

“Metaplasis”: Scenarios for recovery of post-extraction territory of Eordaia Region

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Graduation Studio: Explore Lab AR3EX115

REFLECTION P5

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Design position

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.

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 or reshape a new culture with sympathy to natural processes.

Through this enormous multilevel territory the project is divided in four parts, objects, placed in different parts of a segment of the mine, that of Mavropigi mine. The four objects are outcomes of the understanding of the mine and its forces. The objects with different character, try to investigate through design theoretical questions and possibilities of the mine, setting earth and soil as the core of material and spatial interventions aiming at initiating various regenerative processes. Design has the intention to reform, reshape gradually and with respect the mines structure in order to turn it into a productive place with coexistence of nature and humanity. Thus the Greek word “Metaplasis” emphasized in my title denotes the creation of something anew by altering its form or its composition.

1. What is the relation between your graduation project topic, your master track (A, U, BT, LA, MBE), and your master programme (MSc AUBS)?

In my project I investigate different ways for recovery of wounded territories. My design proposal pivots around the local needs and environmental conditions of every site, a conciliation with matter and place. Similar to the notion of the Explore lab studio, the project explores alternative approaches to the topic of extraction and post-extraction territories, taken from fields of architecture, archaeology, theory, sociology, mythology and landscape. Therefore my project covers a range of different scales, from territorial to local, from the hinterland to human mind. In my research I developed a theoretical framework for the design proposal, but also tried to reveal future possibilities, a narrative over extraction. Based on this research framework also explored different spatial characteristics and material gestures, at different scales from landscape to a small workshop. Endeavours to experiment with form and materiality derived from local quarries and the earth conditions of mines soil.

2. How did your research influence your design/recommendations and how did the design/recommendations influence your research?

The research developed a theoretical background for the design proposal, understanding the complexities of a coal mine. As theoretical concepts of repair, care, craftsmanship, terraforming were developed under the bigger framework of Anthropocene, a base for the concept was set, leading to a group of four interventions. Each intervention focuses on a different condition trying to balance architecture and landscape, craft and the artefact, theory and praxis.

Thus my design proceeded in parallel with the ideas explored in the research, trying also to enrich the research questions. In the formation of every theme, materiality with reference to the vernacular past played a vital role in reformulating the harsh atmospheres of the mine. But this materiality was deepened by the forces of the earth, the literal extraction processes that exist inside an industrial zone that were discover through design. When the capabilities and limitations of the soil and earth was understood, the concept of every intervention was reformulated taking an extra layer, that of earth formations such as piling, extraction, molding and erosion.

Through the mixture of vernacular and industrial processes, these “hybrid morphologies”¹ deepened my understanding of mining process by describing a solution of not fixed positions but rather a gradual change over time. As set in the research, the design reveals future possibilities, a narrative over extraction.

3. How do you assess the value of your way of working (your approach, your used methods, used methodology)?

The research proposed a combination of three related perspectives in multi-scalar design, namely hinterlands, mine or site and human mind. My aim was to discover how the mine of Eordaia, West Macedonia Greece, operates, and uncovering the hidden details from its functions. The analysis formulated in the form of a loose atlas including inventories, catalogues, maps, diagrams and drawings. Outcome was a choreography of mining procedures and connections with natural elements and human actions, the decoding of the mine. This translation gave way to my project defining principles to apply in specific condition. Each site-specific design case presents its own unique qualities and promotes new approaches of environmental and experiential insights. In the case of Ptolemaida, the problem statement and the particularities of mining traced the design directions I wanted to achieve.

4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

The project understands the impact of human forces in environment and nature. Thus the idea of change, terraforming, is meant as an answer to environmental and abandonment issues that post extraction territories suffer from after their exploitation. My thesis presents a series of objects that help the repair of the coal mine over time by reshaping land, presenting a new material culture based on local construction materials and by inviting people to reevaluate a rather misunderstood territory, that of the mine, as a site with potential of leisure and cultivation.

The coal mine of Ptolemaida is a complex environment, shaped by forces of industry, leaving the nature to grow in its borders. This project presents functions that deal with this issue, trying to find the wounded nature by creating actions that help nature to gradually reenter the mine, slowly reshaping it. In this part human agency action is also in place, as workshops try to keep and reeducate work(wo)men into the new conditions, preventing abandonment of neighbor areas set as problematic in the beginning of research. Every intervention has also a leisure aspect, an affiliation with the mine and its traits. The environment that is usually perceived as ugly and uncanny, through manipulation of earth forces and materials is treated as a space of exhibition, leisure, archaeology. The ultimate objective of my interventions is to reverse this negative perception and to unravel the spirit of place.

5. How do you assess the value of the transferability of your project results?

My project, by its core is an understanding of themes of extraction and earth processes. Despite meant as site-specific, its spatial and material characteristics could be applied in different occasions, starting from other parts of the mine of Eordaia, Ptolemaida. Every material gesture, coming from earth formations and material experimentation could set the foundation for a hybrid material culture, which vitalizes local community. Those characteristics and techniques could inform architectural design approach in mining places with similar traits. The mine of Mavropigi sets a small paradigm of experimentation and capabilities in the topic of post-extractive design strategies.

Final presentation

Towards the last stage I want to focus my attention in crafting my presentation for each intervention. Atmospheres, materiality and scaled down perspectives will showcase better the virtues of the design. The four interventions are part of a longer story, a mining story, a tale of life after mining. Thus a different type of narration in graphic expression will be addressed.

¹ Angelil M., Klingman A., (1999), Hybrid Morphologies infrastructures, Architecture, Landscape. DAIDALOS