THE PIER

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ABSTRACT

■   Today, in a digital era where people can do their everyday tasks from home, the city as a social platform faces new challenges. Individuals no longer need to run errands around the city, which, until now, has been the standard way of city life. The comfort of today's modern world impacts not only the private but also the public life of cities. The urban dynamics of city life are likely to be reduced when stores and services slowly begin to disappear. This scenario is not necessarily a dystopia, but we have to be aware of how our modern ways affect and reshape the public life in cities.

The public sphere is central to urban life - a lot having to do with the anonymity it provides. many of its inhabitants enjoy spending hours of the day at a busy shopping center or central square where they can relax, enjoy the view, or simply people watch. These activities are especially significant for the city's youth as they provide the platform teenagers use to break out from their child role and into building a personal identity. The public sphere is also where they learn how to be an adult (Lieberg, 1992).

What methods can we employ to design a city infrastructure that maintains social life and enhances the public domain in the modern city? How can we create social platforms where people can meet, see and be seen in this new public domain?

The image to the right depicts a makerspace and public living room standing in Nyhamnen in Malmö. Using architecture, the project aims to attract the visitor to explore the entire building and hopefully also increase the individual's threshold to try new experiences. The building is also a weather protected public space, programmed with recreational and creative activities.
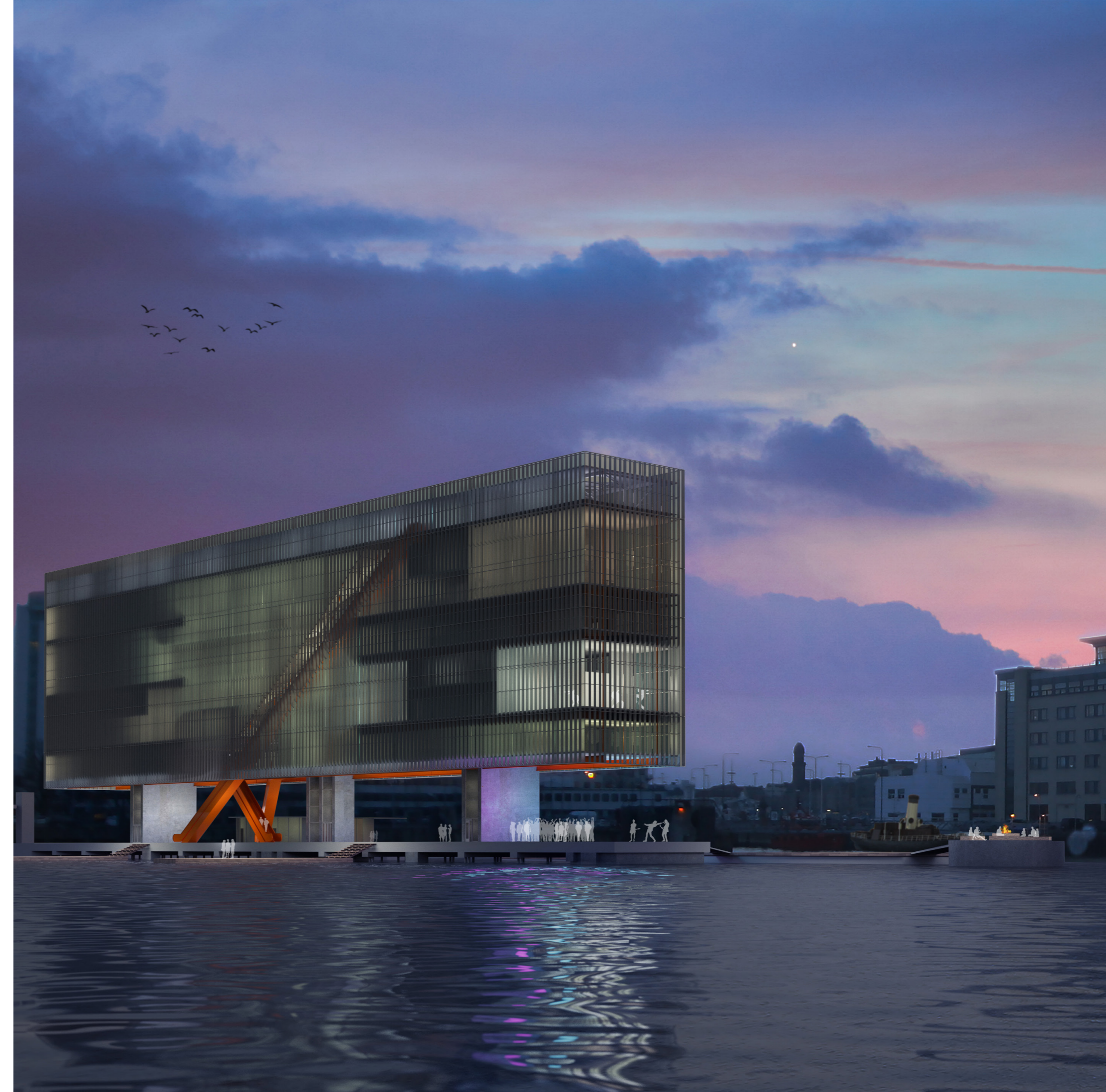
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INTRODUCTION

■ I got the idea for this project in the summer of 2018. I was hanging out with my brother, who at the time was 16 years old. I asked him what he was doing with his friends at night and he simply replied, just "roaming around" in the outskirts of the city. He told me that they were climbing fences, trespassing small industries and construction sites, and looking for thrills and new experiences. This chat reminded me of my own experiences of my youth. A time when I didn't have money, wasn't allowed in bars, and yet had outgrown the youth recreation centers. From these recollections I found the heart of my project: examining and addressing young people's' place or lack-thereof in the city.

Through interviews and extensive reading, many of which included sociological research papers about young people in an urban context, I built a knowledge base for my project. The research led me to a few driving concept for my project; the phenomenon that adolescents are never alone in the public sphere, and that this group wishes to be where people are diverse in age as well as ways of thought (which is one of the reasons why everyone outgrows youth centers).

The most popular "public" spaces for youth are shopping centers and populated domains, however they do crave intimate spaces which they can appropriate and make their own. As these places are beginning to disappear due to the increase in "to the door-step" services and internet shopping, I decided to design a weather protected public space.

The project is located in Malmö, but the conceptual ideas behind my work are not bound to a specific site or city. Malmö felt right due to its size, dynamics, and rapid growth within the last 20 years.

By studying Malmö's sociological makeup and infrastructure I soon realized that there are only very few places where young people can meet across socio economic, ethnic and intellectual backgrounds. In the way the city is designed, it is very easy to go back and forth between periphery and center but difficult to reach neighboring areas outside the city center. Since my quest was to design a public space for the citizens of Malmö I realized that, to make it really public, it needed to be accessible to everyone (centrally located) and that the site had to be neutral (not yet appropriated by a specific group of people).

To find a site suitable for my project I used Malmö Central Station as my starting point and walked around, looking for undeveloped / underdeveloped sites. My journey led me to one really exciting spot in Nyhamnen, just a few hundred meters away from the transportation hub. The site is a 110 meter long and 12 meter wide concrete pier hovering above the sea surface. It was built as a docking spot for steamers in the late 1800s and got its current shape and size during the seventies. Now the pier is unused, and has been for many years. The surrounding buildings contain small factories and office complexes which makes the area as neutral as it can get for a site that centrally located.

To convert this pier to a public space I realized that my project had to be a destination- an end goal, in order to attract people to the site. With this realization I studied Constant's 'New Babylon' project, as well as Bernard Tschumi's postmodern ideas of space and event in order to understand how to use architecture as an attraction point. The architecture has to be visible and evoke curiosity from afar, as well as within. The building has to drag people to it, invite them in, and provoke them to investigate its inner. Thus evoking curiosity became the theme of the project. This theme was central to all architectural decisions- from the choice of facade material to the formal language of the atrium space.

A program can help to bring people to the building, but it can simultaneously exclude others. The architecture should therefore be able to handle different programs over time and allow flexibility since no one knows what Malmö will need in 20 years.

Thus, the first floor of my project will be a fully public entrance floor, housing a café, a recreational center (pool and shuffleboard) and a quiet space for work and study. I consider this floor to embody a marriage between a library and youth center as it encompasses both elements. The rest of the building is filled with spaces for different cultural practices and display venues. The building has a dance department, as well as a film and music center.

I decided to use arts as the core programme rather than sports because independent of background, gender and age, almost everyone has a personal relationship and interest with the arts.

To maximize the public nature of the project I've decided to lift the building from the ground, making the pier accessible at all times. By opening up the pier, and adding floating platforms, the project also makes the water in central Malmö more accessible for the citizens. The rooftop of the building is a two story park accessible by an escalator from the pier. This escalator pierces through the building connecting the exterior public spaces underneath and on top of the building. The lower floor of the rooftop park is a lawn for recreation and play, and the upper is a balcony where one can enjoy the view of Malmö, and on a clear day even Copenhagen on the other side of Öresund.

BACKGROUND

▬ This section will present the research used to aid in the the production of my project which includes a wide range of studies and data. From articles and blog posts about the discrimination of young people in the city, to data-mapping of the segregation in Malmö as well as studies of the public transport system in Malmö, this section aims to examine the intention behind the structure's location as well as arguments for why it is necessary.

YOUTH'S PLACE IN THE CITY

The acceptance for adolescence within the public realm has been lowered throughout the last century. Their presence often evokes negative connotations among other city dwellers with them viewing adolescence presence as distributing and one that incites insecurity within the area.

I believe that, instead of trying to control them with hostile design and adult control, they should be invited to become a part of public life in the city in their own way. Instead of placing youth centers in basements or barracks in the outskirts of the city I want to highlight this group as a great resource for the city.

Young people are smart, curious and formative. They are in a transitional phase of life, from child to adult, and need space in the public realm to go through this transition and become functioning adults.

Adolescents, who otherwise never would meet, should be given a platform to see each other, connect, and develop a more complex understanding of the cities in which they live. One might get friends from different backgrounds, get inspired to pursue one's true potential, and even break barriers within the city.

POLICY & DESIGN vs. ADOLESCENTS

Adolescents as a group have a weak position in society, and are constantly talked of as a threat to the order of things. Media often portray this group with negative connotations, which in turn shapes society and policy to think of them as a problem which needs to be controlled, and in best case disbanded from the public realm.

A wide variety of measures are taken to control, and often harass, young people in the city. It is subtle things like removing a bench because of "loitering", as well as in-your-face control like street patrolling. Some design measures developed to primarily target this group are:

- Playing classical music in public locations

- Coloured lighting that enhances skin blemishes (BBC, 2009)

- Anti skate design

- Organized street patrolling

- Design to minimize the possibilities to hang out in the public domain. This is for example removing railings and seating at locations where young people enjoy hanging out (Lockton, 2008).

ADOLESCENTS NEED PUBLIC SPACE

In order to investigate adolescents use of public space I read Mats Lieber's book 'Att ta Staden i Besittning' (to take possession of the city). The book is a research thesis published in 1992 where Lieberg, through mapping, photography and interviews, analyses how teenagers use public space. The study is made in Lund, where Lieberg collected information during a three year long process. It focuses on how teenagers use the public space literally as well as symbolically. What do they do in the public domain and what does that mean in their process of growing up?

The city, and the city life are of importance for adolescents. This is the physical field in which teenagers are liberating themselves from their parents and the values of childhood, and prepares themselves for the responsibilities and demands of adulthood. Lieberg states that:

In public life and when with one's pals, young people are confronted with different people, situations and values. This can act as a kind of learning process to help prepare them for what awaits them as adults.

The study shows that young people need a variety of spaces to satisfy their needs, they need both intimate spaces where a group can feel in control of the room, as well as open public spaces where the crowd bring anonymity. He uses the terms 'on-stage' and 'off-stage' spaces to refer to this variety of spaces needed. Adolescents are using these different spaces to satisfy different needs. At one point they need to feel in control of their situation and being fully aware of everyone around them, while at another point the need for an anonymous crowd in which one can try new styles or personalities are important.

Lieberg states that, due to their young age and lack of funds, they are excluded from many places and venues, which leaves them to the public realm for them to create their own 'living rooms'. The public spaces in the city are therefore of great importance to this age group, since this is where they can spend time with friends and get away from their parents. In many cases, the friend groups are to big to bring to the house which makes the public space of the city to the only place accessible. The public space, therefore, need to incorporate both places for retreat and places for interaction.

