

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	Angela Ferrero
Student number	6048358

Studio		
Name / Theme	Transitional Territories	
Main mentor	Elena Longhin	Urban design
Second mentor	Raquel Hadrach Silva	Urban design
Argumentation of choice of the studio	I have chosen Transitional Territories Studio because of the aim of rethinking through exploration and design how global decisions and needs can shape relationships between territory, societal needs and the environment with a transdisciplinary and multiscale approach. I want to rethink how this extractive infrastructures and processes can relate with the human and non-human that surround them, with the soil and the water that are modifying.	

Graduation project	
Title of the graduation project	Proposing a transition from the contact zone
Goal	
Location:	High Andean Plateau, South America
The posed problem,	The climate crisis and the pressure to reduce greenhouse gas emissions are driving the extractivism of critical materials such as lithium, creating 'sacrificial zones' under the banner of sustainability. In the Lithium Triangle of the Andean plateau, lithium is extracted through brine evaporation, an unconventional method, reinforcing the capitalist commodification of resources through advanced technologies. This extractive approach, rooted in a fragmented and dualistic worldview, imposes an oppressive territorial logic

	<p>and offers limited public information to long-marginalised communities. The rapid pace of technological progress, coupled with the historical disconnection between natural and urban systems, driven by the need for rapid development from local governments, takes the form of an exploitative practice that creates a sacrifice zone where different worldviews and responses intersect deepening power imbalances, particularly in vulnerable areas with long histories of state neglect. While significant responses addressing the impacts of lithium mining are arising, the diversity of perspectives taken into account and lack of spatial coordination hinder the formation of a unified vision for a sustainable future.</p>
research questions and	<p>How can a territoriality* of brine extractivism on the Andean plateau be achieved with a balance of power over the territory for a truly ecologically, politically and economically sustainable future?</p> <p>SRQ1- What information is emerging in the area? By whom?</p> <p>SRQ2 -How is this information influencing the way in which decisions are taken?</p> <p>SRQ3 - What is permitting, limiting and regulating lithium mining operations?</p> <p>Design</p> <p>SRQ5 - How a mediation can be achieved?</p> <p>SRQ6 - How this mediation can be operationalised?</p>
design assignment in which these result.	<p>The formulation of Guidelines of mediations and the proposal of New design of territorial regulation</p>

The research aims to open the perspective and find common values between ontologies that can be synergised and mediated with a distributed agency. To achieve this, this research aims to shed light on the different narratives that are currently present in the territory in order to understand the logics of the territorialisation. The aim of the project is to dissect current practices and policies that allow and operate under the ontology of extraction, and to unveil current and historical practices of territorial appropriation in the region.

The expected outcomes of the research and the project proposal include:

The contribution of knowledge expansion about the area through a compilation and interrelation of information and the representation of local practices and processes.

The Analysis and critique of current regulations.

The reconstruction and socio-cultural local based knowledge and modes of inhabitation of the territory.

The construction of a Practical framework for mediation through: the formulation of Guidelines of mediations and the proposal of New design of territorial regulation.

Process

Method description

- (1). Literature Review / Information review: A compilation and critical analysis of documentation produced about the area and a review of public information such as documentaries, podcasts.
- (2). Case study: Selection of particular representative cases
- (3). Policy review: compilation, analysis and multiscale interrelation of policies
- (4)Co-mapping - Spatial interviews-conversations. Spatial representation of conversations by local community members and academics
- (5). Analytic mapping: The construction of maps that inform the territorial procedures analytically.
- (6). Documentary archive review: on site literature review in public archives and provided by local people.
- (7). Research by design

Literature and general practical references

'Planetary Mine: Territories of extraction under late capitalism' (Martin Arboleda, 2020)

Operational Landscapes: Hinterlands of the Capitalocene (Neil Brenner, Nikos Katsikis, 2020)

Seeing like a State (Scott, 1999)

Designs for the Pluriverse: Radical Interdependence, Autonomy, and the Making of Worlds (Escobar, 2017)

Ecology of knowledge (Wojciechowski, 2010)

Sacrifice Zones: The Front Lines of Toxic Chemical Exposure in the United States, (Lerner, 2010)

Friction: An Ethnography of Global Connection (Tsing, 2005)

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 research and the Transitional Territories Studio lies in the understanding of the territory as a process. A shared process product of ecological and political relations.

Both in a global scale, connected through the impacts of Lithium global process through a commodification of resources and sacrifice zones to achieve an Energy Transition, and in a local scale, understanding the interrelations between humans, non-humans, practices and processes. With my masters track is the working with several scales and understanding global trends and processes and the aim of integration of social, cultural, economic and political perspectives with the natural and man-made conditions to achieve a sustainable future.

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

Scientific relevance: This project aims to contribute to the body of knowledge of impacts of critical raw materials extractivism through a political ecology lense.

Although there is research on mining with socio-political, philosophical and environmental approaches, the positioning of spatial disciplines within the problem has not been widely explored and tested as a governance tool.

Moreover, it aims to contribute to the body of knowledge of academic practices and decolonising theories by informing territorial practices that were historically subjugated.

Societal relevance of your graduation project: The changing of narrative from a dualistic perspective to a relational one give agency to actors that are oppressed and invisibilised. The unfolding of local practices and processes aim to shed light

and provide tools to achieve a just transition, and the translation of traditional knowledge to the academia can be a tool for local indigenous communities to communicate their ontology.