

# 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](mailto: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:

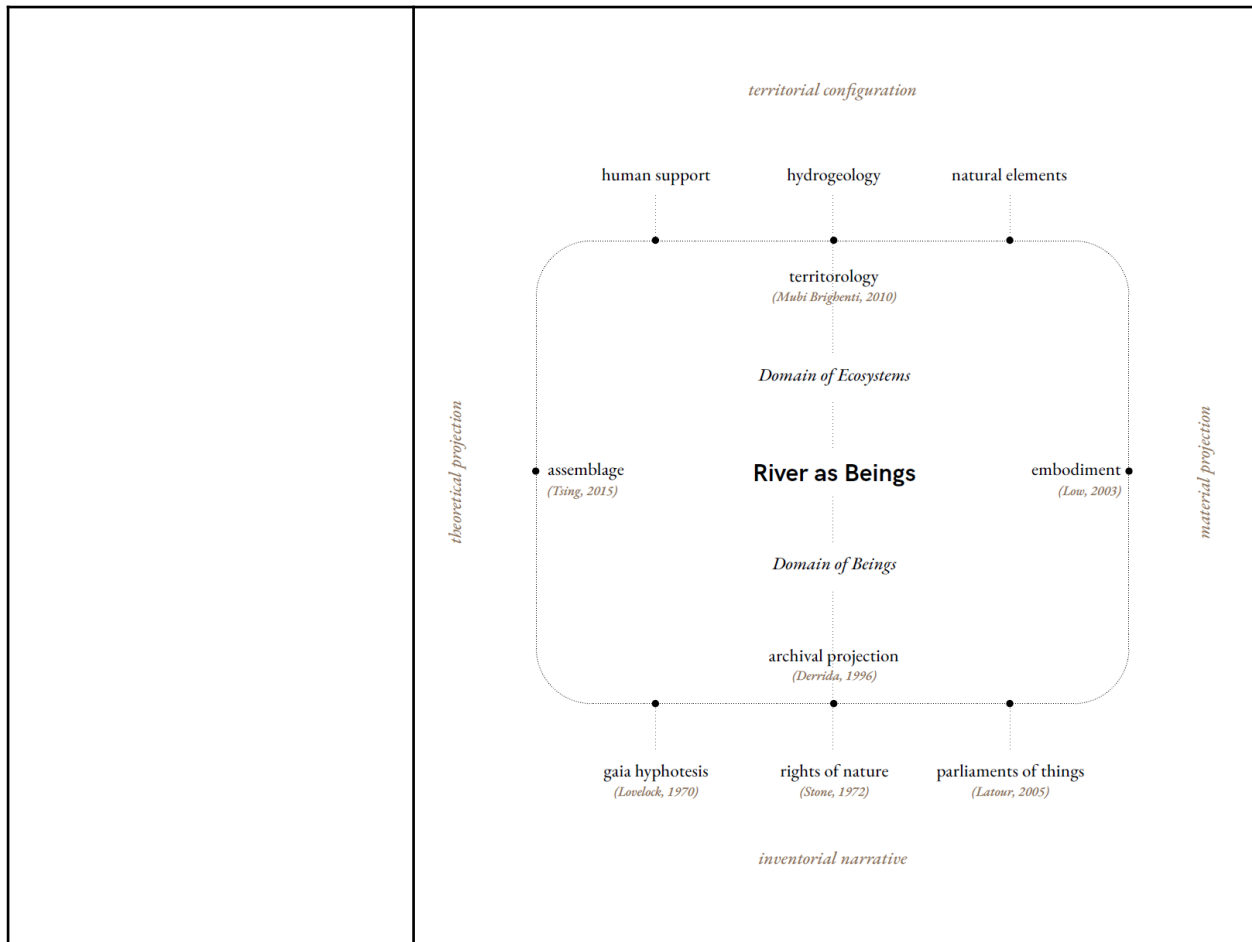
<b>Personal information</b>	
Name	Satria Agung Permana
Student number	5020344