From the reading as well as an interview with Mats Lieberg I came to a few conclusions regarding adolescents need for different spaces. They need:

- *Places where they can fall back*
- *Places where they can show off*
- *Places to study*
- *They have to feel included*
- *A rich variation of spaces*
- *Somewhere to be late at night*
- *Both open and secluded spaces*
- *Weather protected outdoor space*

CONCLUSION / REFLECTION

▬ Adolescents are often framed in conjunction with negative connotations; they loiter, they hang around, they are disturbing etc. The main reason for this negative characterization is their lack of safe space to go or hang out outside of their homes. They often migrate to malls or other commercial centers where their presence isn't questioned. Here, in the intense public realm they act on the same terms as everyone else. However, these places close early and as the crowd disperses the youth are left to the streets. The public realm is where they find sanctuary, as well as the platform for their personal development from children to adults. It is essential they have a safe space within their communities to not only hang out- but most importantly just be.

MALMÖ

▬ Malmö is the third largest city in Sweden with 333 633 inhabitants (2017). It is currently the fastest growing, and the prognosis shows that the population will increase with 13 % (44 000 people) by 2028. Malmö has citizens from 182 different countries and one third of its population were born outside Sweden. The population is young with 48 % of the inhabitants being under 35 and almost 20 % under 18 (Malmö.se).

Malmö has belonged to both Sweden and Denmark over time and the connection to Copenhagen is still very prominent. Since the opening of Öresundsbron in July 2000, people have access to comfortably driving or taking the train across both country's borders.

Over centuries, the huge harbour and shipyard have been Malmö's main industres bringing both cargo and a diffusion of people to the continent. Nowadays these industries have declined but their mark still remains very prominent in the harbour areas in the northern and western parts of the city.

The following section will illustrate the reasons for placing the project where it is by analysing population patterns as well as the public transportation. All data is collected from Malmö Council's web page malmö.se.

SATTELITE IMAGE OF SOUTHERN SWEDEN

MALMÖ

COPENHAGEN

SATTELITE IMAGE OF MALMÖ

HARBOUR

PROJECT SITE

CITY CENTER
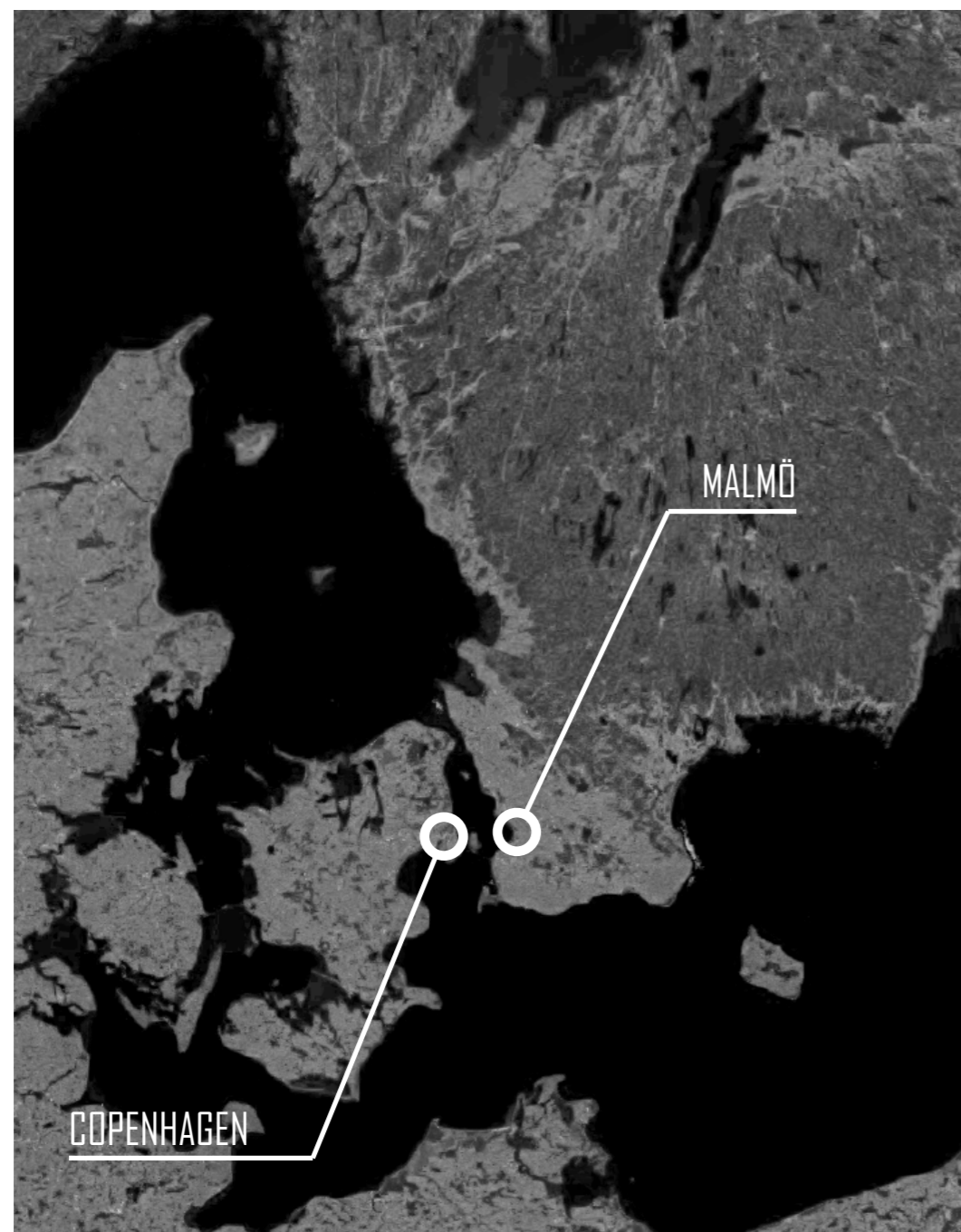
ANALYSIS / IMMIGRATION

The diagram shows the areas with highest and lowest levels of first and second genera-
ton Swedish citizens. In the purple areas less than 20% of the population are born, or
have at least one parent that is born abroad. In the teal areas 75% or more are born, or
have at least one parent that is born abroad. The Malmö average is 45% first or second
generation immigrants.

Through the diagram we can read that the southern and eastern parts of the city have
a higher density of immigrants while the coastal areas to the west are more homoge-
nously populated.

ANALYSIS / INCOME

The diagram shows the richest areas in purple and the poorest areas in teal. The rich areas have a median income of over 400 000 sek per adult per year, and the poor areas have a median income of less than 270 000 sek per adult per year. The median income in Malmö is 328 000 sek per adult and year (data from 2017).

The pattern is similar to the immigration segregation pattern which suggest that immigrants in general have a lower income then average. This is ofcourse a simplification as there are many factors that go into the overall economic makeup of a population. It is well documented that when people migrate they usually look for people from similar cultural background, which is why there are places like Little Italy in New York and Koreatown in Los Angeles.

ANALYSIS / EDUCATION

The diagram shows the areas with highest education level in purple and lowest education level in teal. In the purple areas more than 60% of the population have a three year or more college education. In the teal areas less than 30% have a three year or more college education. In Malmö as a whole, 47% of its citizens have a three year or more college education.

This diagram is the first where the city center isn't a neutral zone. This might be due to Malmö University's central location. When it comes to the teal area it is similar to the immigration and income patterns. The city is quite clearly divided between one south-eastern and one western part.

In conclusion, these segregation studies makes it clear that Malmö faces challenges for the future. In order to minimize the tension between different groups and promote inclusive growth, it is of great importance that we meet and see each other. If a society is segregated the risks of alienation is increased. A society where fear is spreading is significantly unproductive and harmful to its community as well as the economy. Malmö was the first city in Sweden to build a gated community, Victoria Park, and one reason for that might be its segregation.

PUBLIC COMMUNICATION

A quick look at Malmö´s public transportation map, in this case the city bus lanes, makes it clear that the connections are, with few exceptions, from one peripheral neighborhood, to the city center and then back or to another peripheral neighborhood. This highlights a few things; that mobility within the city is supposed to be through the city center and that crossing borders between neighborhoods around the periphery are not intended. The structure of the city is very centralized.

In december 2018 Malmö opened a train loop connecting the eastern and southern part of the city to the center as a way to increase the mobility from these areas. Hopefully this will boost these neighborhoods financially as well as socially with greater work possibilities and reduced segregation.

Malmö Central Station is a key link in the infrastructure of the city. This is the main node for the bus traffic as well as the train loop. Also trains from Denmark as well as Gothenburg and Kalmar stops at this location. This location, because of its connectivity to the city as well as connections from afar, is a perfect spot for a public building intended for everybody. It is of importance that you can reach the project without having a car, since a key group I'm aiming for are too young to drive.
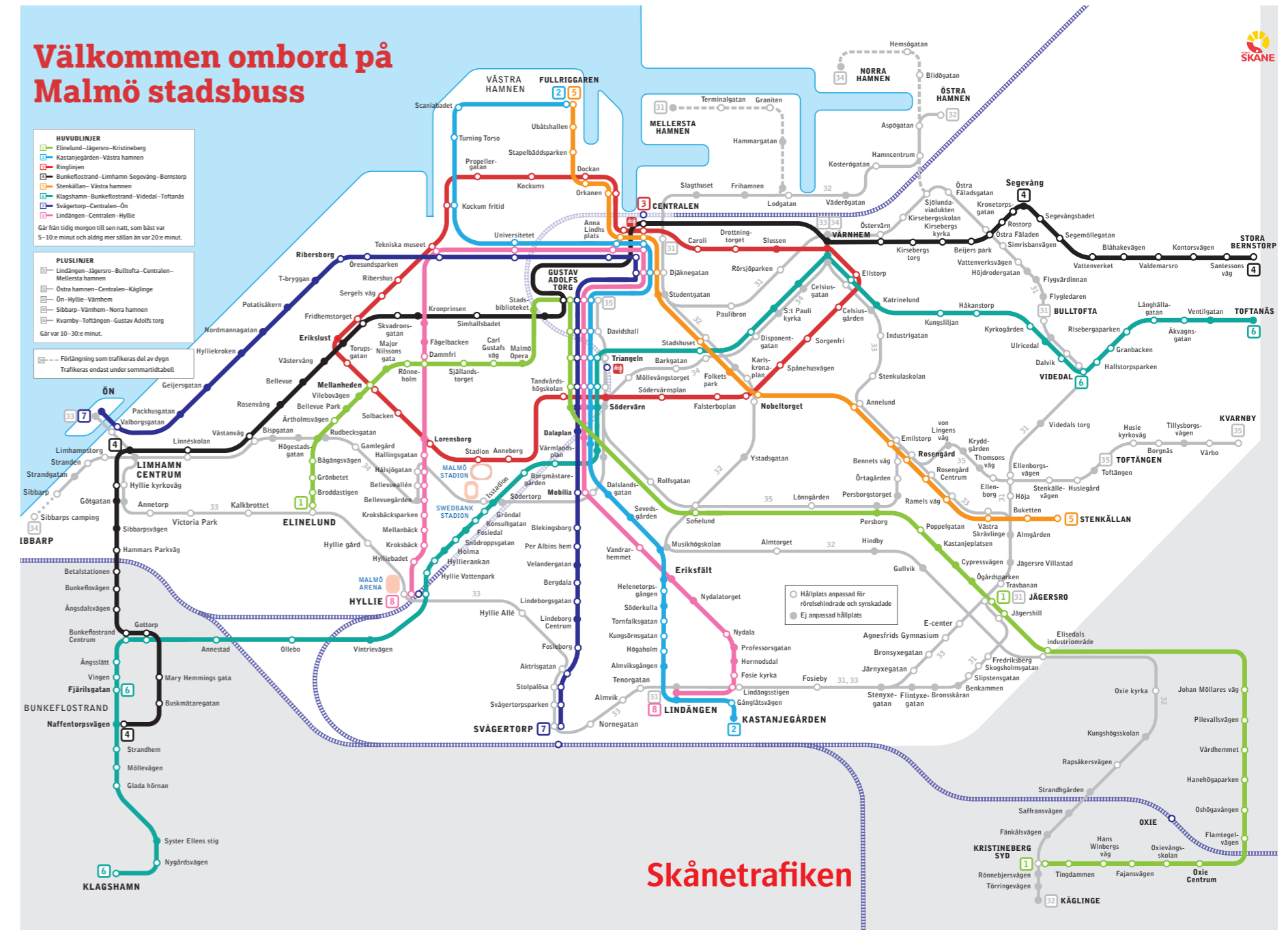
THE SITE AND ITS SURROUNDINGS

