

Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examcommissie-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	Marie-Louise Antonia Johanna Francisca van Dalen
Student number	5503205

Studio		
Name / Theme	Borders & Territories	
Main mentor	Filip Geerts	Architecture and the Built Environment
Second mentor	Oscar Rommens	Architecture and the Built Environment

Argumentation of choice of the studio	My curiosity for the studio lies in the studio's focal point of the notion of Territories of conflict, the spaces where friction is manifested. The studio challenges me to understand and intervene these territories by emphasizing the importance of architecture, which ranges from the theoretical fields of the discipline to a wider spectrum of Arts and Science as a design method. It focuses on territorial sites with unexpected potential. The value of contemporary art or cinema to understand the complex territories is in line with my own fascination. Additionally, it drew my attention that the studio is researching multiple scales, complex socio-political context of architecture, and spaces of conflict. This interrelation between these components and the broad spectrum of Arts and Science is thus of particular interest. Since the studio gives me the freedom to work without boundaries, it challenges me and likewise helps me to experiment and grow limitless.
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Graduation project	
Title of the graduation project	'The logistics city and the closed space' A machine for spreading global capitalism
Goal	
Location:	Turkey, Istanbul (Ambarli Port Complex)
The posed problem,	<i>Introduction site:</i>

Istanbul and the Marmara region function, because of their topographical and geopolitical position, as the port between Asia and Europe. It drew my attention that this location is being exploited as a transit hub for the transportation of people, goods, culture, and politics. This research started with an interest in the invisible and visible geopolitical forces that shape the urban context. Considering the studio's theme for this year; 'Transient Liquidities along the New Silk Road II', I got intrigued by the influence of this New Silk Road on the Marmara region.

As in history, the Old Silk Road consisted mainly of overland routes. The New Silk Road is mainly an existing route by sea. Thus, an important manifestation of the New Silk Road is global shipping and the big container ports that are part of it. Shipping is the crux of the global economy and provides important linkages in the network of supply chains. It is woven into our daily lives, and people have made themselves dependent on it without always realizing it. Because of its strategic geographic location of Turkey, by connecting Asia and Europe, it has become an increasingly important part of the global supply chain. Accordingly, the main mode of import and export in Turkey goes via maritime lines.

The site of investigation:

The Ambarli port area is on the edge of Istanbul along with the infrastructure that connects it to the context of the global maritime trade system. It is located on the northwest coast of the Sea of Marmara. It occupies an important strategic position on the

Eurasian continent. Close to the economic zone of Istanbul and directly connected to more than 140 locations on five continents. Just 35 kilometers from the Bosphorus Strait, a choke point between the Black Sea and the Mediterranean Sea. The port acts as a gateway to the Black Sea and hosts the third-biggest container terminal in Turkey.

Introduction problem statement:

A drastic change started with the containerization and the 'flag of convenience' registry in the late 1940s. It deregulated the international labor markets. Its system assigned nominal sovereignty to specific maritime power centers such as Panama, Honduras, and Liberia (Sekula & Burch, 2011). It allows ship owners in developed countries to bypass national labor legislation and safety regulations. Therefore, cheap labor crews are composed of employees from countries with fewer labor and safety regulations. The flag functions as camouflage for the 'seafaring prisons' which shape the hidden space in the middle of the ocean.

Closedness of 'the machine':

The shipping industry is being addressed, on different scales, as 'a machine'. Firstly, treating the integral system as a machine to globally spread capitalism. It has its hidden dark sides. Which refers to the closedness of the current maritime trade in general. Because of the expansion of the demand of the supply chain, the pressure on the operation of the

