# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



### **Graduation Plan: All tracks**

Submit your Graduation Plan to the Board of Examiners (<u>Examencommissie-</u> <u>BK@tudelft.nl</u>), 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	Sara Granger-van den Brand
Student number	5246628

Studio		
Name / Theme	Methods of Analysis and Imagination.	
	Position in Practice: towa	ards democratic built environments in
	Belgrade, Serbia	
Main mentor	Jorge Mejía Hernández	Architectural Design, Studio
		Coordinator
Second mentor	Pierre Jennen	Building Technology
Third mentor	Aleksandar Staničić	Architectural Research
Argumentation of choice	The natural course of my study and interest towards	
of the studio	democratic understanding of architecture, is addressed by the	
	studio as a thoughtful and meaningful process, stimulating the	
	students to position themselves independently to prepare us for	
	a valuable contribution w	vithin the practice.

Graduation project		
Title of the graduation project	Rethinking Industrial Heritage: Using the ruins of Belgrade's abandoned Cotton Factory to re-industrialize the port.	
Goal		
Location:	Former Cotton Factory in Belgrade, Serbia	
The posed problem,	The areas along the Danube River in Belgrade have been historically subjected to fast transitions caused by industrialization, becoming to represent a more self-sustaining state. However, with the transition from market socialism to capitalism, many of the (former) industrial sites became abandoned, leaving many buildings in decaying state, unknown and estranged from their past. The city responds to this phenomenon by planning sudden transformation and creating masterplans to replace the industrial area to residential urban plan. This abruptness seems to lack reflection for the reconsideration of the position of industrialism in the city. As of now, industrial buildings are dislocated outside of the city or even outside the country, to a context that lacks visibility due to their negative socio-environmental and urban impact.	

	This postindustrial attitude disconnects the relationship between the human and the industry. This manifestation is also recognized in the port of Belgrade, where half of the existing built structures are in the state of decay. Amongst the abandoned sites is one fully abandoned building block situated in the transitional area between the industrial port and the residential part of the city center. This block exists as an abandoned cotton factory and former slaughterhouse. Both are representative factory buildings with a valuable collective memory and cultural-historical importance to Belgrade's citizens and its industrial past. As of now, these buildings are recognized as being important as industrial heritage for their representative value however, they are not under governmental protection, therefore being left to the
	process of <i>ruinification</i> . From the previously stated challenges, the question arises whether the industrial building type could fit in a modern society. In this case, this type needs to be rethought rather than repelled by rethinking the human relationship with the industrial. The revitalization of the cotton factory into a modern factory could serve as a case study that responds to the simultaneous development of urban gentrification practices, the neglection of Belgrade's industrial heritage and the repel of industrialization in the city.
research questions and	How can re-industrialization transcend Belgrade's abandoned industrial heritage from its liminal state?
design assignment in which this result.	The revitalization of the former Cotton factory in Belgrade as a modern industry can host the hybridization of education and production to improve the relationship between the locals and the port area (human and industry), allowing collective memory of the industrial past of Belgrade to ensure the continuity to its modern interpretation. The factory has many potential spaces that could be transformed as a modern industry. This can be achieved by scaling down the morphology of the factory spaces to a more human scale. The former factory will serve once again as a representation of technological development, respecting its historical layers to emphasize the memory of the past and the possibilities of the present. Allowing a micro-society to be situated in the former factory, will be bringing together education (knowledge, sharing) and production (craft, making) to complement each other.

Bringing student universities nearby, as well as possibilities for
unemployed youth in the area has the strong potential to
stimulate a knowledge-economy as a driver to facilitate the
relationship of the industrial port and the residential areas.