THE SITE

ORKANEN

MALMÖ CENTRAL STATION
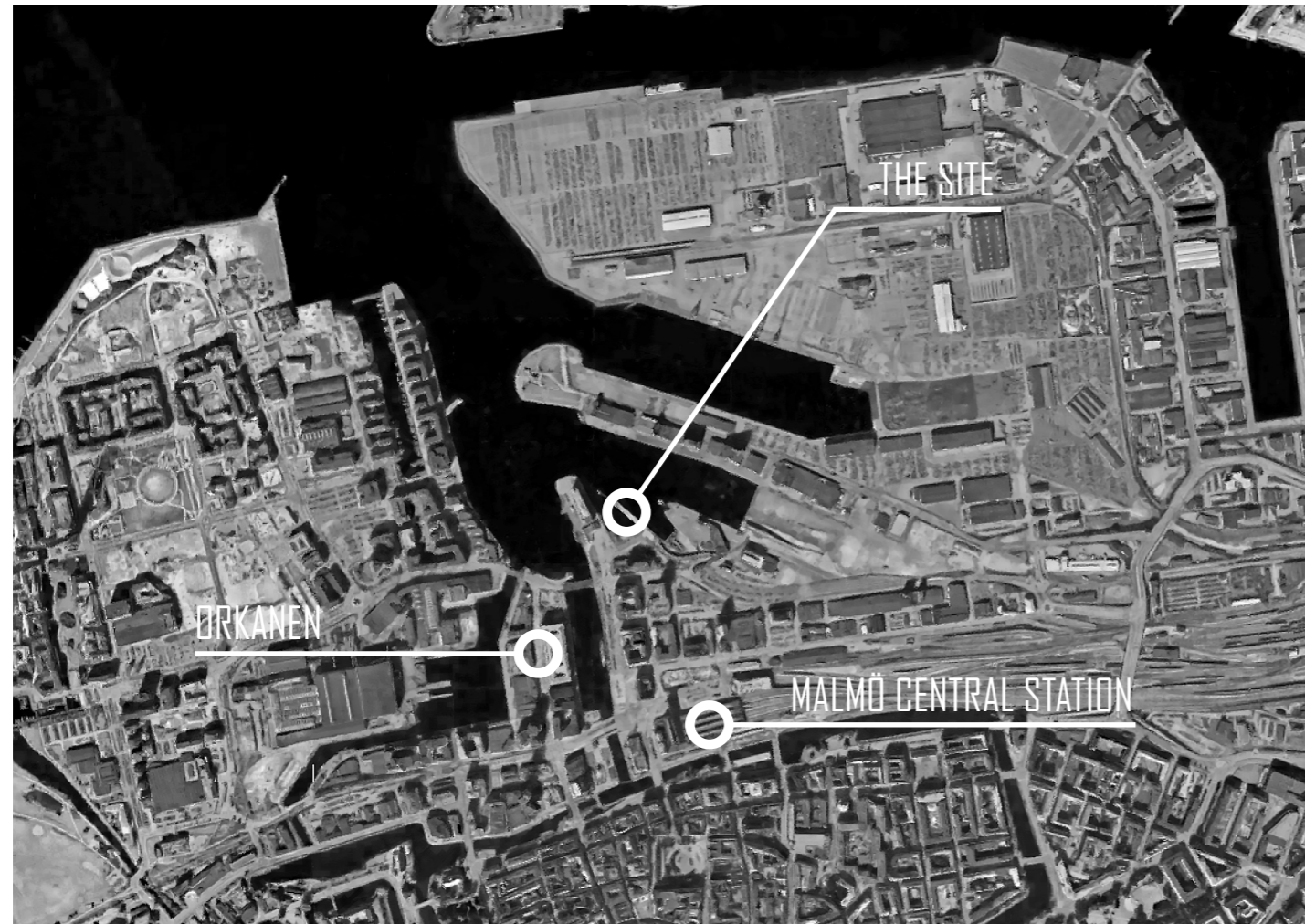
CONCLUSION / REFLECTION

Malmö, where Sweden meets the continent, is a dynamic city unlike any other. Since the late 90s the city has grown a lot, both physically with the addition of Hyllie and Västra Hamnen, as well as in population size. The city has a distinct problem with segregation, and although the city size is pretty modest, it is a completely different place depending on location.

It turns out that almost every major bus lane travels from one peripheral neighborhood, to the center, and then back, which makes Malmö's city center and the Central Station accessible for everybody. The quest to break segregation is an almost impossible task and, if possible, would take generations. To at least try to reduce the current situation, the city must provide public space, accessible to all, where people can meet and see each other. Adolescents play a key role in this development, since they generally are more open minded and have a lot in common, despite differences in background. It is through their open mindedness that the city's borders can be erased.

By studying the public transportation map I realized that the project has to be located as central as possible so people can have access to the site independent of geography. If the project is close to Malmö's Central Station as well, it can reach a crowd from well beyond the city limits. People from Lund and Helsingborg, as well as Ystad and Copenhagen have a possibility to get here in less than an hour.

AREAL ANALYSIS

To find a site for my project I took Malmö Central Station as my starting point. It was important that the site was within walking distance from here to make sure that as many people as possible have access to the project. The only other requirement for the site was that it should be unused and underdeveloped.

Just north of the central station, there is a big harbour area called Nyhamnen, which is a rest from former harbour activity. Today, this area houses a few smaller industries as well as office buildings, but is pretty under developed considering the central location. The scale of the built structures are huge; grand warehouses and silos, as well as big ramps for loading and unloading vehicles and cargo onto ships. The area is very industrial in character and extremly man-made. The dominating materials are concrete, steel and glass and there are almost no green spaces around. The water is constantly present, but it is always a few meters below. As a visitor one can't fully interact with this wonderful quality in the area.

In this area I found an interesting site to work with, a 110 meter long and 12 meter wide concrete pier reaching out into the water. The pier is currently unused and fenced off by gates and barbed wire.

SITE ANALYSIS

The pier is a concrete and steel construction originally used as mooring for cargo- and passenger ships. The construction itself brings a certain rhythm to the structure. It possesses a lifted concrete floor about two meters above sea level. At the moment the pier is fenced off with protected gates and barbed wire.

The water is a great asset and could be used for a variety of activities like swimming, fishing or boat riding. The site and its relation to the surrounding water can also help to create a dramatic and even iconic project that physically and metaphorically places the visitors in the center of attention.

The pier's very specific shape and visual expression have inherent problems, as well as great potential. Whatever that is being placed at this site will dramatically change the experience of the pier. The add-on will be visible from every angle, from Västra Hamnen, as well as from the university and the other industries. The site is objectifying whatever that is placed there. That very specific situation requires architecture that will be able to stand on its own and doesn't rely on the surrounding scale or typology.

PIER STRUCTURE

The structure of the site is simple and repetative. It is a thick concrete slab which is resting on concrete fundations. In-between these fundations there is a series of secondary supports in a repetative sequence. These are made by a concrete beam which rests on steel pillars.
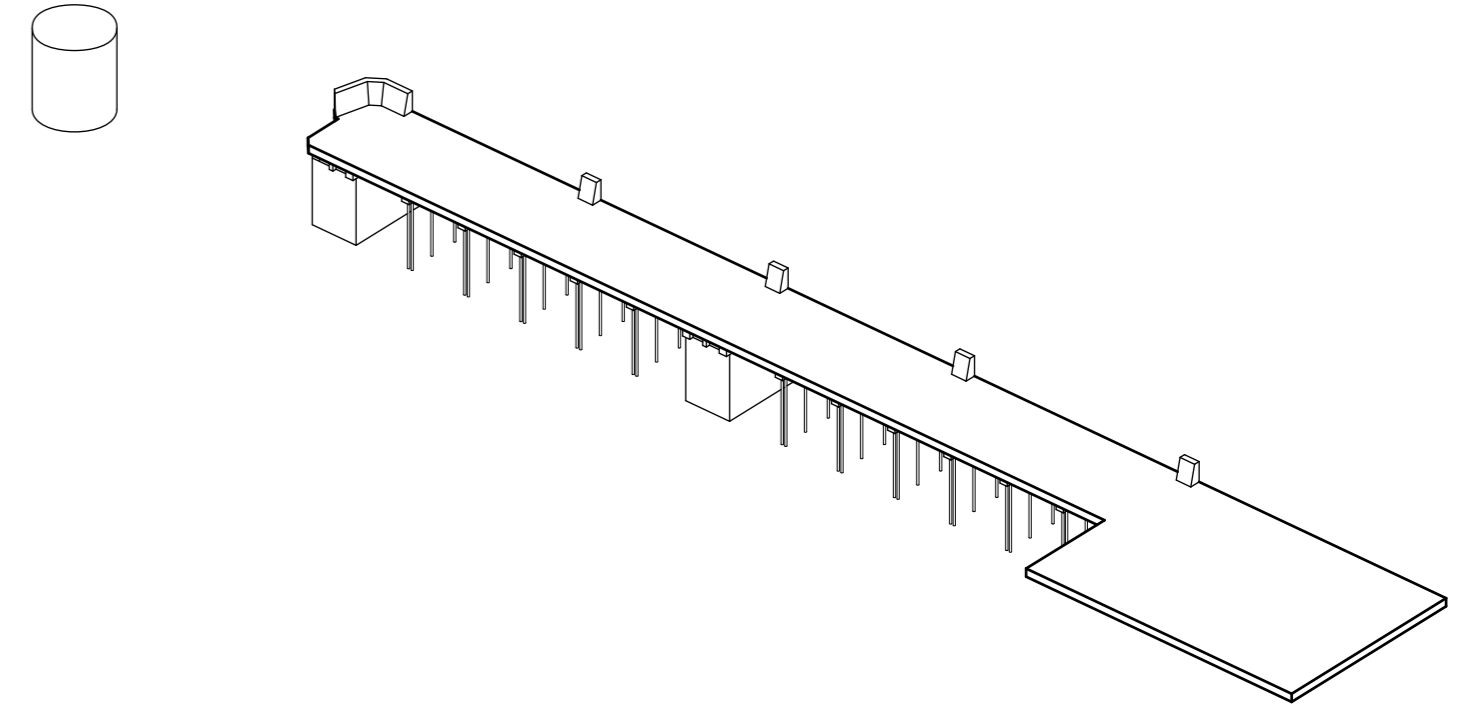
CONCRETE SLAB

CONCRETE BEAM

CONCRETE FUNDAMENT

STEEL PILLARS
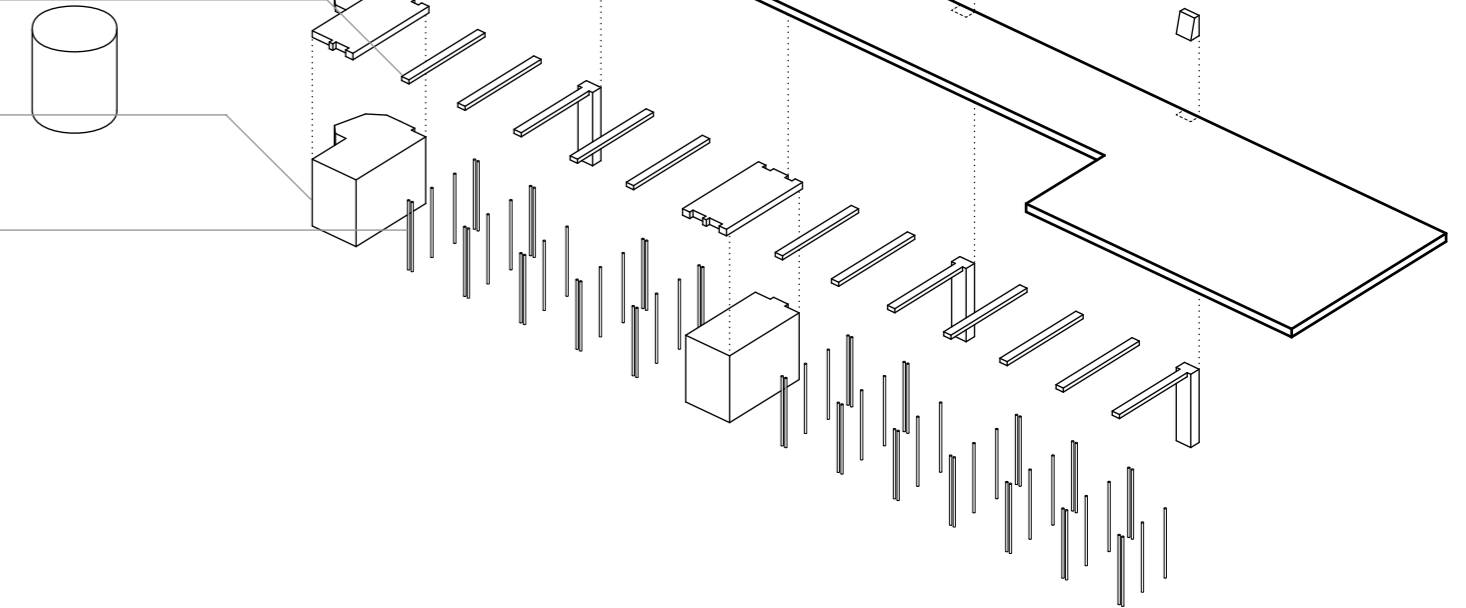
HISTORY

This part of the harbor has been redeveloped several times over the years. This is mainly because of the changing needs and industrial and technological developments of the transport sector and harbour industry.

