

Reflection:

(Re)Mind the Wall

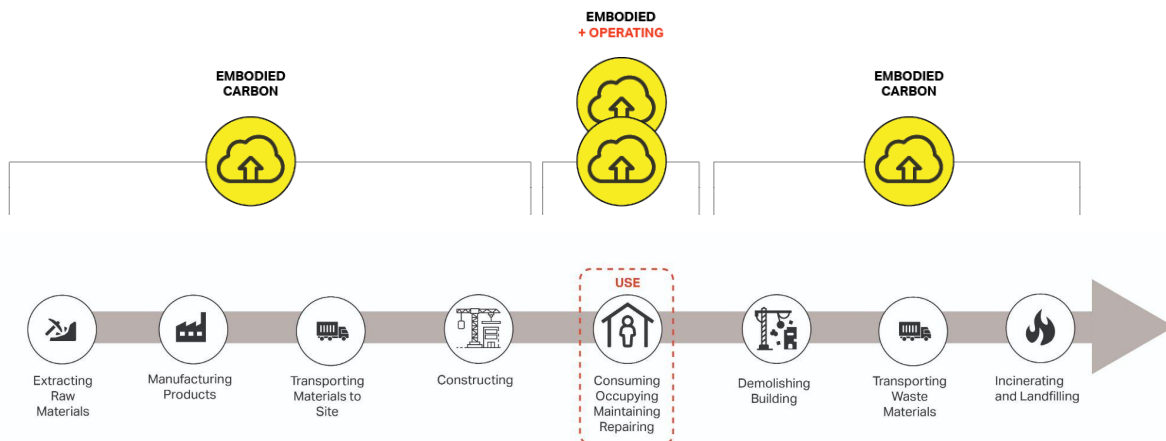
**Designing a circular Creative Commune
for the people of Berlin**

Mimi Cepic

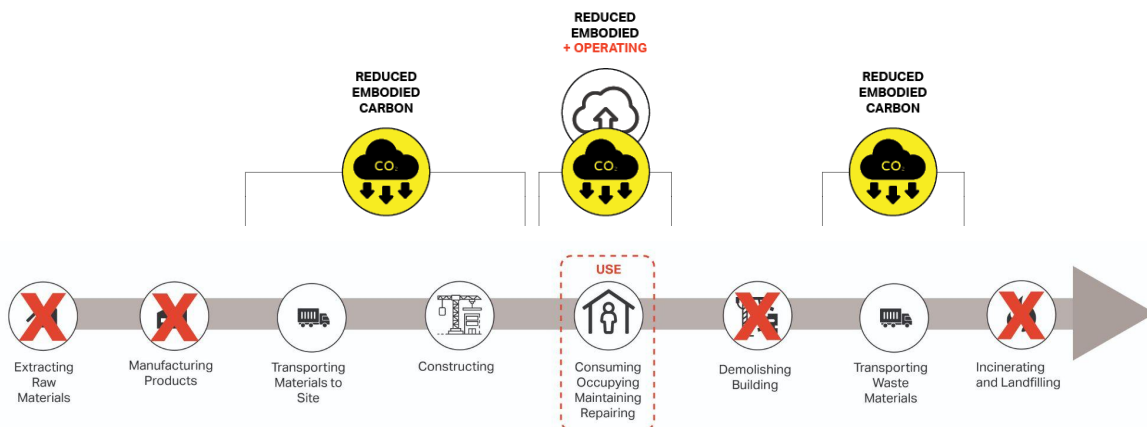
Reflection

1. What is the relation between your graduation project topic, your master track (Ar, Ur, BT, LA, MBE), and your master programme (MSc AUBS)?

CO2 emission and waste are our planet's worst nemesis. Buildings alone make up 33% of global carbon emissions ¹, while the construction industry is responsible for merely 40% of global waste ². It is the responsibility of the designers and practitioners to design more sustainable buildings for the future, buildings that are carbon-free and waste-free. This project seeks to research new solutions to reducing carbon footprint and waste in the construction process. The relationship between my graduation project topic and the MSc Architecture track is that it directly addresses this challenge in the building industry by designing a circular public building out of reclaimed urban materials.



Current Linear Construction Process



Steps to Eliminate in the Process



Adapting the process with a circular system

Within this new circular process, the design now begins at the location of the site and explores new ways to design with waste materials. By designing with what is already existing and nearby, it continues to minimise the waste and carbon emissions even within the closed loop system. The project seeks to experiment in different ways we can use our cities as urban mines to reclaim existing construction materials as the material palette for the buildings in the future.

