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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	Ilias Vouras
Student number	5859026

Studio		
Name / Theme	Explore lab	
Main mentor	Alper Semih Alkan	Architectural design and theory
Second mentor	Rufus Van den Ban	Technical Building Design
Third mentor	Heidi Sohn	Architectural theory and research
Argumentation of choice of the studio	<p>I chose to enroll to the Explore Lab graduation studio since it would allow me to address my personal research and design concerns. My interest circulates around the notion of extraction sites, more specifically coal mines and marble quarries. My research and design topic is about the recovery of post extraction territories after their exploitation. In the recovery process, the role of architect is examined as a carrier of local narratives, construction technics. Explore lab provides me with the ground to set my own standards for those questions and flexibility to work with chosen tutors, theoretical and practical tools, and design location. The project is located in the proximity of my hometown, at the North part of Greece, called West Macedonia. There several extraction sites based on coal and stone are located, making it the most intense production region in Greece.</p>	

Graduation project	
Title of the graduation project	"Metaplasia": Scenarios for recovery of post-extraction territory of Eordaia Region
Goal	
Location:	West Macedonia region, Greece
The posed problem,	Soil extraction results in different material qualities. Some products, like coal, are affiliated with industry and pollution. Others, such as marble, equal to perpetual wealth and aesthetic.

	<p>Departing from this difference between marble and coal, my research investigates extraction practices as a multilevel topic, an ever-growing field where artificial and natural landscape blends. In the possibility of extraction sites' closure, many questions emerge in regards to the impact on the city, environment and humanity sites towards a future transition.</p> <p>In the region of West Macedonia, more specifically "Eordaia", in the North part of Greece a combination of extraction sites are located. Coal is the dominant factor, as the production line carries two thirds of Greece's energy, providing employment opportunities in the region. Besides coal, marble and other stone quarries coexist in the region creating a material network of extraction. This dense materiality blends with the surrounding industrial building shells, giving its own identity to the region.</p> <p>The Greek national government has created a plan for the closure of mines to take effect by the end of 2028. The reason is the end of the repositories, as the region need to focus on its next "post-lignite" period. The future of those territories and the content of the new period raise questions, regarding spatiality and design. In this framework project attempts to forecast this period and turn it into a productive process for humanity and environment, to carve a new culture with sympathy to natural processes.</p>
research questions and	How could we recover post extraction territories
design assignment in which these result.	The post-extraction era in West Macedonia will lead to many changes in

local conditions affecting the residents of the area who have been dependent on mining as their main economic source. The prior agricultural communities, left their former expertise to involve in mining activities. As a result traditional professions and skills slowly have decline, as a large number of local craftsmen who were building with extracted local materials like stone and wood do not impart their knowledge any more, due to the concretes' triumph as the main construction material. The loss of skill knowledge in collaboration with natural degradation which affected the ecosystem, will lead to a decline of population. The post-extraction era has already began, with abandoned industrial shells and large portions of wounded land awaiting recovery strategies and care. Despite those not so optimistic facts the soil of the region is still fertile, with some ecosystems adapting to the extraction change, and stone-marble extraction is still happening, as stone repositories are considered in abundance.

Project aims to recover the territory through the revival of local manual knowledge. Agriculture and craftsmanship, the prominent economic occupations of the past, are turning to oblivion. Focus is a revival of those ideas, however this rethought happens with a contemporary view on technology. Motivation is to assist the region for its self-sufficiency and autarchy, where crafts not only revive but become critical agents of futurity.

My proposal will develop a building program responding to multiple functions of the required land repair. Instead of focusing on a design of an isolated large program unit, a series of site specific smaller interventions will be developed in a section of the coal mine

of the city of Ptolemaida. The intervention points are located within the mine but also in the neighbor areas, villages directly affected by mining activities. The project seeks to create a new material culture on the region, with focus on the natural resources and affiliation with nature, reviving the traditional construction techniques in a contemporary manner. Thus the notion of crafts is used a catalyst of the interventions.