In the 1890s the origins of the pier we see today were constructed (Malmö.se(2)). This was a dock for steam ferries that carried passengers, as well as cargo, cars and trains, between Malmö and Copenhagen. The passenger traffic at this site ended in the seventies.

It is argued that these harbour specific structures are important to preserve, even when redeveloping the area, to create a historical continuity and understanding of the site for the future. That argument has a valid point that the harbour with its structures, are important historical-marks in the cityscape and when redeveloping this land great caution should be taken regarding alterations of these infrastructural residues. The harbour has been Malmö's main employer and a major institution in the city for a very long time.
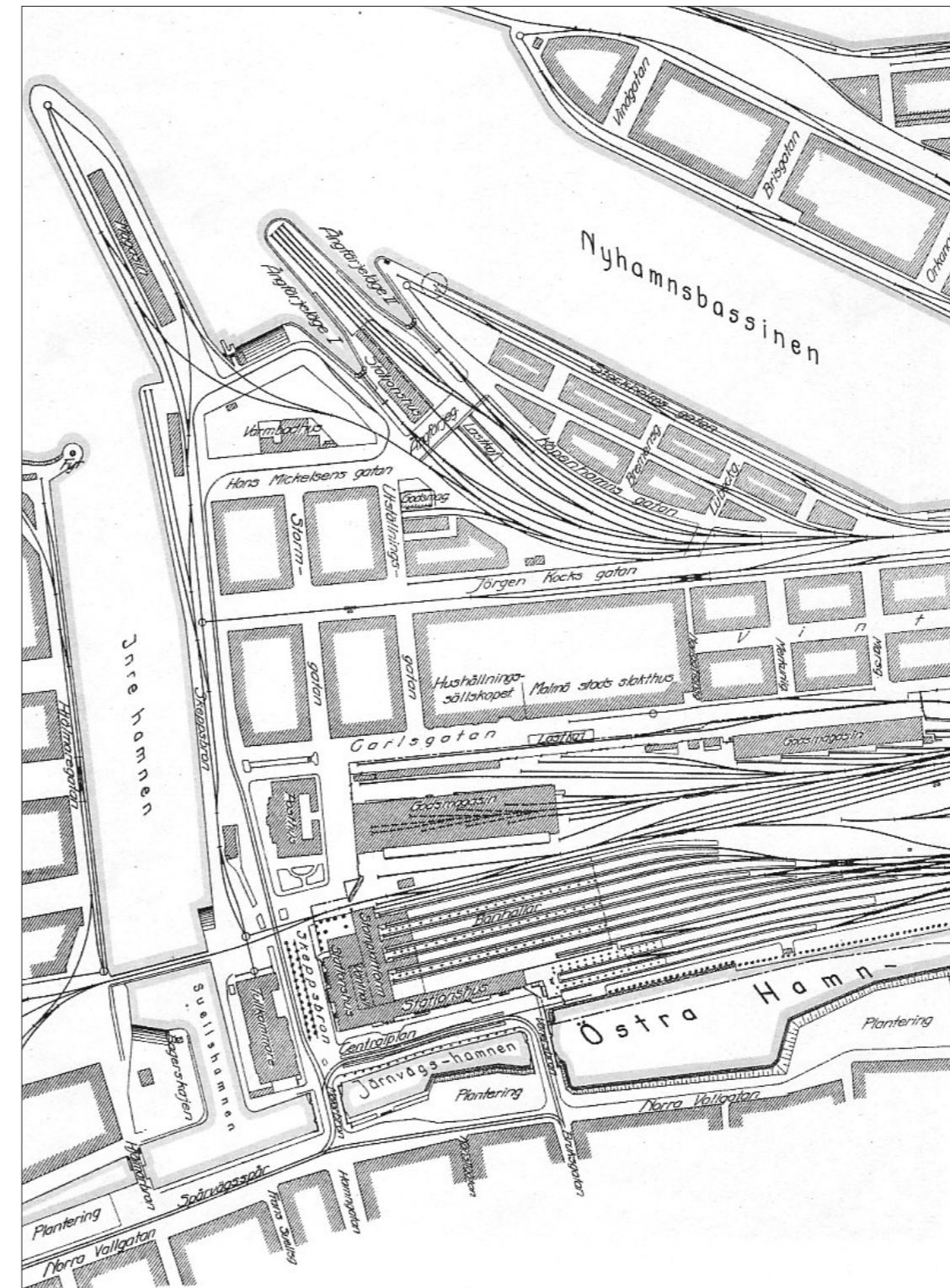
FUTURE DEVELOPMENT

Malmö Council are planning a huge extension of the city center redeveloping Nyhamnen as a new central part of the city. They aim to bridge the train tracks and develop Nyhamnen as a new node connecting the eastern and western part of the city (Larsson, m.fl, 2018).

I concider the future expansion of this area to be positive for this project and strengthens the site decision. The Pier will be a first step in bringing the citizens to this part of the city, which until now has been unavailable and undesirable for the people due to the heavy industry which historically have taken place here.

Looking at Malmö Council's development plan of this area, it is evident that they plan for a high density extension of downtown. By creating new man made islands and connecting bridges, a lot of new land is available for development. Generally this master plan has potential, creating sight lines, accessability and connectivity towards the surroundings. However, some of the harbour qualities might be lost with too much land fills and bridges. The size of the area as it is would manage to house the majority of apartments, offices and parks which the city council are planning for.

They plan to tear the pier up and instead build an island housing a few apartment buildings. The added structures just south of the site are not following the block grid north of the station that would allow for visual connection to the water. Instead the volumes are functioning as a maze making the waterfront increasingly privatized. By keeping the pier with its present shape, as a symbol from the past, and redesigning a few blocks just south of the pier, one can both save some harbour qualities of the area while also making the water more accessable for Malmö's citizens.

CONCLUSION / REFLECTION

▬ The pier in Nyhamnen is by its nature a very specific location, it has water on all sides, and even underneath, which makes any structure placed on top unique. The pier is a pedestal, showcasing whatever is on top from every angle, extracting it from the surrounding city. The site is objectifying what is placed there. That very specific situation requires architecture that can handle to stand by its own, that doesn't rely on the surrounding scale or typology.

Malmö Municipality are currently working on grand plans to develop Nyhamnen as an extension of the city centre. Their ideas are to strengthen the connection between east and west Malmö through this development. The future development of Nyhamnen are strengthening my project both conceptually and physically. My project could be a way for the citizens to discover this part of the city and to increase the interest of the upcoming development. The development will in turn guarantee that this project, even in the future, will have a central and accessible location.

ARCHITECTURAL RESEARCH

▬ The project is about filling the void in society for adolescents, the void when you have outgrown the youth centers but jet don't have access to the bar and club life. My project aims to fill this gap while also adding value to all citizens in Malmö.

After taking part of sociological research by Mats Lieberg, which states the value of public space and public life for the development of young people I understood that my project have to be a public building for everybody. Adolescents need public space filled with people from different backgrounds and age to feel included and to be able to develop from their child role to independent adults. This led to the conclusion that the project should to be a generator of public life.

To make a building that creates public life is not an original idea, and it is usually done through mixed use programming or a wide variety of functions to bring people with different needs and different interests together. However, programming are simultaneously excluding since not everyone's interests can be satisfied. Programming a building is also something that is very much bound to today's society, and since we cannot know what technologies and trends that are occuring in the future it would be unwise to design a building, intended to be a generator for public life, through a specific program.

CONSTANT NIUWENHUYS /
NEW BABYLON

The consequence of my argumentation is that the architectural form, expression and technology have to be the main attractor in the project. To approach that I studied the situationists, and especially Constant Nieuwenhuys' 'New Babylon' project, which is a series of paintings, sketches, texts, and architectural models describing the shape of a post-revolutionary society in which the population is considered completely free. The project imagines a society where people are no longer bound to work by the clock and are therefore liberated. The main argument of the 'New Babylon' project is that "the post-revolutionary individual would wander from one leisure environment to another in search of new sensations. Beholden to no one, he would sleep, eat, recreate, and procreate where and when he wanted. Self-fulfillment and self-satisfaction were Constant's social goals" (Williams Goldhagen, 2006). 'New Babylon' was a series of huge, ever transformable structures perched above ground, and the idea was that the people populating this realm would play, wander around and explore continuous new situations. 'New Babylon' was designed to promote détournement (french for rerouting); the design itself should trigger exploration by its inhabitants. Constant himself explained the project like this:

It is obvious that a person free to use his time for the whole of his life, free to go where he wants, when he wants, cannot make the greatest use of his freedom in a world ruled by the clock and the imperative of a fixed abode. As a way of life Homo Ludens will demand, firstly, that he responds to his need for playing, for adventure, for mobility, as well as all the conditions that facilitate the free creation of his own life. Until then, the principal activity of man had been the exploration of his natural surroundings. Homo Ludens himself will seek to transform, to recreate, those surroundings, that world, according to his new needs. The exploration and creation of the environment will them happen to coincide because, in creating his domain to explore, Homo Ludens will apply himself to exploring his own creation. Thus we will be present at an uninterrupted process of creation and re-creation, sustained by a generalized creativity that is manifested in all domains of activity (Nieuwenhuys, 1974).