<b>Studio</b>		
Name / Theme	Transitional Territory	
Main mentor	Luisa M. Calabrese Taneha K. Bacchin	Urban Design - Department of Urbanism
Second mentor	Denise Piccinini	Landscape Architecture – Department of Landscape Architecture
Argumentation of choice of the studio	<p>Due to my limited understanding of architecture and its inability to address the complex issues of Earth degradation and social segregation, I have decided to shift my attention to studying Urbanism at TU Delft. As I embarked on my studies in my first year, I pondered how we can enhance our understanding of nature in order to be more mindful of avoiding excessive and self-serving design. Subsequently, I expound upon my journey in utilising (spatial) design as a means to comprehend nature, addressing my inquiry and using a design-oriented approach to improving existence. The Transitional Territories Graduation Studio introduced me to the concept of 'altered nature — poetics of change', which expanded my understanding of how we might explore human interactions with the natural world through various scales, interdisciplinary approaches, and thought-provoking methods. Consequently, this studio will enhance my skills as an architect and urbanist, enabling me to contribute to the future development of the built environment in Indonesia.</p>	

<b>Graduation project</b>	
Title of the graduation project	River as Beings: Rivers Embodiment in Java's Temporal Riparian Landscape

<b>Goal</b>	
Location:	Yogyakarta, Indonesia
The posed problem,	<p>The Anthropocene period profoundly influenced climate ecology and imperilled the biodiversity on Earth. And the extensive colonisation of nature by cities in recent decades, all in the pursuit of human settlement. The river, which is seldom mentioned, is one of the affected ones. The current state of the river clearly demonstrates its extensive modification to cater to human requirements. The river is no longer capable of withstanding the stresses. In order to forge a more promising future, we must collaborate closely to enhance the quality of our river.</p> <p>The Environment and Forestry Ministry (KLHK) stated that 59% of Indonesian rivers are severely polluted by household and industrial waste (KLHK, 2020). Sapiens have shaped this Earth for centuries until it reached the limits of climate change in the whole world. The tension between them and nature gradually will lead to the failure of civilisation. River as a law subject recently has become an international discourse since the Whanganui River in New Zealand and the Gangga and Yamuna Rivers in India now have their rights. For humanity, water has been the centre of civilisation for centuries. However, in Indonesia, scattered urbanisation has altered the river into a poor area, leading them to pollute and treat it as their backside. The awareness of climate change and ecological crisis in this Anthropocene era put us on the demands of a radical paradigm shift in tangible and intangible subjects. Through time, the river has been supporting the inhabitant's daily activities. Each part of the dynamics serves different purposes, from irrigation to transportation. The late multicultural influence on urbanisation completely reshaped the imagination of the river and started to become polluted from industrial and domestic waste. Polluted rivers gradually infect the reservoir basin and threaten the underground water aquifer that has been used as domestic water wells. Moreover, although the river has its own ability to filter, it still cannot degrade the plastic properly and leaves microplastics towards the sea and its fauna, which are later consumed by humans.</p> <p>The need for spatial alteration and physical contribution from architecture, landscape, and urbanism mending towards the river rights. Therefore, by researching Java, and specifically Yogyakarta's river dynamics through</p>