[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.]

Process

Method description

The present research proposes a combination of three related perspectives in multi-scalar analysis. Firstly the analysis focuses on the hinterlands, as the regions which carry industrial production. The main analytical tool is mapping based on the case study in the region of Eordaia, West Macedonia. Secondly a scale down view to the actual extraction sites, mines and quarries of the hinterland is the next step. The aim is to find how mines operate, the hidden data that exist in the soil and relation to human mind, finding the spirit of place. At this stage the analysis is formulated in the form of loose atlas including inventories, catalogues, maps, diagrams and drawings.

Thirdly, the last layer is the role of human beings in mining activities and their material environment. Under the scope of crafts(wo)man, the worker with deep knowledge of materials and connection with tools, the research intends to integrate the architect into the design process of those heavily industrial territories and evaluate his/her role as another craftsman. These three topics do not only represent a scale analysis, but rather a cognitive evaluation of extraction. Based on their oppositions and bonds, extraction is perceived as a system of relations, which necessitates the use of the actor-network theory from Bruno Latour.

The combination of the three perspectives aims to formulate a theoretical basis for my project with a critical understanding of the region leading to create site-specific interventions. Eordaia extraction sites can be seen as a paradigm for rethinking the notion of extraction and the return of local manufacturing. In terms of locality the project implements local raw materials, technics with affiliation with nature and

environment, with a contemporary view. All of these stands for a recovery of Eordaia's wounded nature and its elements.

Literature and general practical references

Theories:

- Bruno Latour: Actor-network theory
- David Gissen: Subnatures

Keywords:

- Terrestrial or a contemporary locality
- Craft
- Repair (as the way to treat design process)
- Uncanny (regarding atmospheres, narratives of the place)
- Material agency

Literature:

- Sennett, R., (2008). The Craftsman. New Haven :Yale University Press
- Latour B., (2005). Reassembling the Social. An Introduction to Actor-Network-Theory, Oxford University Press: New York
- Latour, B. (2019). "We don't seem to live on the same planet" – A Fictional Planetarium. Kathryn B. Hiesinger & Michelle Millar Designs for Different Futures, Philadelphia Museum of Art &The Art History of Chicago pp; 193-199.
- Vidler. A., (1992). The Architectural Uncanny: Essays in the Modern Unhomely, 1st edition. The MIT Press: London
- Yusoff, K., (2021). Mine as Paradigm, e-flux Architecture, URL: <https://www.e-flux.com/architecture/survivance/381867/mine-as-paradigm/>
- Gissen D., (2009) Subnature: Architecture's Other Environments, Princeton Architectural Press: New York
- Space Caviar., (ed), (2021). Non-Extractive Architecture Vol1: On Designing without depletion., Stenrberg Press
- Arendt H., Canovan M., (1998). The Human Condition, University Of Chicago Press

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 project investigates different ways for recovery of wounded territories. Invites a design proposal that is closer to the local needs and environmental conditions of every site, a conciliation with matter and place. Similar to the notion of the studio Explore lab, the project explores alternative approaches to the topic of extraction and post-extraction fields, taken from fields of architecture, archaeology, theory, sociology, mythology and landscape. Therefore my research

covers a range of different scales, from territorial to local, from the hinterland to human mind. The research develops a theoretical background for the design proposal, but also reveals future possibilities, a narrative over extraction.

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

The project unfolds on the topics of pressing environmental and social issues, regarding the impact of anthropogenic forces, exploitation and depletion. Project tries to implement local manufacturing, as a notion closer to local materials, atmospheres and nature. The proposal is not a synthesis of a static condition, but rather a flowing procedure over time, which assist local human and non-human communities to converge and step by step repair the land.

In this scope the role of architect is explored too. In an era of post-extraction that requires alternative technics for land recovery, architect has to reposition, reevaluate his role and finally re-emerge. The post-architect takes the form of a contemporary master craftsperson deeply rooted to the conditions of every place and its practices.