Constant´s view of built structures as a series of ever changing new experiences to stimulate play, leisure and self development became the keystone architectural concept for the project. To further investigate Constant´s ideas, and to try to materialize his concepts I then turned to the Swiss architect Bernard Tschumi who has been inspired by the Situationist throughout his career.
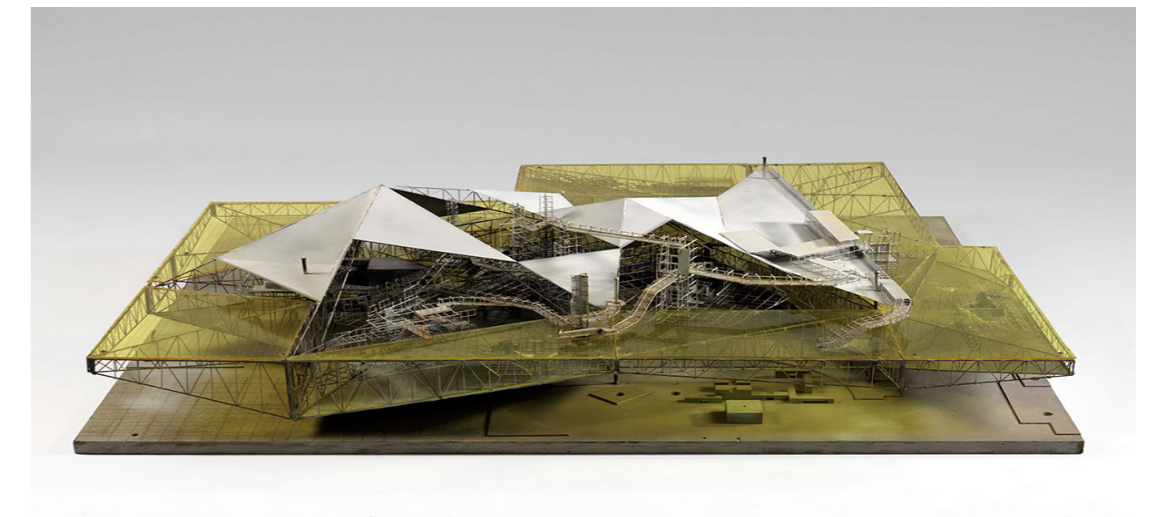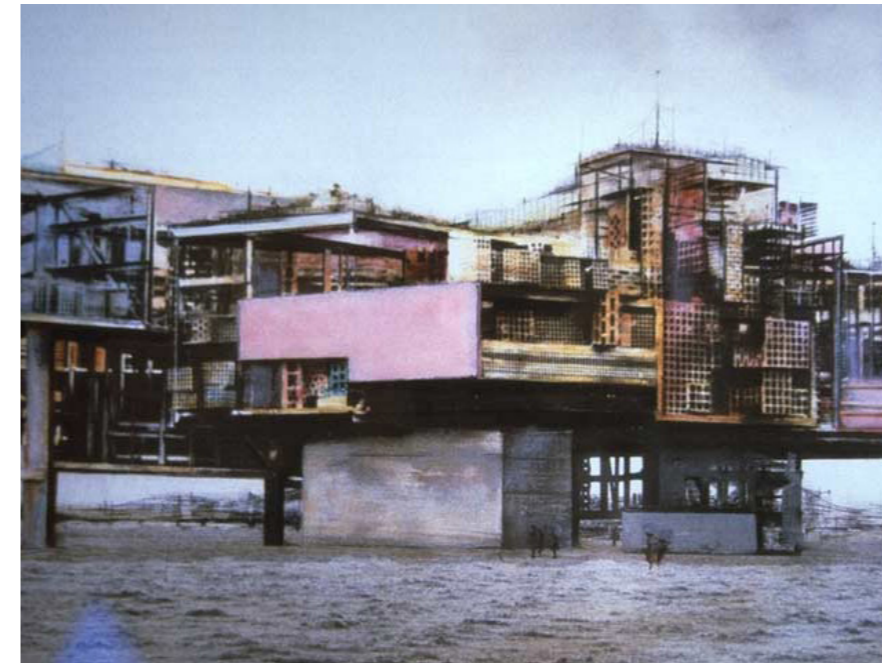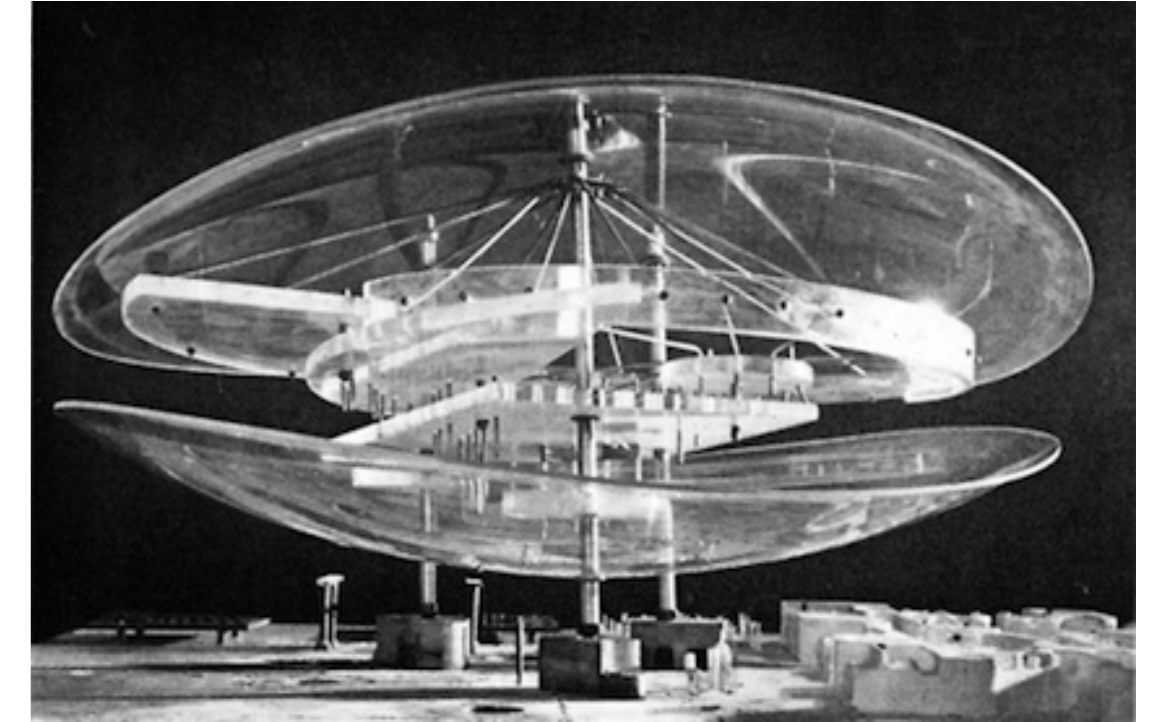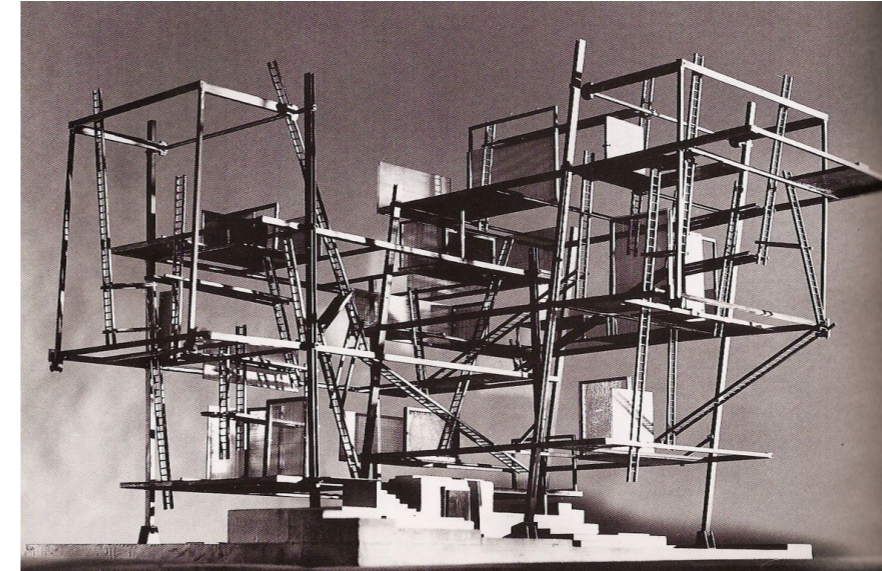
BERNARD TSCHUMI /
SIX CONCEPTS

Tschumi´s work is, and has always been centrally linked to the idea that there are no architecture without events, actions or activity. He argues that architecture must originate from concepts before becoming form and "cannot be dissociated from the events and movements of the living beings that inhabit it". Bernard Tschumi´s architecture are designed to respond, and even intensify the inherent activities, and the "combination of spaces, movements and events change and creatively extend the structures that contain them." (Mun-Delsalle, 2015).

In his book Architecture and Disjunction from 1994, he explains his architectural theory through six concepts. These are guides for which direction modern architecture should be heading according to him. The concepts he uses are:

Technologies of Defamiliarization
The Mediated "Metropolitan" Shock
De-structuring
Superimposition
Crossprogramming
Events: The Turning Point

The main point he makes with defamiliarization is that a defamiliar structure is more democratic, it is not yet charged with the prejudice inherent in familiar objects, which leads to the conclusion that we cannot mimic history if the goal is to build a more liberated society for the future. His argument regarding shock is mostly a modern society analysis. Where data is free, authenticity no longer exist. The only value a specific image or object has, is their shock value. De-structuring is a way for Tschumi to question the "habits of mind" in the field of architecture. Superimposition was the confrontation of traditional hierarchies, "form follows function" etc. The superimposed is instead a "both… and…" relationship.

Crossprrogramming - he uses this term to highlight how in today's society, churches are turned into night clubs and how warehouses are becoming exhibition halls which are evidence that form does not follow function neither does function follow form. However, they are interacting. The specific experience comes from where the two meet. "If architecture is both concept and experience, space and use, structure and superficial image -- non-hierarchically -- then architecture should cease to separate these categories and instead merge them into unprecedented combinations of programs and spaces."

Events are considered to have an non-hierarchical relationship to spaces and movements, and that these together form architecture. Architecture is about the "design of conditions that will dislocate the most traditional and regressive aspects of our society and simultaneously reorganize these elements in the most liberating way, where our experience becomes the experience of events organized and strategized through architecture".
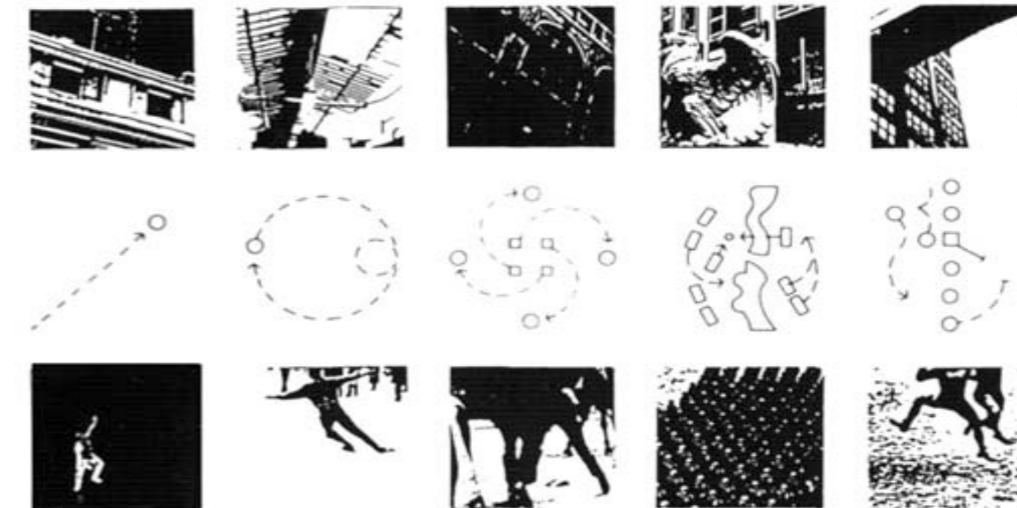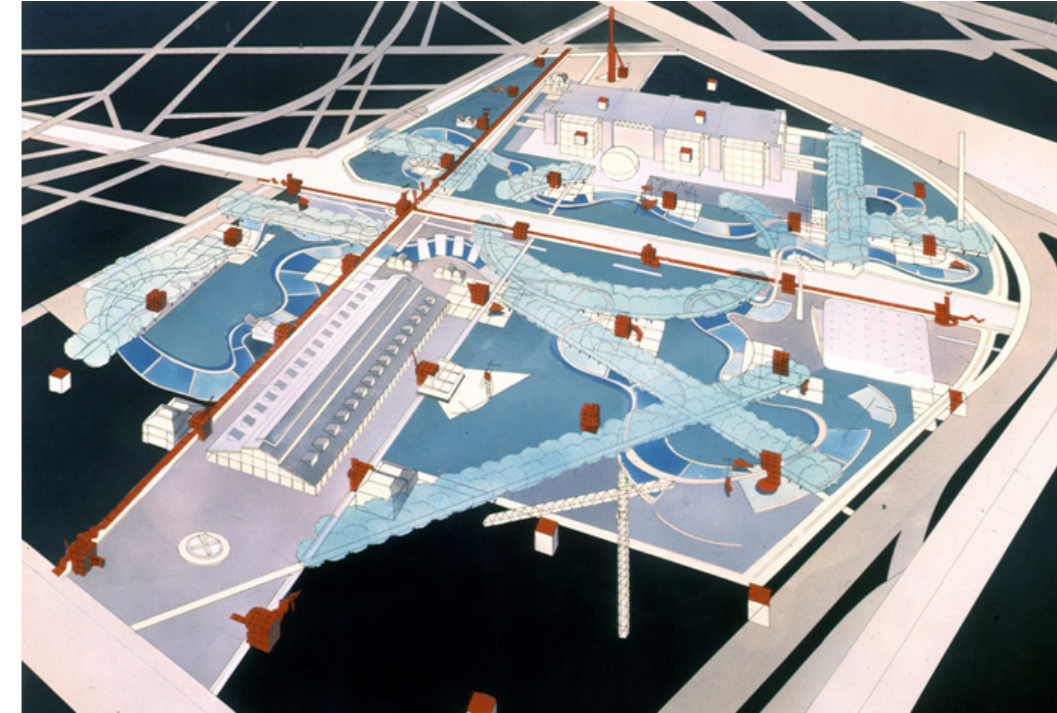
CONCLUSION / REFLECTION

🟥 Bernard Tschumi, as well as Constant Nieuwenhuys, are both mentioning the non-hierarchical (fully democratic) society, and are both trying to realize that concept. The architecture should be the framework for potential events and, at best, intensify these. The structure need to be resilient to changes in use and with a variety of spaces that can handle a wide variety of events and programs. 'New Babylon' teaches about détournement and how the built structure should trigger exploration by its inhabitants.

INSPIRATION

🟥 In the following section a few projects that has been of inspiration to my work will be presented. We will look at Sou Fujimoto, OMA, OTH and Toyo Ito

Sou Fujimoto have inspired me a lot regarding the interior design. I aim to achieve the curiosity his architecture carries and aim to apply that level of complexity to my project.

OMA have two projects I've been looking at, the Seattle Central Library and Trés Grande Biblioteque for their experiance based circulation.

OTH's project Kraanspoor has been a major inspiration for the facade work as well as an inspiration in how to reuse and enhance a existing structure to become something more.

Toyo Ito's Dendai Mediatheque have inspired me in the use of an open or even floating division of rooms through furniture and use, and the minimalization of fixed room dividers.

SOU FUJIMOTO

Sou Fujimoto´s way of using the three dimensionality of space to achieve complexity and evoke curiousity is remarkable. The atrium at Ecole Polytechnique Learning Center (image to the left) is complex throug a quite simple system of bridges and stairs, which together creates the complexity needed. Meanwhile it invites the visitor to explore its inner by using big inviting stairs and open and generous spatial qualities.

