Reflection Paper - PJB Tilman

This reflection paper explores the journey of my graduation year, focusing on the research and design phases of my project. By examining the relation between my graduation project topic, my master track, and my master program, I highlight the significance of studying the enclosure and its interaction with the inside/outside dynamic. Through this reflection, the value and impact of my graduation project are explored within a broader architectural context.

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

The topic of my graduation project is the enclosure and its relationship with inside/outside. This suits the studio Borders & Territories well because the studio highlights research in specific border conditions and what role architecture plays in these conditions. Furthermore, the theme of the studio, "Trans liquidities along the New Silk Road.," is indirectly connected to the project. Turkey, which is a global player and important intermediary between the east and the west, builds large infrastructure projects to maintain its strategic position that facilitates trade between the east and the west. Therefore, researching how to deal with the abandonment of an old airport in favour of a new airport is relevant in the studio research topic.

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

In the analysis of a research site in Istanbul I analysed a gated community in the west of the city. In this analysis I made a series of drawings which provided insight in the architectural principles of the gated community. The essay I wrote on the definition of the camp informed my understanding of how these enclosed spaces function and consequently informed the design principles applied in the project. Namely, the project aims to create a series of spatial identities from out to in and around the airport. Furthermore, the most intense threshold, between the corridor and the muse, is elaborated into a programmed infrastructural piece of architecture along the runway. The object will host a walkway, energy -, water distribution and a vast number of potential functions suspended within the structure.

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

In the process I employed several methods to transform my research results into a design project. Overall, by assessing the value of my way of working, I recognize the significance of researching and repurposing old infrastructure, contributing to urban development, sustainability, and advancing (theoretical) architectural knowledge in an interdisciplinary context. Furthermore, the project serves as an example of the interdisciplinary nature of contemporary architecture. It highlights how methods traditionally associated with architecture can be applied and transferred to projects of varying scales.

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

The relevance of researching architecture that deals with old infrastructure can be described in three parts. Firstly, from an urban development perspective, large areas such as airports are often situated close to cities and within well connected mobility systems, the architecture produced there offers brilliant potential to host new types of spaces within cities and countries. In my research I reached the limits of the potential of the project by repurposing the airport area into one single function and evaluating the possibilities and recording the impact. For instance: I found that creating just disaster relief would offer on site housing for a maximum of 170.445 people at 45m2 per person (UNHCR guidelines). Secondly, from a technical and social sustainability perspective, the reuse of old infrastructure is beneficial for the environment and the inhabitants of the area. The emission from buildings can remain low and the area once unavailable to many inhabitants now becomes public domain. Thirdly, from an academic perspective, an abundance of questions arises from the act of abandoning such infrastructure: How could architecture make this area inclusionary again? How does architecture define the edge conditions around enclosed areas? What is the spatial relationship with the inside/outside? How could airport infrastructure be applicable to distinct functions? What materials become available when mining such a site?

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

The project aims to establish an approach to the transformation of existing infrastructure. The project touches all the different disciplines within the faculty and is therefore an interesting exercise in transferability. With the practice of architecture becoming an increasingly interdisciplinary field these types of projects offer an interesting insight in the boundaries of the field and how methods traditionally seen as architecture can be used on larger and smaller scales. The fence like structure is based on design principles stemming from my urban analysis, theory research and the local conditions. Therefore, the design is specific to its site, however the methods discovered within the process and conceptual approach are transferable. For instance, the research and consequently the design consider the thresholds between the different identities as spaces with a certain thickness. This approach can be valuable to enhance spaces and reflect on the spatial conditions that shape them.

6. How has the practice of speculative modelling helped the design process?

During the graduation year two collective workshops were organized. The first workshop Modi Operandi focused on architectural expression as a

theme to expand on architectural research. The workshop sessions inquired architectural expression and the ways in which this crucial, yet very ambiguous aspect of the architectural design can be developed through a number of (model-making) exercises. In the MO workshop multiple strategies have been developed in dealing with the site.

In MO#1 I developed an interpretation of the site in the form of a layered 2.5D model. The model emulates the site by interpreting it as a set of different systems. These systems are constructed using material that is used for fencing and walling off sections of the airport. Barbed wire, concrete, chain link fencing, metal poles and steel cables construct my understanding of the airport.

In MO#2 the assignment was to develop an assembly inspired by form. In this assignment I developed a mobile that assembled shapes inspired on the geometries that make flight possible around the airport. For instance, the concrete structures for the parking garages, the flight glide paths that guide the landing of planes and constructive geometries of the terminal roof. This mobile is consequently painted in red and white stripes to make the viewer hyper aware of their shapes without giving it a certain identity.

In the final MO#3 I took a casted block of gypsum and defined a 2-part iterative method. Taking three different tools (hammer, saw, putty knife) and three colours of paint (black, white, red) I started a process of iterative destruction and painting. Each destruction was followed with the painting a particular colour. The base colour of the brick being black, the soft application of the tools highlighted in white, and the aggressive application of the tools highlighted in red. The model highlights not only the destruction, but it also highlights the rearranging of material to create new form.

7. How did you handle obstacles within the design process?

Within the design process I encountered various obstacles. One significant challenge I faced was the vast scale of the project. It was crucial for me to find an architectural language that could effectively address and integrate all scales, from the urban context down to the smallest details.

The "Corner workshop" provided a valuable opportunity for exploration. During this workshop, I developed a structure that condensed and collapsed all the ideas related to the large-scale aspects of the project into a single line within the landscape. This line, serving as an indexical device, became instrumental in comprehending and reading the overall masterplan. Furthermore, by focusing on this pivotal area, I was able to expand my understanding and refine the design on various levels, ensuring coherence and progress throughout the project. Reflecting on the project now, I realize that I found it essential to condense and unify my ideas into a central element that could capture the essence of the project. By doing so, I could then explore the implications and consequences of this element in the most critical areas. This approach allowed me to navigate the complexities of the project successfully and make meaningful progress in its development.