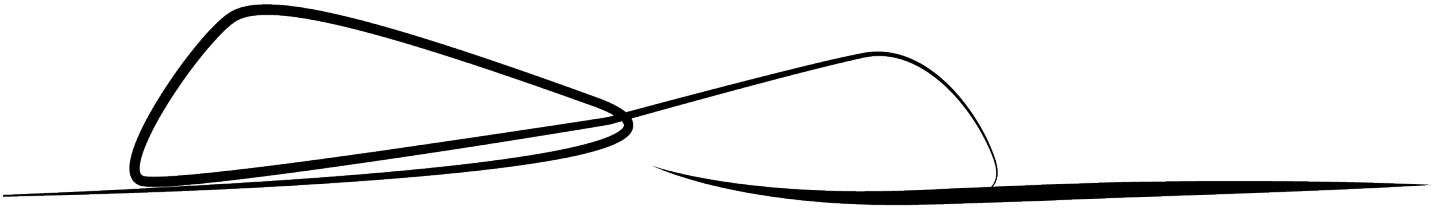


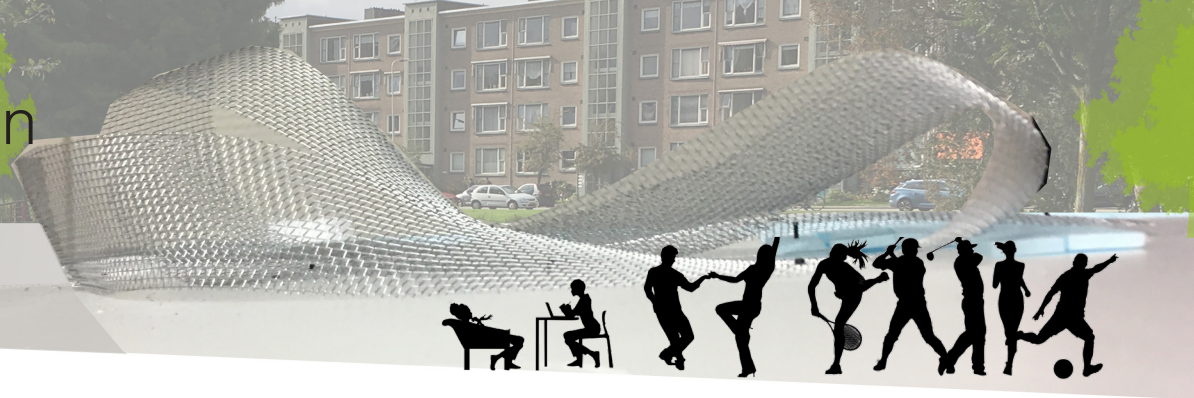
Staging (the) MultipliCity



Reflection paper

Student name: Bart van Huizen
Student number: 4811232
Date: 28.06.2021
Graduation studio: AR4AP100 Public Building Graduation studio 2019-2020
Tutor: Ir. Paul Kuitenbrouwer
Second mentor: Ir. Gilbert Koskamp
Board of examiner delegate: Ir. Frank Schnater / Dr. Erik Louw

Introduction



The Public Building Graduation Studio offers a course where the student researches the possibilities how to extend the public realm into a (semi)-public architectural framework.

The main goal of this course is to find a way how to connect the layers of society, with all the socio-demographical differences, throughout this architectural framework.

I have chosen this course because my personal interest in the architectural field is also within the public domain and how to extend the public life with architectural manifestations integrated within the urban tissue. I think, as architects we have this responsibility towards society to be constantly looking and researching how to extend the status quo.

During the first phase of the project the group researched both locations that were provided by the studio. The first location was Copenhagen, and the second location was The Hague. Although, both locations are situated in a park, there are a lot of differences in context.

I eventually chose The Hague as my graduation location because the park is an empty canvas and could turn in a vital element to maintain and enhance the city experience. Therefore, the park and the public condenser revealed its possibilities to become an urban element integrated into its park context.

The relationship between research and design.

The municipality of The Hague set the goal to massively increase the existing housing stock of The Hague Southwest with 10.000 houses. This action also has consequences for the existing urban tissue. The municipality needs to take smart interventions to avoid running down the public realm.

The Public Building Graduation Studio provided Melis Stokepark as site location which is located adjacent to the Green Cross, which is the vital green connection in The Hague Southwest. Alongside this Green Cross, there are plenty of public buildings, mostly reserved for sport and play.