OMA

Two projects by OMA have interested me in my design process, Très Grande Biblio-
thèque and their Seattle Central Library. My studies of OMAs projects had to do
with their focus on the experience of the visitor. The circulation is not considered in
terms of spatial efficiency, but rather the experiance of the visitor. The visit should be
an experiance where you are constantly exposed to the content of the library, and in
that way trigger your attention and curiousity. Trés Grande Bibliotéque is the perfect
example of that kind of exposure and experiance. The entire volume is considered as a
solit of the library´s content, and some forms are pressed through that volume to create
circulation.
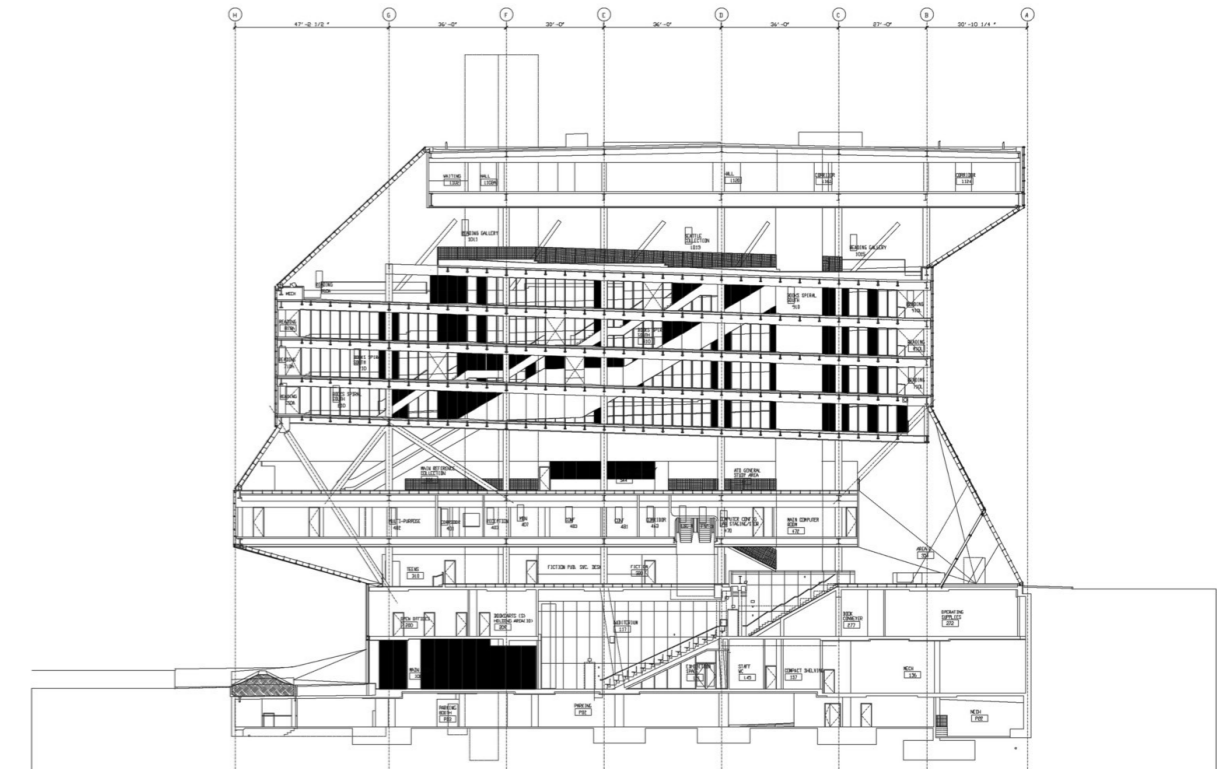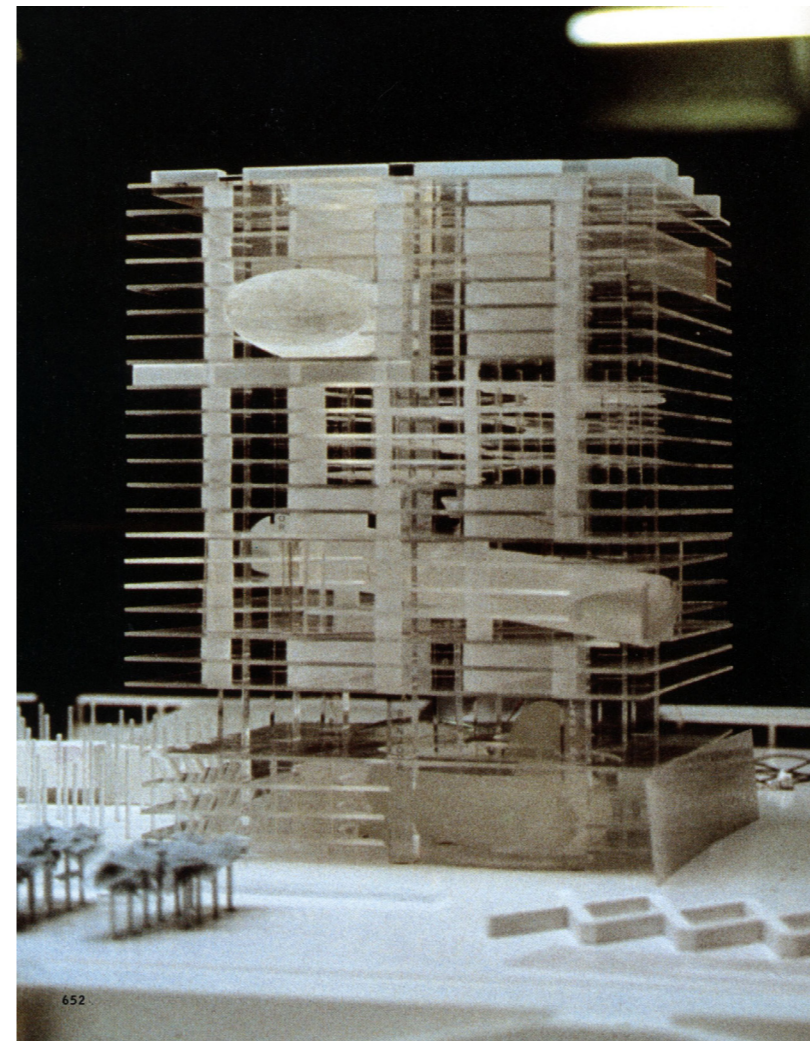
OTH

This project, Kraanspoor has mainly been an exterior inspiration. The way they are handeling an existing harbour element and enhancening its presence is really strong. However, their office design is simplistic and repetative and nothing that I want to bring into my project.
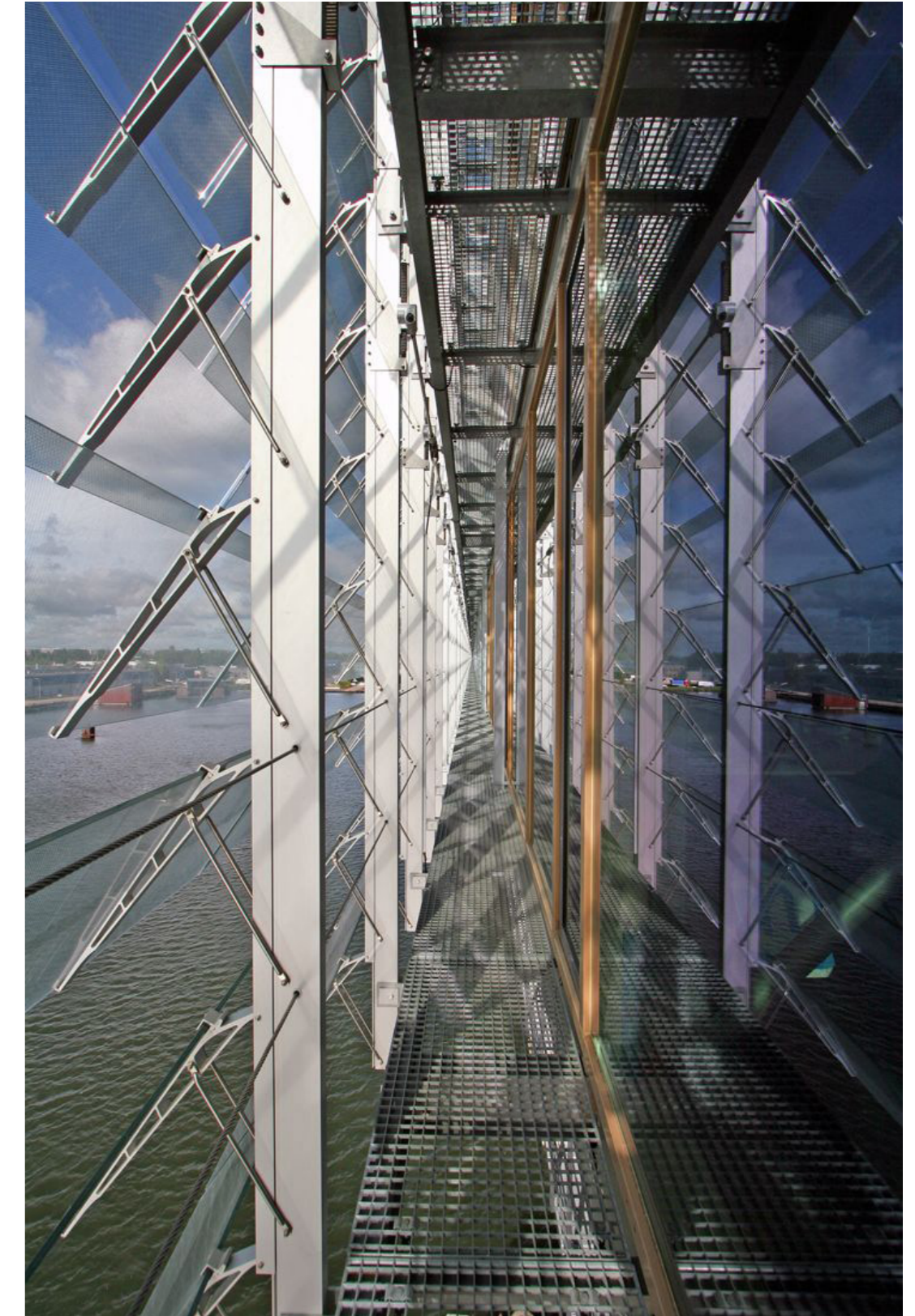
TOYO ITO

The Dendai Mediatheque have inspired me in the use of an open floorplan, where the rounded structural pillars almost disappear and the only real room dividers are the furnishing of the slabs. This kind of resilience in a building is unpresidented, and the way the building is minimalizing the use of walls and still create separate rooms for different activities and different levels of intimacy is impressive.