“Future cities will become huge, rich and diverse raw materials mines. These mines will differ from any now to be found because they will become richer the longer they are exploited; new veins, formerly overlooked, will be continually opened.” (Jane Jacobs, “The Economies of Cities”, 1669)

This research of circular processes and materialisation has led to the project evolving into a preliminary process of future sustainable construction in the form of an urban backyard building. It has developed into the study of explorations and experiments with the materials that exist within the context of the project.

2. How did your research influence your design/recommendations and how did the design/recommendations influence your research?

Research and design were intertwined and simultaneously influencing each other through every stage of the project. The scope of research for this project is within a circular economy, with a focus on circular construction methods and urban mining to incorporate reclaimed materials into the building process. This notion of taking from the

past to reclaim for the future was further solidified when contextualising the project in Friedrichshain, Berlin due to the city's history, culture, demographic and public needs.

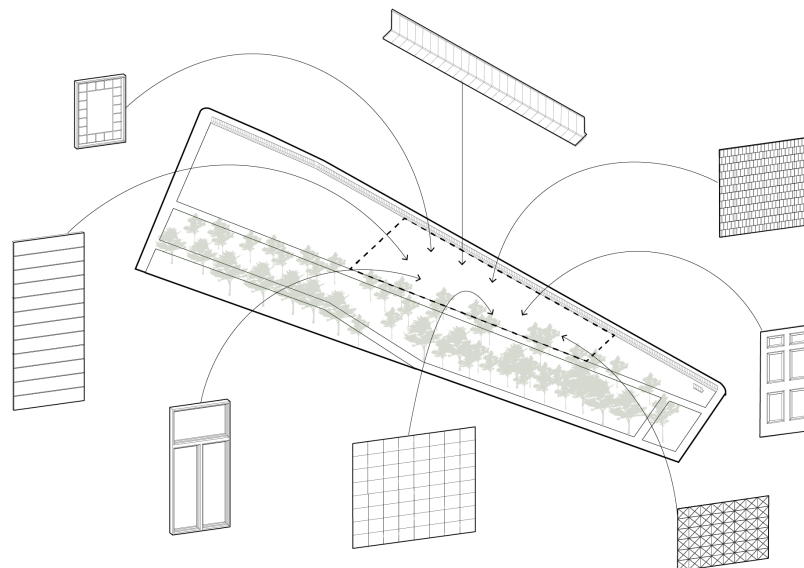
The site of the project is Park an der Spree, Friedrichshain, Berlin. Informally known as “the backside” of the East-side Gallery, the park is a dead-end space backed up to one of the most historically significant structures in all of Germany, the Berlin Wall. The design needed to start with the elements of the immediate site: the wall, the Spree canal, the existing paths and trees. It reshaped the entire perspective of what “reclaiming” could imply. While the initial design aspired to respond to the people and identity of Berlin with the concept of creating an ever-changing, colourful public space for the Berliners to collect and engage, it developed into a multiplicity of layers that interconnected natural elements, circular construction and reclaimed materials to public commune, street art celebration and reinterpreting historical landmark. Designing and researching together resulted in a circular urban backyard that directly responds to the culture, context, people and identity of the city of Berlin.



3. How do you assess the value of your way of working (your approach, your used methods, used methodology)?

I came into the studio with a background interest in designing out of waste materials within the scope of a circular economy. I wanted to address this issue in the building industry through my graduation project. I defined my circular strategy and approach to my design, by starting with the site and researching what was locally available. Upon the study trip to Berlin, I determined my site, Park an der Spree (behind the East-side

gallery) and extracted the existing elements of the site as new components I would recontextualize back into my project. I “reclaimed” the Wall and sought out the neighbourhood of Friedrichshain for other reclaimed materials to develop my overall material palette for the project. Based on what was available I designed my building and facade that maximised on low-cost, low-carbon construction methods and I implemented both passive and active sustainability strategies to create an overall circular building on all levels. Simultaneously I continued researching more about the history, culture, people and to further define my program, architecture and overall concept of a public condenser. My approach was a hybrid of research, material exploration, context-sensitive design and circular strategies that resulted in a project that looks to the past to define how we can build the new. It is a multiplicity of layers that altogether reflect the ever-changing identity of Berlin and exemplify sustainable, ethical and community-oriented design.



4. How do you assess the academic and societal value, scope and implication of your graduation project, including ethical aspects?

Regarding ethics and societal value, this project is a direct response to the current carbon and waste problem within the building industry. It works within the scope of a circular economy and experiments with reclaiming “waste” materials back into the construction process, therefore closing the construction loop.

5. How do you assess the value of the transferability of your project results?

This project is a prototype design process design model that has output a building as a result of research specific to the context and location of its site. While many elements of

this project are unique to the site and its broader context, I provide examples that exemplify the many ways... in which a reclaimed project unique to any site can be developed. This is accomplished by utilising the circular construction process as the transferable element for this design model, based on the locally available reclaimed materials.