

Reflection paper

Lûte Biesheuvel
4301064
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Beirut Studio

Project description

The project is located in Beirut, Lebanon. This is a city which has a rich history and culture, but also scars from the civil war, political and religious struggles, and is quite recently also subject to a financial and fuel crisis. One of the aspects that was negatively impacted the last 50 years, is public transport. Before the civil war Beirut had a well-functioning tram system, buses and enough opportunities for pedestrians. On country scale there was a railway system, connecting the big cities of the country, but also connecting to Syria. When the civil war began, it became too dangerous to continue to operate this. With the arrival of passenger cars, and highways, there was less space for other modes of transport. Trams and trains disappeared completely, and buses became unregistered mini-vans with no official route, operator or restrictions. Cars became dominant on the streets, pushing away space for pedestrians. This resulted in a very car dependent city, with negative effects like high levels of air pollution, great dependency on fuel, high number of traffic accidents and higher living costs. Everyday around 600,000 people commute to and from Beirut, creating immense traffic congestion. An estimated loss of 8 to 10 percent of Lebanon's GDP is connected to this traffic congestion. This number increased even more since the fuel crisis worsened and people spend entire days in queues to get some fuel.

On the 4th of August 2020 the port of Beirut was the scene of an explosion. This tragic event impacted so many citizens, leaving them homeless or injured, and it cost the lives of at least 220 people. The entire port area is almost completely demolished.

This gave the opportunity to rethink this area and its possible impact on the rest of the city. The area before 04/08/2020 was used as a very ineffective industrial port, with no access for citizens. Since public space and access to the waterfront is something that's lacking in Beirut, the new empty space could give an opportunity to change this around for the better. However, this area should also have a larger impact on the city, which goes from one crisis to the next. It has the potential to work as a catalyst for real change in the city, and maybe even country. The protagonist for this change is a newly constructed mobility hub, on the edge of the historic center and the destroyed port area, close to the Beirut Central District. Beirut is in great need of jobs, opportunities for citizens, and financial stability. With the construction of this mobility hub, which introduces trains, rapid buses and bikes, companies and investors will be attracted to the area, construct buildings around it and create jobs for the local population. The city will become more resilient in the future because of this. The construction of the hub will also create jobs, and once it's finished, gives the opportunity for people to commute easily to the centre of Beirut from the outskirts. This gives more people the opportunity to find jobs, which are in the city, while remaining to live in their houses, which are often in the suburbs. It mitigates the traffic congestion, and thus the high levels of air pollution, resulting in a healthier population and less healthcare costs. In addition, it will attract tourists from all over the country due to the easy and fast connection. There are plans to connect Jounieh (city north-east to Beirut) with Cyprus by a ferry in the future. The train

connection can distribute tourist over the rest of the country, introducing the tourist sector as an extra economic sector. The train will also connect to Syria, and with this also advantage the job opportunities for the Syrian population, since now a lot of day-workers commute to Beirut by mini-vans.

The mobility hub is connected and reuses the former Charles Helou bus station. This has three floors and a road on top, the most important road in Beirut. The road is part of the new hub, so it's not diminishing cars all together, but simply offering more attractive solutions for transport. The first transport mode offered are trains, which sit on the ground floor, immediately connected to the transit hall. On the lower level a bike parking can be found, and on the higher levels car parking, and a bus platform. These transport modes together shape the new mobility of Beirut, while being a catalyst for change in the city.

2. The relation between research and design

Addressing a completely unknown environment, in this case Beirut, makes research an even more important part of the design process. There was hardly any background information to start with, so we started our group research by collecting data and learn about the country, the people, the culture, the landscape, etc. This was a combination of hard data and soft data. We've done research from a large scale, the whole country, to the very small scale, street profiles for example. Without thinking of an exact design yet, this started to shape our views and the possibilities of what kind of project would make sense and how it would be perceived. It created a narrative. To create a 'good' project, it's important to keep looking back and referring to the research. Every step should be traced back to the data and information collected in the earlier stage.