The group research mainly focused around four themes: city, connection, people and power. From these themes I developed starting points for further research.

The research done in the first phase of the graduation studio provided my some interesting insights. For instance, the socio-demographical parameters of The Hague highlight the differences in the multi-layered ethnical society, the unhealthy lifestyle, while there are plenty of sport facilities in the surrounding neighbourhood and the massively increasing housing stock.

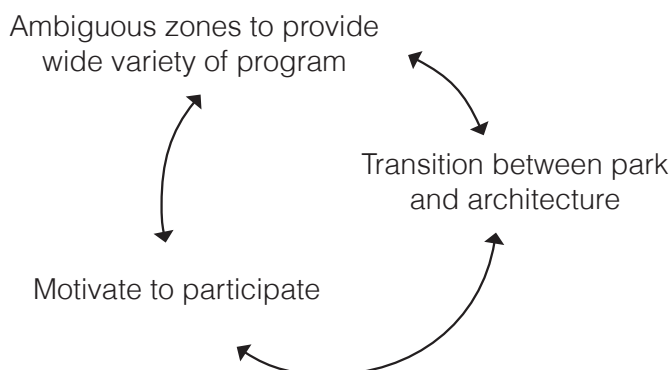
The goal for my graduation project is therefore highlighted in my research question:

*“How could a public condenser provide a **framework to offer a wide variety of program** to contribute the multi-layered ethnical society regarding a **cultural, sportive, and healthy life**, where the visitor is motivated to **move and participate**, while still maintain the **park character**?”*

The P1 provided me the first starting points for a scientific framework. In the P2 I started to elaborate these starting points more within the architectural field.

I was inspired by quotes from Richard Sennett, Immanuel Kant and Richard Kook regarding the bottom-up approach, the crooked timber of humanity and using architecture to stage the city life. These quotes gave me the inspiration to research into the ambiguity of architecture. Which developed into researching the themes regarding the main theme of the public condenser course: multiplicity.

Multiplicity means to me in the architectural field that the public domain should contain certain ambiguity. There are spaces where one activity can happen, while consecutively spaces for multiple different events. This results in different layers of architecture. Certain layers are reserved for the larger events, while the leftover space is reserved for the technical and supportive layer.



The scientific framework started to gain more boundaries during the P2. The theory of coexistence by Philip A. Loring regarding the multi-layered ethnical society gave me more insights how species with different backgrounds could live together. Every targeted audience should be able to do their interests within the architectural field, yet there should be a connective element which brings them together to share experiences.

This is highly related towards the term multiplicity. Eventually I held on to the term fluctuating and dedicated spaces, which is portrayed within the Seattle library by OMA. Fluctuating spaces have an ambiguous character where multiple activities can happen. Whereas, dedicated spaces are defined by furniture and objects designed for a specific function and can expand its boundaries towards the fluctuating space. Therefore, multiplicity could be used as a strategy that offers an interaction between fluctuating and dedicated spaces.

After the theoretical framework, I started to research case studies to gain more insight in the themes of transition and movement. Which was rather difficult because I started to research the projects by using different techniques, for instance watercolor drawings, to highlight the important transitional elements.

But, because of the fluent watercolor, these techniques did not always represent comparable qualities in the drawings. Eventually, I modeled most of the case studies within the 3D modeling program Rhinoceros. I took this step because I wanted to upgrade my skills before I started to develop myself further into the architectural field. Although, my skills are upgraded, these steps took me more time than eventually planned. With the case studies 3D modeled, there were more comparable qualities to gain insights between transition and movement.

With a more solid foundation due to the research, I started to continue in the design phase by making models, sketches drawings and diagrams.

Reflecting on this phase, I had a rather difficult time to translate theoretical information into the practical field. After the design phase I gained more experience how to deal with the design phase and to evaluate and translate the insights from theoretical research towards concrete design instruments.