	<p>shipping industry asks for constant adaption. Therefore, the dimensions of container ports are getting increasingly bigger. Whereas in history the ports were located in the city nowadays because of the size of the occupation of land they are hidden far out of the city center. The sizes of the ships are also getting gigantic because if it's bigger they can carry more cargo and thereby it is more profitable. In this a juxtaposition is embedded, the ships and the ports are getting extensive, yet, they become less visible. Tucked away on the edges of the city and closed off from the surroundings. As well, the goods are tucked away in closed containers and changed into a pallet of colored boxes. The increasingly digitized ports transform the landscape into spatial software. An automated machine controlled by only a small number of people.</p> <p><i>Problem statement:</i></p> <p>The Ambarli port area is dealing with natural elements of the landscape; land and water. Besides that, it deals with a set of political, social, and economic spatiotemporal patterns. They have an enormous repercussion on the physical and social appearance of the territory. This territory covers the hinterland to the hidden space of the sea.</p> <p>The character of this graduation project lies in the fact that a rather banal and for some, 'non-architectural system', like global maritime trade is employed to experiment with and learn from the beauty, and complexity of this machine. Coinciding with the negative, - and</p>
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	<p>positive consequences of the ever-growing and changing expressions of global maritime trade.</p> <p>The research aims to dissect the operation of this machine and employ it as a lens and method to form a critical understanding of the relation between 'the machine', the human, and the contemporary architectural discourse.</p> <p>I'm driven by the beauty that lies within the machine that functions as a container port. This beauty is formed by an almost not understandable complexity of the ever-expanding supply chain and the demands it asks from the functioning of the machine and the impact it has on the urban landscape. Aside from the well-functioning, this machine's visible and invisible failures are a fountainhead for establishing an architectural intervention.</p> <p>This graduation project is a critical remark on the machine that forms the shipping industry driven by the symptoms of the human urge to consume.</p>
<p>research questions and</p>	<ul style="list-style-type: none"> - How could the chosen territory be understood through the lens of the functioning of the container port, which is conceived as a machine? - How could the operation of this machine be used in a (different) way, to disrupt or project a way of shaping the territory? - How could the notion of 'a machine' in the light of the global maritime trade, frame contemporary theory and method and form this into a design method?

design assignment in which these result.	<ul style="list-style-type: none"> - Determining the spatial manifestations of the global maritime trade on the territory. - Demonstrating how the shipping industry could be conceived in different ways so it could show unexpected potentials or failures. - Forming a method in which the shipping industry is placed in relation to the 'machine', the human, and the contemporary architectural discourse. - Establishing a design intervention on the site. - Eventually, this graduation project will be a critical remark on the shipping industry.
<p>[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.]</p>	
<p>Process</p>	
<p>Method description</p>	
<p>'Transient Liquidities along the New Silk Road II' is the name of this year's graduation studio of Borders & Territories. The research and design proposal of this graduation project about the global shipping industry fit the theoretical framework, and design method initiated by the Borders & Territories studio. Different methods are proposed by the studio to guide us towards the finalizing of the graduation project. Starting with a collective mapping exercise, while parallel starting with my own exploration of the topic of interest. After the P1 we went to Istanbul to determine my own choice of site and therefore topic. Back in the Netherlands, we finalized the theory paper and while doing this we started a three-part drawing exercise as an act of both analysis and interpretation. The last method was the two-week Modi Operandi wherein we made the transition from analyzing to the start of a design proposal.</p>	
<p>The graduation studio started with an inventive research methodology; the method of mapping enabled us to get a better understanding of the spatial conditions of the Marmara Sea region. The studio started with this collective mapping where we encountered cartographic techniques and could compose an index for future individual research of the area. In my case, I collectively mapped the border and migration map. This exhibited the first interaction with the territory. The map represented the aforementioned, strategic location of the Marmara Sea region, functioning as a human transit hub.</p>	

<p>The second method of this graduation research is an individual written theory paper. It is structured parallel to the collective mapping and relied on the establishment of a theoretical background. The theory paper supported the formation of a topic for the graduation research and helped to establish a conceptual and theoretical background to support a method and the choice for my topic. The writing of the theory paper is accompanied by input from seminar discussions in which the theoretical themes of the studio and the positioning of the architecture's historical and contemporary debates are discussed. The writing of the paper was supported by weekly assignments in the form of drawings. They ought to help with the development of my formulated architectural position. Here, the notion of infrastructure and global maritime trade is introduced and discussed by means of theory and literature. The complexity of this topic becomes clear by analyzing and addressing the existing theory. Consulting relevant studies helped to frame the scope of this research and to point out the relevance and direction of the graduation project.</p>
<p>While finishing the theory paper we started a method of making three different drawings which aided the exploration of the individual chosen site and topic. The themes of the drawings were; site, system, and materiality.</p>
<p>To shift from analyzing to design another step had to be made. A workshop organized by the Borders & Territories graduation studio, conducted considering the transition from research and concept towards a free way of design thinking. The workshop was divided into three parts introduced by a lecture about the three topics. Referring to the three themes; site, form (assemblage), and program three physical 2D models were produced in line with the previous research method (three drawings). This change of method made it possible to see the graduation projects' unexpected potentials. The physical representation of the experiments within the studied phenomenon accompanied the potentials of the project and enabled a discussion about the start of the design proposal.</p>
<p>Altogether these methods bring the graduation project to the point that it has enough theoretical background, exploration of the phenomenon, the right relevance within the architectural discourse, and the fundamentals to determine the specific site, form, and program. This will conduct a design proposal that forms the starting point for the next semester.</p>
<p>[A description of the methods and techniques of research and design, which are going to be utilized.]</p>

Literature and general practical preference

To frame and support the design,- process, and methods, theoretical and practical discussion on the theme of territories and infrastructure within and outside of the architectural discourse are examined.