My personal interest and topic soon became infrastructure and mobility. Since the situation is so different than in the Netherlands, I had to research a lot on the history and possibilities of implementing new transport modes. The more research I did, the more convincing the need to change the current situation became. This made me more secure about the significance of the design and gave me enough arguments to design for this drastic change. The research question for this projects is as follows: 'What role can a mobility hub play in the reconstruction process of Beirut?'. Both research and design are used to answer this question, with the research leading to a design brief, and with the design that tries to provide an answer to that brief.

3. The relationship between my graduation topic and studio topic

The Complex projects studio of 2021/2022 regards the port area in Beirut, Lebanon. The direct incentive for this studio subject was the explosion that happened in the area in August 2020. As quoted from the Studio poster: 'The explosion should be considered as an impetus for change.' 'Change' is the leading studio topic and this topic is also very present in my graduation. A change in land use at the port area gave an opportunity for new buildings and functions to emerge. By changing the very car-embedded culture in Beirut, the city can hopefully change for the better and become more resilient.

4. Research method and approach chosen in relation to the graduation studio

At Complex projects we start to research from large scale to small scale. An important way of researching is by making maps. This can, for example, show historical growth, or all the tramlines disappearing, or a changing building grain. We did this for 6 different scales: Mediterranean, Lebanon, greater

Beirut Area, the city Beirut, the larger port area and the blast area. By doing this we learned to see all the changes in a bigger context.

Next to this (historical) mapping we've conducted case study research, on other port areas along the Mediterranean sea for example, or on cities with similar traffic congestion problems. Also descriptive research was part of the research approach. We've extensively used google maps and similar websites as a source of information and research. Also discussing with Lebanese students and drawing road profiles was part of this research method.

In the later stages of the studio, the focus shifted more towards research-by-design, where we used both physical and digital models as a way of doing research.

5. Relationship between the graduation project and the wider social, professional and scientific relevance

The topic of changing cities centered around cars, into cities that are designed for pedestrians, cyclists and public transport is a very relevant topic in this era. People start to realize that not only do cars produce a lot of pollution and effect our health and the climate negatively, they dominate the scene of the street. Streets are often more designed to suit cars than anything else, and in Beirut this is even much more the case. For example, in a growing number of Dutch cities cars are banned from the city centre, because people's views on car usage has changed. Lebanon isn't there yet, but creating a good and attractive alternative transport is the first step for change. Also professionally and scientifically speaking this is an interesting research, since there aren't so many countries anymore which almost completely lack any form of public transport and are 100% dependent on cars. Could Beirut maybe go in the direction of Istanbul, which suffered bad

traffic congestion but managed to solve a lot with great public transport?

Next to the changing importance of cars, the reuse of Charles Helou bus station has a large social relevance. In Beirut buildings, also heritage buildings, are demolished on a large scale, by property developers. But also in The Netherlands buildings are often not used as long as they potentially could be, especially when they are perceived as 'unattractive'. This projects proves that an out-of-use, massive, concrete, brutalist building can get a new life when it's being upgraded and given a new purpose.

6. Ethical issues and dilemmas you may have encountered during graduation

Ethical dilemmas were very much present during this graduation process. I felt often like looking at the problem with a 'Western mindset', that couldn't quite understand the level of corruption and political chaos. When in contact with the Lebanese students I felt as if we came to 'offer the solution' to the problems that were their real and everyday lives. Not something that's gone after you shut down your computer. This put me in a difficult position sometimes, their stories were incredibly hard to imagine for me. The longer we worked on the project, the more I started to realize that implementing public transport in a city like Beirut is very different than it would be here. There won't be government funding for example, and if there was, people would be suspicious because they generally don't trust the government at all. Certain design aspects became even more important than they would have been here. For example, creating a surplus in renewable energy, to also generate energy for surrounding buildings but also not be dependent on the unreliable electricity supply of the country.

It was a fine balance between creating a project which deals with a real-life issue, and not get detached from what's really going on there. I would feel some sort of guilt when I asked for their help or views on something, while they never gave me a reason to feel like that, because the differences in our living situations are so evident. I tried to stop assuming that things that might be normal or obvious here, would apply there too.