	<p>macro and micro territorial methodologies, to understand its characteristics as beings potentially address its rights and further tapestry the interaction with people.</p>
<p>research questions and</p>	<p>Main Question How can the right of nature recontextualise the relationship between humans and nature in Yogyakarta's river basin territories through spatial embodiment?</p> <p>Sub Question</p> <ul style="list-style-type: none"> <li>● What is the manifestation of the right for nature in the riparian landscape, and how can we understand it?</li> <li>● What are the networks of the relationship between the river and humans as an entity in this altered landscape as an intervention in the uncertain future?</li> <li>● How can (documentary) fieldwork and archives broaden our comprehension of the indigenous relationship of rivers and human ecosystems in the Anthropocene?</li> <li>● How can landscape (architecture) and territorial design recontextualise the river as an entity embodied in a temporal landscape?</li> </ul>
<p>design assignment in which these results.</p>	<p>All the questions will be answered in the following chapters of the thesis. It started with comprehending the rivers in the world and, eventually, Java, Indonesia. Continued with fieldwork and archival study to inventory the alteration to rivers and designing its projection. Followed by territorial projection on the regional scale and concluded by reflection through landscape and architectural design to recontextualise our relationship with the river. In order to address the spatial inquiry within this context, we must return to the fundamental aspect: human perception and experiences. The integration of several senses in perceiving urban environments holds significance in the fields of design and planning. The general public would comprehend the concept once they are able to recognise the objectives and ideas. An example of this is when architectural design takes into account the additional experiences of sound, touch, smell, and taste in addition to sight. This approach may result in the creation of structures and urban areas that more effectively facilitate our social, cognitive, and emotional growth.</p>



**Process**

**Method description**

A series of research will undergo this project in the following methods:

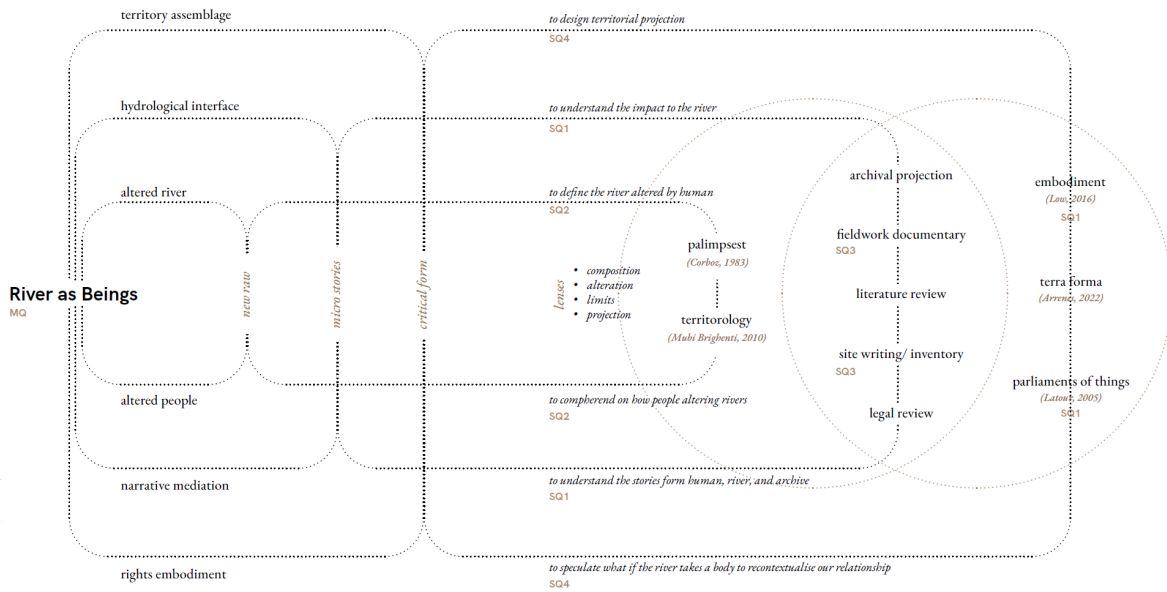
- Historiography analysis of riparian landscape.
- Forensic site writing through archive and fieldwork documentation.
- Extraction of geographical information systems and satellite imageries as cartography analysis and projection.
- Design as theoretical reflection.

The premise is clear: if the river assumes a tangible manifestation that people can comprehend, the rights of the river will eventually be acknowledged, so enhancing our consciousness of the imperative to responsibly steward nature in accordance with its inherent nature and our understanding of it. Engaging in a discussion about this topic within the field of urbanism may present a complex task of exploring initiatives that operate on several scales in order to stimulate a comprehensive comprehension of rivers as entities both in theory and in materiality. Hence, a range of media is necessary, including site/archival research, territorial mapping, envisioning landscapes and architecture, and documentary fieldwork.

