio topic of Sustainable transitions and transformation of port cities, my master track in Management in the Built Environment, and the master program in MSc Architecture, Urbanism and Building Sciences is closely intertwined.

My graduation project topic focuses on meta-governance in cross-border regions and stakeholder collaboration for sustainable mobility transitions. This topic aligns with the studio theme of Sustainable transitions and transformation of port cities, as it addresses the need for effective governance frameworks to facilitate sustainable transitions. As a student in the Management in the Built Environment track, I have gained knowledge and skills related to strategic management, governance, and policymaking in urban contexts. These competencies are directly applicable to my graduation project, where I explore governance mechanisms and stakeholder collaboration for sustainable mobility transitions. However MBE is mostly focused on the Dutch context therefore this thesis will give me the opportunity to gain additional knowledge of management practices in other countries.

Moreover, I also did the master track Urbanism which has provided me with a comprehensive understanding of the built environment, including urban planning, architecture, and sustainable development. This knowledge base enables me to approach the topic of sustainable mobility transitions from a holistic perspective, considering the spatial, social, and environmental aspects of urban areas.

Furthermore, the master programme MSc AUBS focusses in general on inclusiveness, sustainable futures and how to envision those. This thesis can contribute to getting to that sustainable future and aims to support an inclusive process.

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

This research on meta-governance in cross-border regions and stakeholder collaboration is highly relevant to society. It examines how effective metagovernance can foster collaboration among diverse stakeholders in addressing transboundary issues. The findings can inform the development of inclusive and participatory governance frameworks, ensuring the legitimacy and effectiveness of decision-making processes. A societal transition such as towards sustainable mobility has to be inclusive so that policy and projects are supported and there is compliance with possible regulations. Furthermore, the research can help contribute to the development of cross-border regions as frontrunners in sustainable multi-modal transport networks. Not only focusing on the infrastructure aspect but even more on increasing the social capacity of the region. Border regions are usually the ones that see the disappearance of services and job opportunities which creates a need to travel longer distances. This thesis can contribute to mitigating the results of higher unemployment rates and the outflow of higher educated personnel and promising young people as well as preserve services in the region.