One of the important nodes of the New Silk Road is infrastructure. Keller Easterling's research about infrastructure is an important source for my investigation. Keller Easterling discusses large-scale spatial organizations like infrastructure projects, as a site of multiple overlapping, or nested forms of sovereignty, where domestic and transnational jurisdictions collide, and infrastructure space becomes a medium of what might be called extra statecraft (Easterling, 2016). In the study of architecture, these spatial products are often treated as banal or not responding to the architectural language. As an architectural student, this study could be seen as a non-architectural direction. However, this is foolish, as Keller Easterling states, architecture presumably has more to learn than to teach in the study of global politics. It could contribute to some vivid evidence of another set of mechanisms, perhaps as telling as financial and political indicators in characterizing the market's weakness, resilience, or violence (Easterling, 2007).

Because of the expansion of the demand of the supply chain, the pressure on the efficiency of maritime trade faces a lot of challenges. Therefore, the dimensions of container ships are increasing, and so the dimensions of container ports are also expanding enormously. Whereas in history the ports were situated in the city nowadays they are hidden far out of the city center. Container ships demand a lot of the landscape. Firstly, the water in the port needs to be deep enough to host the enormous ships. In addition, they have a lot of negative side effects on the ecology around the port; polluting emissions from the ships, noise disturbance, and lastly the influence on the health of the residents.

Conceiving maritime trade as a machine stems from the notion of the Latin calque from Greek ἀπό μηχανῆς θεός (apò mēkhanês theós), Deus ex machina 'god from the machine' ("Deus Ex Machina," 2022). It originates from the conventions of ancient Greek theater, the actors who were playing gods were brought onto the stage using a machine. This machine was either a crane (mechane) to lower actors from above or a riser that brought them up through a trapdoor. It is a plot device whereby an unsolvable problem in a story is suddenly and abruptly resolved by an unexpected and unlikely occurrence (Chondros et al., 2013). During the Modi Operandi, the 'assemblage' model enabled me to link the container port with the notion of the 'Deus ex Machina'. It is a catalyst to explore the container port and the relation between 'the machine' the human, and the urban landscape.

References & Bibliography:

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Sandford, A. (2022, October 31). *Ukraine war: Two cargo ships leave ports despite Moscow's grain exports deal pullout*. Euronews. <https://www.euronews.com/2022/10/30/ukraine-war-russias-grain-deal-pullout-will-worsen-world-hunger-say-western-leaders>

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The literature (theories or research data) and general practical experience/precedent you intend to consult.]

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 topic of the graduation studio of Borders & Territories this year is 'Transient Liquidities along the New Silk Road II'. My proposed graduation project is therefore much in line with this topic since my chosen topic is an investigation of maritime trade which is an important part of the New Silk Road. My inspiration for the topic was drawn from the studio's theme but also from the theoretical,

conceptual, and practical framework of the studio. Literature such as Keller Easterlings' research 'Extrastatecraft' was proposed by the studio from which I drew inspiration and knowledge to come up with my narrative. The Borders & Territories studio works with big scales, like territories, which also matches my choice of topic in the field of a global trade network.

However, not only big scales are treated in my graduation project. The Architecture Master track explores a project from the conceptual phase to a physical site intervention. My investigation started on a big scale, observing the proposed region of the Marmara Sea region. Finally decreasing towards a smaller scale and finally working in the urban context. My graduation project is in Istanbul which is enormous. The urban fabric spreads out in a way, the Netherlands is not familiar with. During the field trip, we did not only focus on Istanbul, but we even went around the Marmara Sea. All these investigations are included in the conception of my graduation project. Altogether this graduation project is a multi-scalar, varied investigation into a topic that is many-sided and deals with scientific research, conceptualizing, and architectural theory.

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

Global trade is in light of the current challenges the world is facing, an ongoing discussion. The war in Ukraine which resulted in tension in the Bosphorus strait due to Moscow's grain exports deal is a good example (Sandford, 2022). The ongoing discussion about climate disruption and the challenges worldwide leaders are facing is correlating with the huge impact of the shipping industry. My research investigation is addressing socio-political forces and the impact it has on the built environment. It is a contribution to the ongoing discussion and theoretical research about how a big system, to do with many parts of the built environment, is impacting the urban fabric. As well as how we can learn from it and propose a relevant architectural intervention.