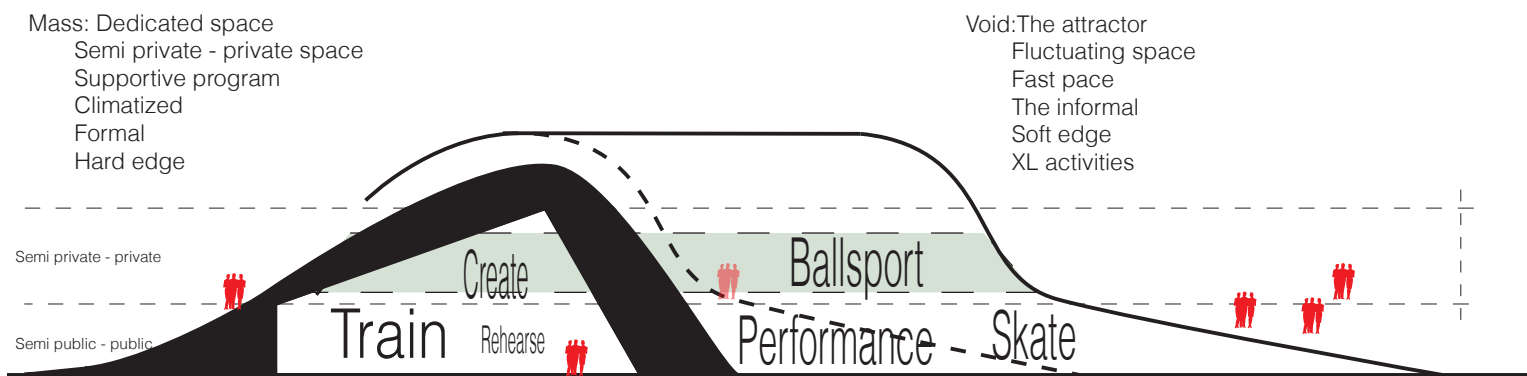


Diagram of personal interpretation of the relation between dedicated and fluctuating spaces.

The relationship between Staging (the) MultipliCity, the public condenser, the master Architecture track and the faculty architecture and the built environment.

The master Architecture track of the TU Delft invites students to address the spatial, social, and technical challenges we are facing today by using design as a tool to develop creative and innovative solutions.

These goals are also intertwined within the Public Graduation Studio and my graduation project: Staging (the) MultipliCity. The public condenser as integrated urban element has gained a part of the daily life cycle for the citizens of Morgenstond, and can use its architectural framework for the events on a larger scale.

The public condenser addresses the spatial challenges by giving an example how a public building can integrate itself into the park and support the movement flow of the park to become an urban element. Therefore, the park character is maintained and kept as a vital element for the expanding housing stock and the multi-layered ethnical society.

The social challenges are on the other hand how to cluster different groups of the multi-layered ethnical society. The theoretical research reveals that different groups need to do their desired activities in order to live together. Thus an connective element c.q. zones are needed in order to connect the different layers of society.

The sustainable and durable challenges are the main topic of the technical challenges. These challenges are intertwined in the main theme of the public condenser: multiplicity. The personal interpretation of this term reveals that multiplicity means an interaction between fluctuating and dedicated spaces.

By using this strategy the lifespan of the building is expanded. Next to the use of zones as strategy, the building needs to keep its park character and the structural aspect needs to be demountable to address the challenges we face today. The park character is highlighted by using fluent lines that emerge from the park to create density and mass. A continuous structural form that laces the park and program together.

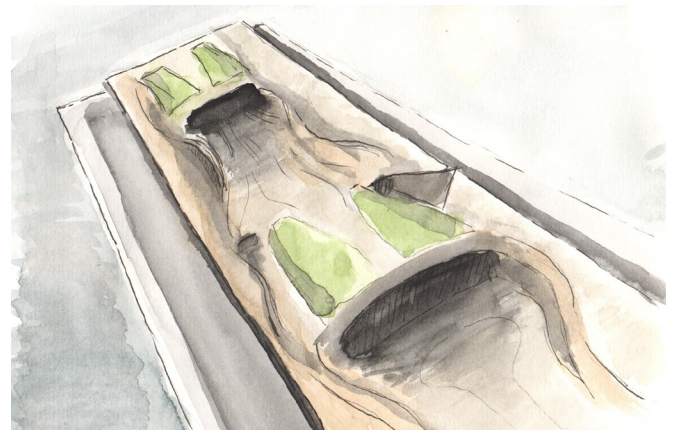
Elaboration on research method and approach chosen by the student in relation to the graduation studio methodical line of inquiry, reflecting thereby upon the scientific relevance of the work.

The graduation studio, offered by the chair of Public Building is a course which evolves around the interaction in the public realm with the social- demographical differences. The course also challenges the students to find the meaning of the public realm and different methods how to extend the realm as public interior by using local urban challenges and improve its context.