7th floor: Studio

0   10m   20m
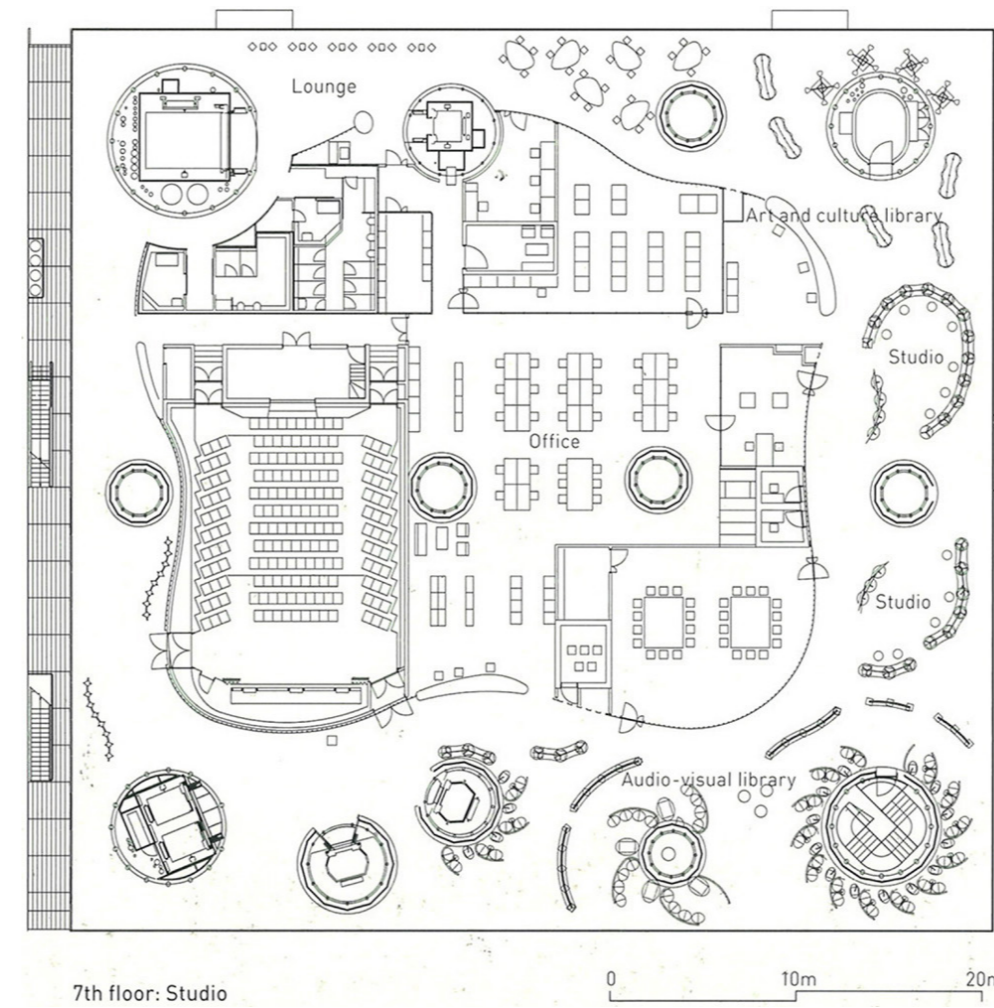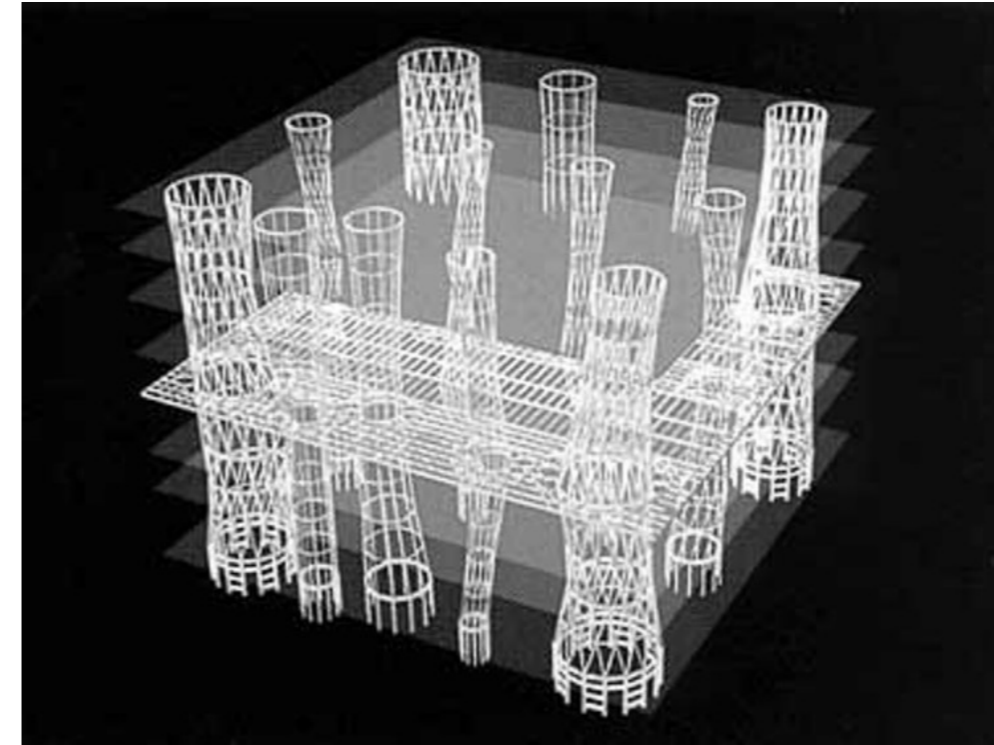
CONCLUSION / REFLECTION

▬ By studying these inspirational projects I got a few ideas. They helped me understand how to approach the site, how one could relate to the concrete pier and use this existing structure to something new, and by that, also strengthen the pier as an hostorical mark in the city. Further I realized what kind of complexity that is needed to create an interest for the visitor, and how to achieve that. The tree dimensional visual and audial connection in Sou Fujimoto's Ecole Polytechnique Learning Center is a perfect model in how one can achieve that kind of floating spatial relation which creates that suction into the building. To think of the circulation as an experience rather than for efficiency also hepled me in my design process.

THE PROJECT

This episode is ment to present the finished project. It is a makerspace and public living room in Nyhamnen, Malmö. The program is thought of as something that a wide range of people can be interested in, from music studios and rehearsal rooms, to a blackbox and green room for film and animation production, as well as a dance studio. The idea is that this mix of programs could hopefully attract people independent of gender, age, ethniticity and class. However, the program is secondary in my approach to the project. The idea is to create a piece of architecture that can attract people independent of the program, which also would make the building more resillient to changes of use over time.

This section will start with an explanatory design scheme, where I demonstrate how I use the research mentioned earlier to achieve the final project design. Next we will look at a more detailed study of the how the main part of the project, the atruim. Then we will look into the formal language and structural scheme before the final product is presented in plans, sections and visualizations.

BUILDING DESIGN

Inspired by the projects I've studied, together with Constant and Tschumi's theories, I started my design study. In order to attract people and in extension create public life, it is of importance that the building evokes curiosity. The building has to look interesting and inviting without spoiling itself at once, it has to give the visitor clues and new surprises throughout the visit. The building should tease the visitors, giving away one fragment of its identity at a time. My main architectural concept --> teasing, provide visitor with fragments of experience.

To apply the concept of teasing to my project and my site, I first started by extruding the pier surface. Because of the narrow pier shape, only 12 meters, I realized that the building facade possibly could act as a shadow screen, suggesting the interior variety of activity and space. This is the reason for using a milky polycarbonate facade. In order to diffuse the repetitive structure of the facade, and simultaneously protect the building from sun loads, a superimposed exterior shading system was added.

To avoid a hallway based building and room structure, and to achieve a flexibility in room heights, I decided to subdivide the volume in three parts and to remove the central piece. This void is where the circulation through the building takes place, and is also the most public part of the building. I consider this atrium to function as a vertical square, with a combination of intimate spaces and open, stage-like plazas.

To gesture an invitation to the citizens, and at the same time liberate public space to the city, I decided to lift the building from the pier. The hovering volume will protect the pier from weather while also creating a more intimate room; the pier slab gets interioresque spatial qualities while remaining a permanent public space.

Additional public space is added by creating a two story public park on the two top floor of the building. The lowest of the two are a lawn for recreation and play, while the top one is a bridge structure from where one can enjoy the view of the harbour and city from above. To strengthen the relationship to the water three wooden platforms are introduced. These are designed to create a variety of spaces, both intimate and personal spaces, as well as public sunbathing spots.

To further demonstrate the inviting gesture of the building I decided to use escalators as main entrance points to the building. Their color and orientation breaks the rigid lines of the volume, suggesting a more playful interior contradicting the exterior abstract volume. There are three escalators; one taking you to the building entrance, one taking you back to the ground, and one tangenting the northeastern facade taking the visitor through the building all the way up to the rooftop park.

When exiting the escalator on the entrance floor, the visitor find themselves in a in-between space. It is a balcony, between the facade and the climate shell. From here you then enter into the bottom of the public atrium space.

The balconies that annex the atrium have a playful architectural language, promoting movement and exploration. Due to their form, and grand staircases, they invite the visitor to further explore the building. The long escalator that pierces through the building, from the pier below to the rooftop above, are a constant reminder that there is more to come upstairs.

The architecture is constantly teasing the visitor to continue his or hers exploration of the building. To create a public life the main needs are to tease people to visit the place, and to keep them there for as long as possible. In this case that is done through ever cahnging experiences, bringing people up through a complex atrium space, from which one can take part in the different programs that are housed in the building. In the atrium space people can meet on their way to or from different activities. Through visual connection the programs are also activating the atrium, making it lively and rich in experiences.
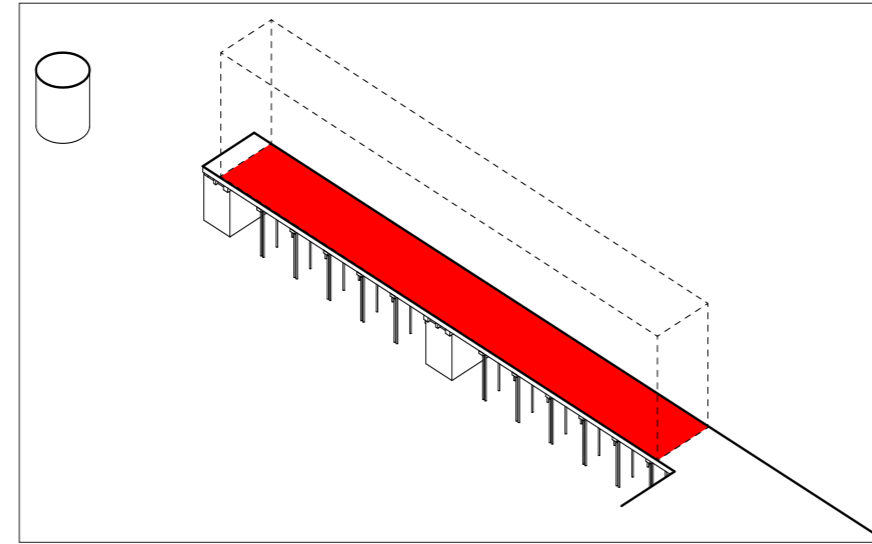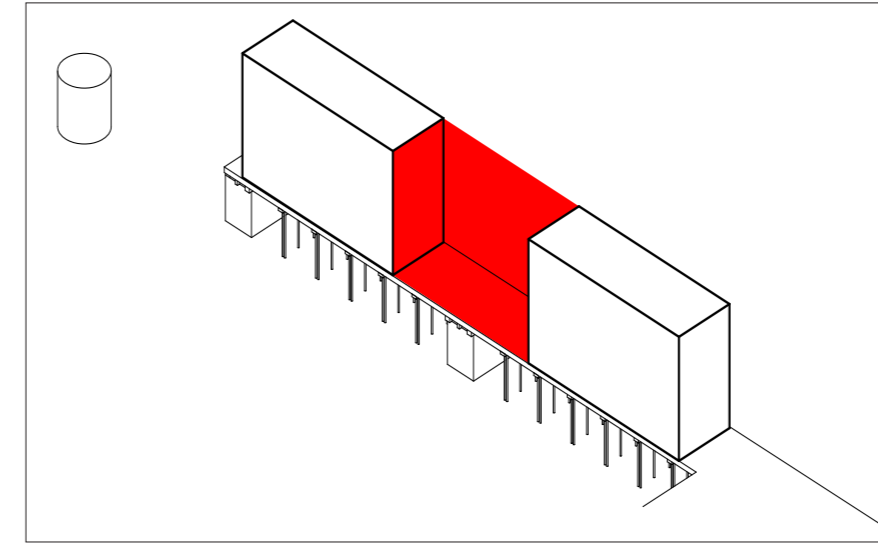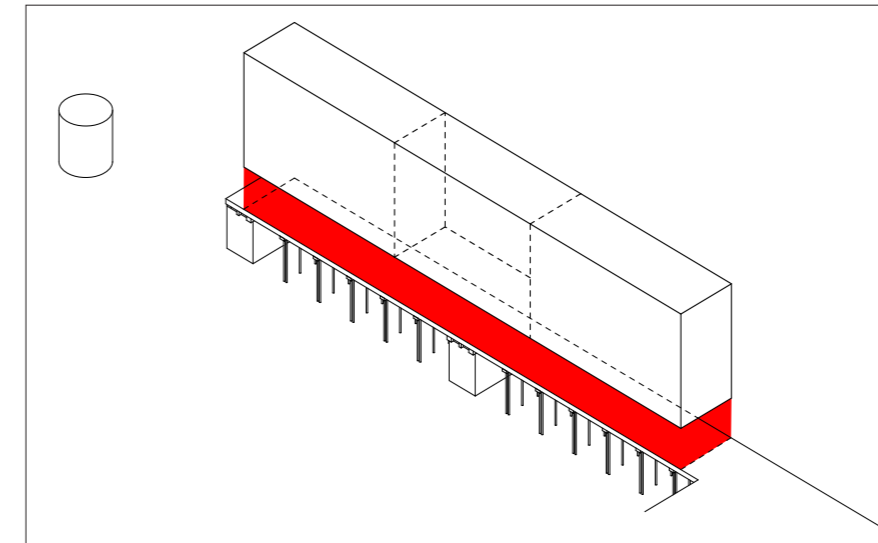