#### Process

#### **Method description**

The method of investigation is to define a possibility of continuity by looking at the lenses of the past, present and the future. This will be done by creating a wholistic understanding of the form, use and representation of the cotton factory for the three time-fragments. These fragments will be understood, dividing the research into the following themes:

Part 1 Re-define Belgrade's industrial identity – Praxeological Analysis
Part 2 Respecting the relationship and representation of the past – Typological & Morphological Analysis

Part 3 Adapting spaces for a modern factory – Semiological Analysis

The first part is aiming to address the current state of the industrial ruin in relation to the city. This notion will be explored in respect to how the building itself has been influenced by the built environment, its subjected economies (of industrialism) and the bureaucratic process of industrial heritage. In this part, the human relationship within these cultures will be explored, with the focus of the making of cotton and textile.

The main driver of the second part, is a method to understand the memory of industrial heritage in relation to its contextual specific memory as well as the collective memory of this building type. The research aims to provide a deeper understanding of the development of the industrial in relation to society and how this has been translated into building typologies and morphologies. The interest leans specifically towards the understanding of the human scale and relation to the creation of these spaces as well as the techniques involved to conceive the spaces.

For the last part, the previous two parts will be taken further and translated, through analysis, into concrete design intentions. This will regard the re-definition of the past and the present semiological approach to the factory and how to adapt this relationship for a future factory. The question is therefore translated into these design intentions: 1. Making craft more interactive and visible. 2. Re-fragmenting the hall to allow dynamism and define purpose and 3. Create spaces with the means of sharing the craft.

#### Literature and general practical preference

Literature:

Tim Edensor, Industrial Ruins: Spaces, Aesthetics and Materiality (Berg, 2005).

Ljiljana Jevremovic and Milanka Vasic, "Aesthetic of Industrial Architecture in Era of Reindustrialization," in *University of Nis*, (2nd International Conference for PhD students in Civil Engineering and Architecture, 2014), 568–74.

Henri Lefebvre, *The Production of Space* (Malden, Ma; Oxford: Blackwell, 1991).

Michel De Certeau, Luce Giard, and Pierre Mayol, *The Practice of Everyday Life, Volume 2, Living and Cooking* (Minneapolis: University of Minnesota Press, 1998).

Jelisaveta Petrović and Vera Backović, eds., *Experiencing Postsocialist Capitalism: Urban Changes and Challenges in Serbia* (2019; repr., JP Službeni glasnik, Belgrade, 2019).

Conceptual Projects:

Fun Palace – Cedric Price No-stop City – Archizoom Parc de la Villette - Bernard Tschumi

Precedent:

RDM campus Rotterdam - Plus Architecten Xi'an Former Textile Mill - China Architecture Design Group Renovation Cotton Lab Changzhou - Atelier Archmixing Goldsmith CCA - Assemble Former Sugar Factory of Belgrade

#### 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 graduation studio of Methods of Analysis and Imagination is mainly promoting the idea of preservation of the democratic values present in the built environment by stimulating students to develop of a framework to position ourselves academically. This framework is meant to collaborate with the studio by the inclusion of meaningfulness, appropriation, and integration. This graduation project aims to move forward the academic notion of continuity through form, use and representation as inquired during P1 and contextualize this in the case of the revitalization of industrial heritage. I am developing a growing fascination for the human position in architecture, as well as its impact that goes beyond the human, in the discussion of the boundaries on the themes of nature and technology. Dealing with this relationship and how we, as designers, influence and are influenced by this, comes with a responsibility that we need not to take for granted. Preserving memory in a modern/contemporary discussion is a relevant method of dealing with our design intervention in the future.

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

My project is a response to the currently rapidly developing society and the inability of buildings to keep up. Even if the focus of this investigation regards the conventional industrial building type, this phenomenon is and will be relevant for other building types, especially in a world with different perceived (augmented) realities and pandemics. The main, fundamental understanding of continuity in the built environment provides a framework that reaches beyond the use of a building. With this project and the relevant interdisciplinary approach of this studio, I aim to develop a deeper knowledge on how to deal with the question of preservation. My proposed strategy of re-industrialization is an occurring challenge within many academic fields, that is becoming more relevant within our specific contemporary society. In the case of this project, this regards industrial heritage specifically, as it is a building type that is subjected to the challenges of neglection in many "postindustrial" cities.