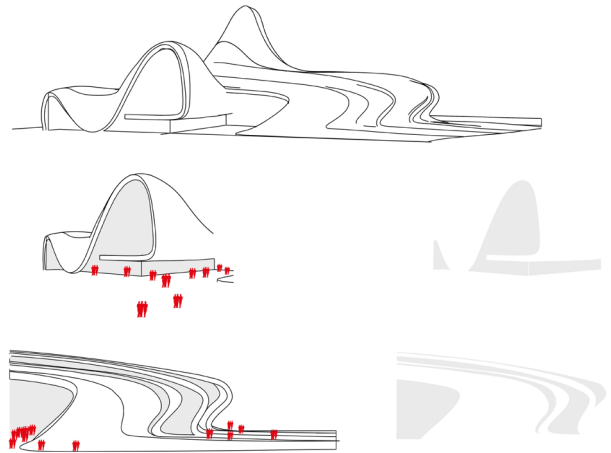
The P1 research consisted mostly of exploratory research to give the student enough ingredients to funnel them into a concrete starting point for the remaining phases. As an addition during this stage to clarify the view towards public buildings, the selected list of buildings was researched using the case study method.

My starting points revolved around the social and architectural field. Which led me to expand the exploratory research to gain a more solid foundation. In my graduation plan I highlighted to do case studies regarding the adaptability of space. But, because I expanded my theoretical research I shifted to research goal towards case studies regarding movement, transition, fluctuating and dedicated spaces. These case studies were studied on theoretical information and used different drawing techniques to gain comparable typologies.

Afterwards, I used the mapping technique to research the location and gainend more knowledge about how to use the public realm more efficiently. The program of the public condenser is researched using more diagrammatic instruments.



Watercolor drawing of Yokohama terminal by FOA architects



Diagrams to highlight transition of Heydar Aliyev Center by Zaha Hadid Architects

