INTRODUCTION

The US-Mexico border region stretches over 3000 miles, connecting the east and west coast of North & Middle America, and simultaneously divides the US from Mexico. It is a region where the western and developing world collide, and where people from two different nations live together.

The last decade has provided perhaps the most tumultuous period in the history of the Border so far. The combination of economic potential, migration crises, the physical manifestation of homeland security and the respective current success and failure of Mexican and US economies have led to an unprecedented worldwide attention for the border region.

The Border Studio wants to investigate this conflicted region, and find ways of making the two sides work together better.
PROBLEM STATEMENT

1) The Border Region between the US and Mexico is an area where inhabitants from two different nations live & function as one, but are divided by the physical and political border. Thus the architecture of the Border Fence can be seen as the architecture of violence, and has created a divided region.

Especially in the twin cities along the border, such as San Diego-Tijuana, or El Paso-Juarez, this is visible. The border fence violently disrupts the city fabric, dividing two cities that have had a long history of working together.

Most clearly the problem of the border and the divided cities can be seen at the actual border crossings, where people queue up for hours, waiting to get checked by Homeland Security. Crossing the border is an obtrusive and violent experience.

2) The Paso del Norte border crossing connecting the cities of El Paso and Ciudad Juarez is one of the most clear examples of this architecture of violence. The most urban crossing along the border, connecting the downtowns of El Paso & Juarez, this crossing is the only one that connects two city centers directly, and is used by more than 8 million pedestrians annually.

It also connects two of the most closely linked border cities, that however are also the most divided. El Paso, the safest city in the US, and Ciudad Juarez, one of the epicenters of the Mexican drug war.

Their century long history reveals a lively economic and cultural exchange. Ciudad Juarez was felt like just another neighbourhood for people from El Paso, and an international tramline and very minimal border crossing made sure people crossed over on a daily basis.

After a decade of violence and increased border security the climate seems to be changing: violence has decreased, the Mexican economy is soaring, and the closed down restaurants of Juarez are reopening again. More and more people take the journey across again.

However, crossing the border remains an obtrusive experience, and its architecture the architecture of violence. People queue up for hours in the sun, waiting next to vehicles with running engines, putting their health in danger. The atmosphere of crossing the bridge feels like walking through a place where you should not be, sandwiched in between chain link fences and very visible security measures.

My graduation project is about redesigning this bridge. I try to change the experience of crossing the border, and through that try to remove the divide between the two sides of the border.
RELATIONSHIP BETWEEN RESEARCH AND DESIGN

Both the collective group design of a regional strategy for the Border Region as well as my personal redesign of the Border Bridge are the result of a period of extensive research on different levels: for the regional plan we mapped out the different areas and elements of the region, and conducted more investigative socio-demographic research.

In a similar manner, my design for the Border Bridge is the result of both ‘hard’ and ‘soft’ research. I did extensive research on the twin city of El Paso-Juarez, mapping out the main areas of interest, the traffic circulation in the cities etc., but also investigated the particular economic functioning of the twin city, the history of the city and the border area in particular.

In order to redesign the Border Bridge, I conducted a study into the design requirements and functionality of border crossings. I looked at various crossings along the US-Mexico border as precedents, and researched the requirements for border crossings as stipulated by the respective governments.

Next to this, I researched the existing border bridge extensively, both in terms of connection to the city, the type of offices, parking structures, etc., needed, but perhaps most importantly by investigating the type of border crossers, and the problems that arise with the current bridge. The result of my redesign is very much a consequence of this. The research I conducted led me to a clear problem statement with the issues that needed to be addressed, and the detailed site, user, and security analyses I did of existing bridges led me to a clear brief about what needed to happen on site.

![Diagram of site conditions and security measures](image-url)
RELATIONSHIP BETWEEN THE THEME OF THE GRADUATION LAB AND THE SUBJECT

The choice for the redesign of a border crossing is very closely related to the collective research we did within the studio and the subsequent regional strategy we designed. The scope of the graduation studio encompassed the whole border region, researching the different aspects and consequences that have arisen through the border fence and politics.

The studio tried to look at this region in a new way, eschewing the traditional north vs. south divide, looking at the potential of the region as a whole, and the way the two sides of the border are closely tied together both in the past and future.

The Regional Strategy that we devised with the studio was a result of this research and tried to make both sides of the border work together better, and tried to see the Region as one. By using the existing potential we tried to dissolve the divide and remove the obtrusions.

My decision to redesign a border crossing came from a further zoom-in in this regional plan: I believe that in order for our regional plan to work, the most important thing is better functioning twin cities, the beating hearts of the border region. These cities tie the region together, and in order for these cities to become less divided, I felt the most important element to change would be the border crossings. These are the most obtrusive elements (long waiting queues, violent architecture) dividing the two sides of these twin cities.

I decided to redesign the Paso del Norte Border Bridge as this is the most urban border crossing along the border: it directly connects two downtowns, and is used by more than 8 million pedestrians annually. It connects two very divided cities, which also have the most closely linked history. Furthermore, given its central location within this twin city, local businesses are dependent on its functioning.

In summary, this border crossing proved an excellent subject to further elaborate on the problems and questions that the theme of the studio posed.

the proposed new Paso del Norte Border Bridge
RELATIONSHIP BETWEEN THE METHODICAL LINE OF APPROACH OF THE GRADUATION LAB AND THE METHOD CHOSEN BY THE STUDENT

The studio research that was done in the first semester of the graduation studio was based on two types of research: hard research in which we mapped different aspects of the region, as well as more investigative research methods; looking into the socio-demographic aspects. This combination of two types of research led us to the regional plan, which combined for example infrastructural interventions as well as policies to increase social mobility.

For my own project I’ve used a similar combination of two types of research, where ‘hard’ site investigations and security measures led to the spatial organization of the infrastructure of the bridge. The more investigative research I did into for example the atmospheric problems of the border bridge, or the economic effect on the twin city, led to the main design concept of having a double layered bridge, with a pedestrian street on top, connecting the two cities.

The combination of hard, dissecting, research and the investigative parts are exemplary for the Complex Projects chair, and these two methods have also been the main drivers of my project.

RELEVANCE BETWEEN THE PROJECT AND THE WIDER SOCIAL CONTEXT

The design of the Paso del Norte border bridge is not only relevant for the twin city of El Paso-Juarez that it connects, but can be exemplary for many of the other border crossings along the US-Mexico border, as well as other border crossings in the world.

But more importantly, the issues that the project deals with, can be found all over the world, as the project is located directly on the border of the global North-South Divide, and deals with the connection and division between the western world and the developing world. The western world has become a ‘walled world’, and the US-Mexico border is part of a network of borders that surround the western world.

The issue of an actual physical border and border crossings as its connecting element can be found in both the past (the Berlin Wall), as in the future, as more and more kilometers of walls are going up throughout the world. Even in Europe, the border issues, especially migration, are getting more urgent.

The redesign of the border crossing has not just something to do with connecting through a fence, and its physical appearance, but the problematique has to do with the divide between the west and the developing world and with the fast globalization of our world, I believe the border issue will become more widespread throughout the world, thus making the topic of this graduation studio very relevant both now and in the future.