The project will be divided into three stages: firstly, understanding the critical form of the altered rivers in Java; secondly, defining the territory assemblage of the 'new

raw'; and thirdly, embodying the human-river relationship through micro-narratives of landscape and architecture in a specific site.

Methodologically, each stage serves distinct objectives: firstly, comprehending the newly exposed state of the modified rivers in Java; secondly, delineating the composition of the territory through the 'micro stories'; and thirdly, defining the crucial structure by embodying the interplay between humans and rivers through micro-narratives of the landscape and architecture in a particular location.



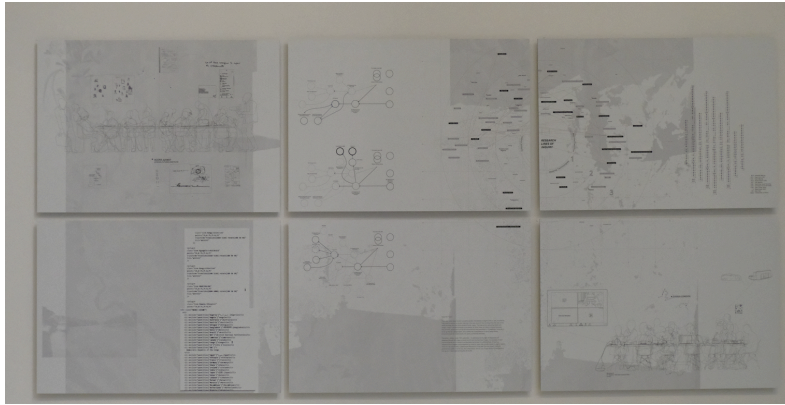
**Expected outcomes:**

*Documentary fieldwork as forensic investigation - a relationship of humans and rivers.*



The Landscape Rehearsals (Gaeilge, Yoruba, Fulfude, 2023, Venice Architecture Biennale 2023)

*Critical cartography as spatial analysis and design.*



Archive of the Future (Clancy, Alice, et. al., 2023, Venice Architecture Biennale 2023)  
*Design as reflection.*



Allmannajuvet Zinc Mine Museum (Zumthor, Peter, 2016. Photo by Per Berntsen)

*Book as thesis report.*



A Guidebook to an Empty Land: Kalimantan and the Shadows of the Capital (Mayrina, Angela, 2021, Harvard GSD)

## Literature and general practical references

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- Yaneva, A. (2022). *Latour for Architects (1st ed.)*. Routledge



## 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)?*

This thesis is about how we reshape or recontextualise our relationship with the river, beings that have been forgotten in post-development design discourse in Indonesia. Graduating from architecture had me thinking that the river is a source of water, a source of natural presence that we could frame in our design. However, familiarising myself with the notions introduced in the Urbanism programme at TU Delft, such as Anthropocene, territorial design, landscape urbanism, etc. made me realise the importance of understanding the context is crucial in design. The theme of 'altered nature' offered by Transitional Territories Graduation Studio opened my views on how we can investigate our relations with nature in multi-scalar, interdisciplinary, and provoking ways.

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

This project aimed to sound the voice that is often unheard in design practice and policy, that always put the river as an object. Subsequently, as a subject, rivers and humans should develop relationships intangible and tangible. Rivers have been altered since the need of our race to conquer and dominate nature in order to survive. However, most of the time, it leads to catastrophic consequences, such as floods, land slidings, water scarcity, etc., due to a lack of awareness of how to maintain the river properly. This project will contribute to further studies of the rights of nature in realms of spatial and territorial design.

In the professional domain, this project addresses the importance of interdisciplinary and flexibility to navigate in the problem field. Socially, to address the quality of life and space, it is important to comprehend the rights of nature and implement climate justice in our lives. Scientifically, through multifaceted theoretical review, the architecture, landscape and urbanism design and planning could achieve a discursive domain.