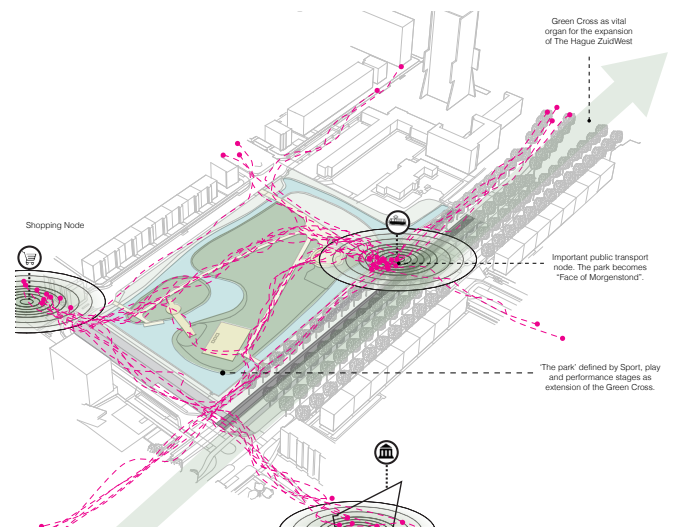


Diagram of the project site visualizing the preferred urban flow

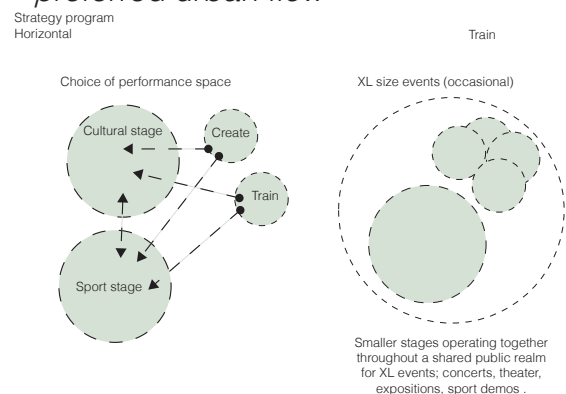


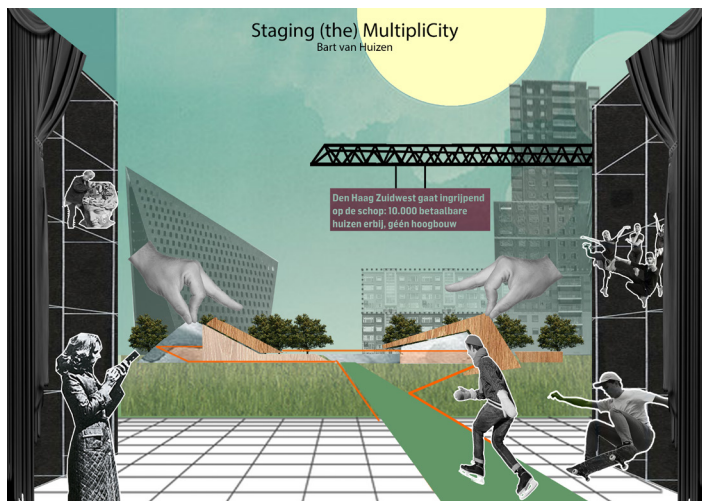
Diagram of the organizational strategy of the program

To visualize my concept I used a collage technique to highlight the key elements. I found the use of manifesto drawings really helpful because it can trigger the imagination without giving clear boundaries what the building ought to be.

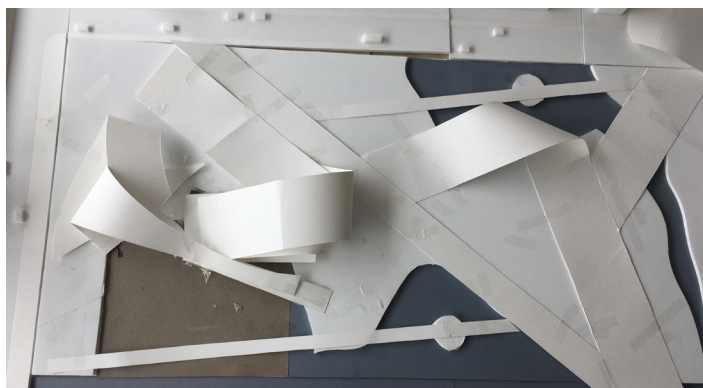
Afterwards, I started to make different physical models. It was a challenge due to the fact how to visualize the fluent transition and which model material to use. The models were at the beginning exploratory but started to grow into more concrete building shapes and scales.

Eventually, I started to make models on a 1:200 and 1:100 scale which assisted my to gain different insights regarding the usage of the building.

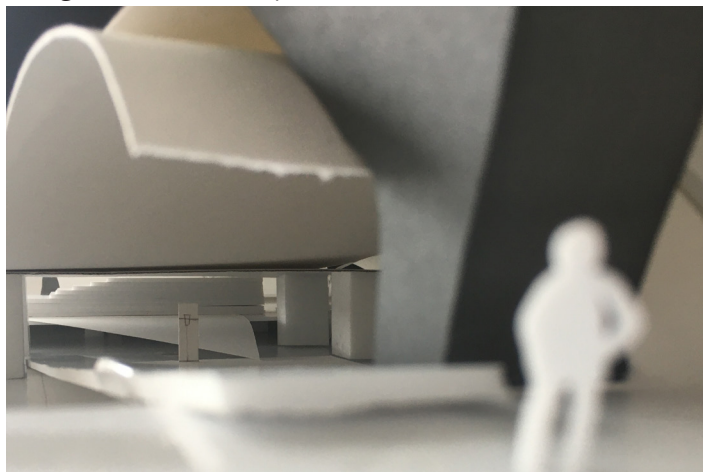
By using the same 3D model different 2D drawings were possible to create to find the balance between scale, proportion and the perception of space.



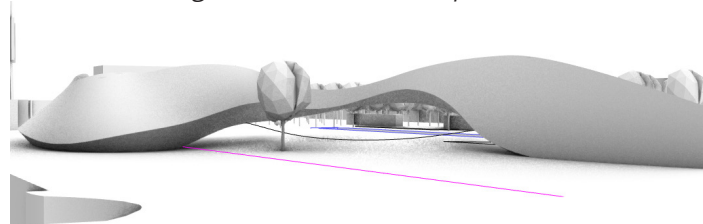
Collage technique regarding the manifesto of the project



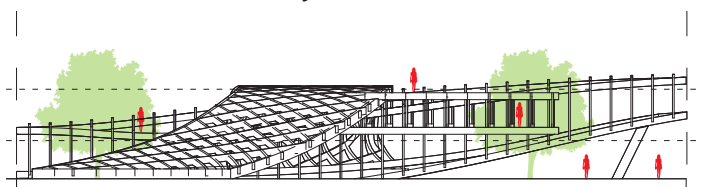
1:200 study model of the the park and the integrated landscaped ribbons.



