

# Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences



## Graduation Plan: All tracks

The graduation plan consists of at least the following data/segments:

<b>Personal information</b>	
Name	Nicolaas Daniel van Laere
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<b>Studio</b>	
Name / Theme	Complex Projects / Border Studio
Teachers / tutors	Hrvoje Smidihen
Argumentation of choice of the studio	My choice for the studio is based on my design to learn how to deal with complex architectural and urban problems.

<b>Graduation project</b>	
Title of the graduation project	Juarez Garment Factory

<b>Goal</b>	
Location:	Ciudad Juárez, Mexico
The posed problem,	In Mexico, a large number of foreign owned assembly factories is located along the U.S. border. These factories are functioning under specific laws that allow for tax breaks, making it very attractive to be located in Mexico. For the production these factories bring in raw materials from their country of origin. The Mexicans that work in these factories are paid low wages and often under harsh conditions. Also these factories are also often polluting the environment. Since the factories are owned by large companies that are powerful and large contributors to the Mexican economy, the government generally is not taking action to stop their misconduct. When production becomes cheaper somewhere else, or production demand decreases, these factories will suddenly close leaving their employees unemployed. The construction of the factories generally takes place outside existing urban environments, therefore leaving their

	mark on the environment and the life of inhabitants in the border region.
research questions and	How to develop a production facility in the city of Juarez that provides good working conditions, uses local renewable resources, that can sell its products on various scales and is therefore able to function consistently in the fluctuating economic and political situation of the border region?
design assignment in which these result.	The design of a factory in Juarez for the production of garment from local grown cotton fiber.

## **Process**

### **Method description**

The studio determined to use a method in which design choices are made based on research. This research will be captured in a research book which is continuously developed during the project. This book will help both the development and understanding of the project.

### **Literature and general practical preference**

The literature and reference material I used has its source in the INEGI (Mexico statistics agency), conversations with professors and students from UACJ (University of Juarez), conversations with inhabitants of Juarez, a number of books on factories, the movie Maquilapolis and a number of Mexican laws.

## **Reflection**

### **Relevance**

A large part of the world population nowadays works in assembly factories. These factories and their manufacturing processes are getting more and more specialized and are being developed to be as efficient as possible. The companies often deplete their environments and create harsh and unpleasant conditions for their workers. Furthermore production is moved to specific parts of the world, where the wages are low and tax breaks are installed, in order to maximize profits. My project also deals with factories that function in such an environment. Global production chains are

becoming common. Next to the exploitation of workers and nature, this creates a separation between humans and the production processes of the products that we use. The factory workers are treated like machines and consumers of their products are getting alienated from the production, which used to be part of our environment.

## **Time planning**

### **P0 - P1**

General analysis of the cities of Juarez and El Paso and the U.S.-Mexico border region. A two week trip along parts of the U.S.-Mexico border and to the cities El Paso and Juarez.

### **P1 - P2**

Analysis of the history of production in the border region, assembly factories in Mexico, production in Juarez, the Juarez valley, cotton production and garment production. Analysis of factory case studies and sites. Definition of topic, research question, ambition, program, functional diagram, site and massing.

### **P2 - P5**

Decision on tools, concept and massing. The development of the project in drawings from a regional scale to the details of the building.

In addition I will also take a course at the TU Delft to develop my presentation skills.