1:100 study model of the visual relation between the fluctuating and dedicated spaces.



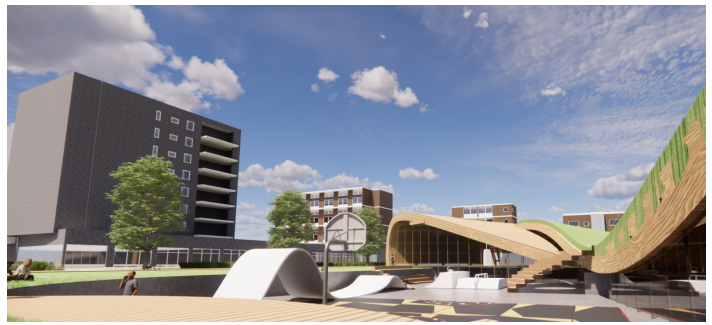
3D visualization study model of the mass.



2D study model of the structural anatomy of the building.

However, the project consists of certain parameters due to the landscaped style and using an architectural ribbon to define outdoor- and indoor space. I have chosen to learn to use and implement these parameters into the parametric modelling program Grasshopper. With this approach the building started to develop further due to the possibilities within the program.

This final step assisted me to visualize the project further and draw the project more realistic due to the implemented parameters.



3D visualization study model of the ribbon.



3D visualization study model of the ribbon.

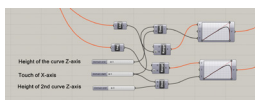


3D visualization study model of the ribbon.

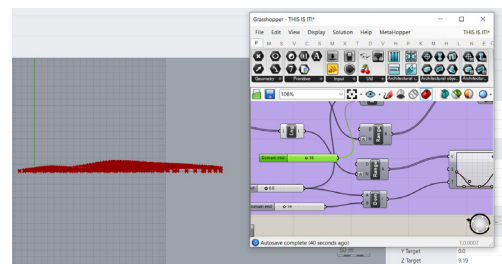
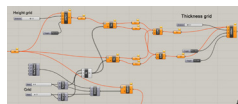


Defining the curve of the outer lines

Defining the graph of the curve

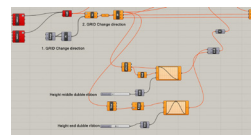


Defining the grid

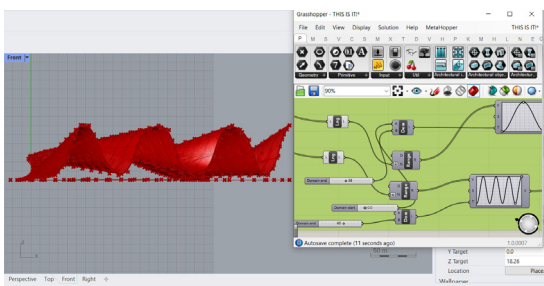
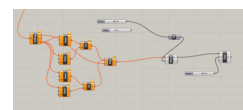


A flat ribbon when the parameters are set to zero.

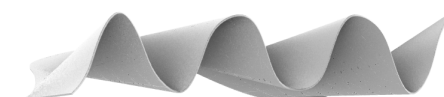
Inside structure of the ribbon



Extra bracing



The parameters allow the ribbon to be adjusted.



Elaboration on the relationship between the graduation project and the wider social context

The urban tissue on international scale will be immensely intensified in the upcoming decades by the rapidly increasing population. The demands on nature and urban tissue will only become higher due to new standards regarding social, climate and technical aspects.

Maintaining, improving, expanding and creating new green areas within the metropolitan areas will therefore be key to keep a pleasant living environment.

The role of the public condenser in these green areas could enhance this. Not only on functional and social level but also as urban element, while still creating an exciting place where visitors are invited to participate and explore.

Personal reflection

It has been quite a graduation phase with its ups and downs. The pandemic limited my resources and social life and I experienced personal issues which led to extending my graduation phases. But in the end, I also gained new experiences and learned new skills which will help me to develop myself further into the architectural field.

My main interest about the public realm still remains the same. The idea of how to cluster people of different backgrounds using an architectural framework is still one of the topics I enjoy the most. Therefore, I am glad I have chosen this graduation studio.

If I look back to the whole process with the new information I gained I would change some actions, which would let me further excel in my project in a more efficient way.