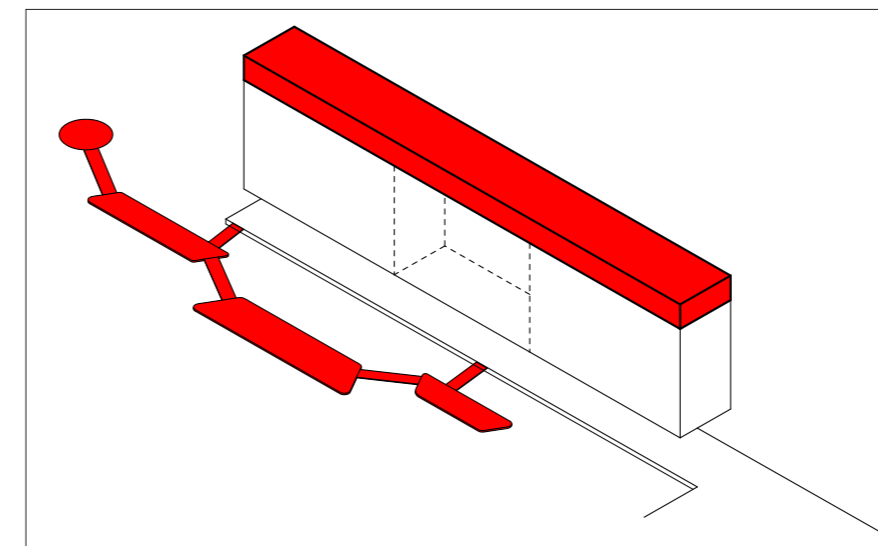*1. Extrude the site*
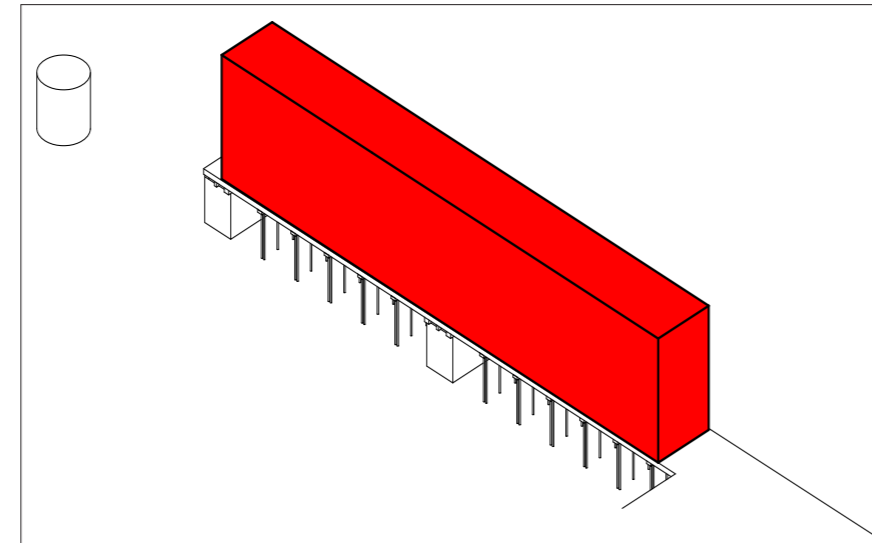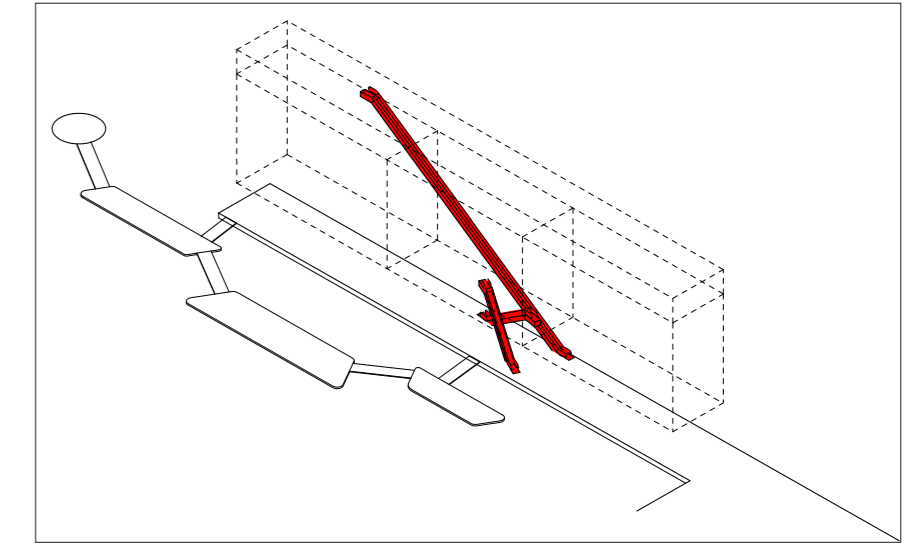

2. Building Volume
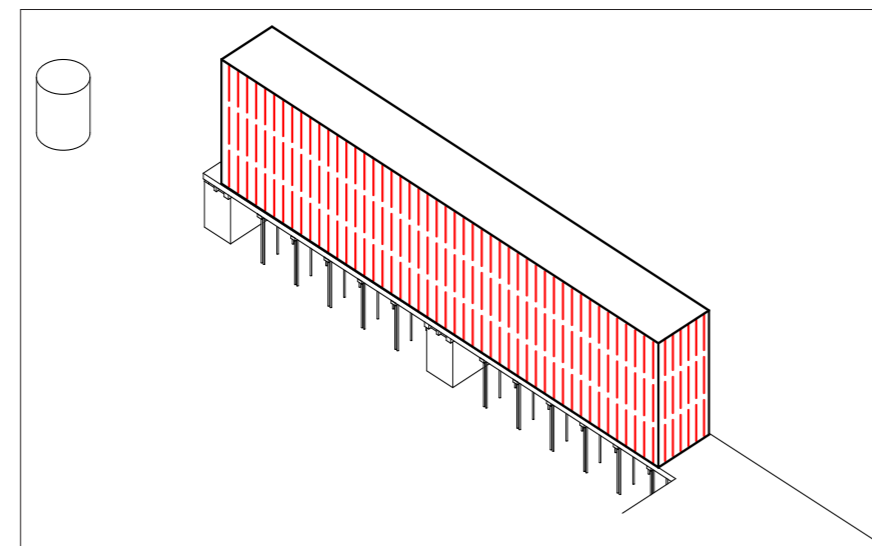
3. Add exterior shading

4. Subdivide the volume. The central void is for circulation while the two fixed parts are for program
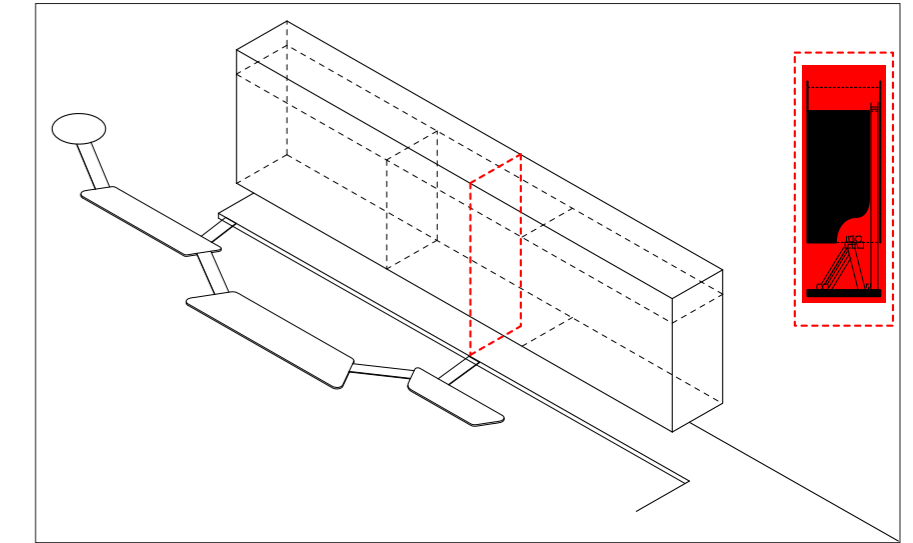

*5. Lift the building to make the pier accessable as public space*

6. Add rooftop garden and floating platforms to increase the amount of public space, and strengthen the contact to the water

7. Escalators playfully placed to invite the visitor

8. The long escalator connects the outdoor space above and below through the building. The shorter escalators connect the entrance space and the pier below.
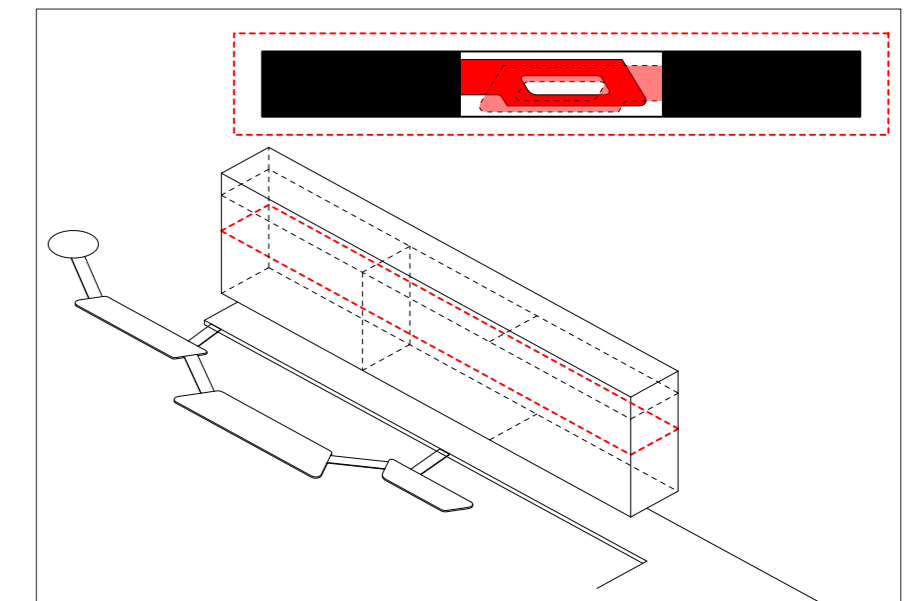

9. The free-form shape of the balconies in the atrium are creating a complexity of the space. The form also triggers movement.

SPATIAL CONCEPTS

To make the atrium space into a vertical square where people stroll around and hang out I needed to further design those bridges and stairs as well as their relation to one another. The idea is to use of form, material, movement, direction, as well as visual and audial connections to trigger curiosity of the visitor. The overlap of different spaces; small intimate places for private converstation, as well as bigger open plazas are important in order to create a mix of "on stage" and "off stage" action.

The main ideas behind this project is to design a place where you can both see and be seen, where both bigger open spaces and small intimate corners coexist, and to develop an architecture of curiosity. Another important design aspect was to overlap public space and program specific space. The idea is that the programming of the building will enrichen the experience for the visitor, while also marketing itself. Hopefully this exploitation of the different programs can trigger visitors to try new activities.
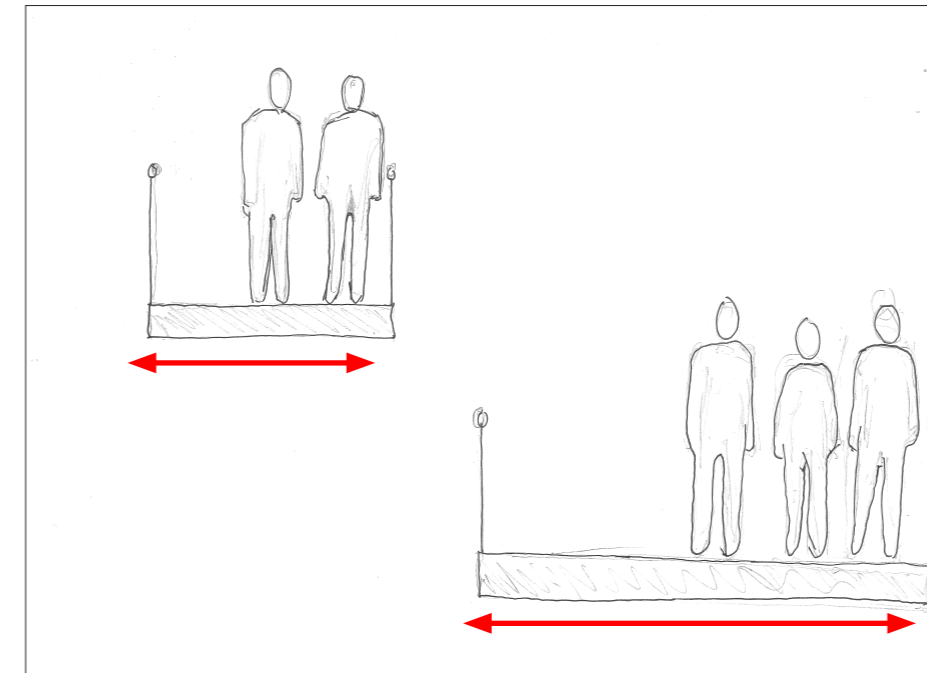
Both intimate and generous spaces
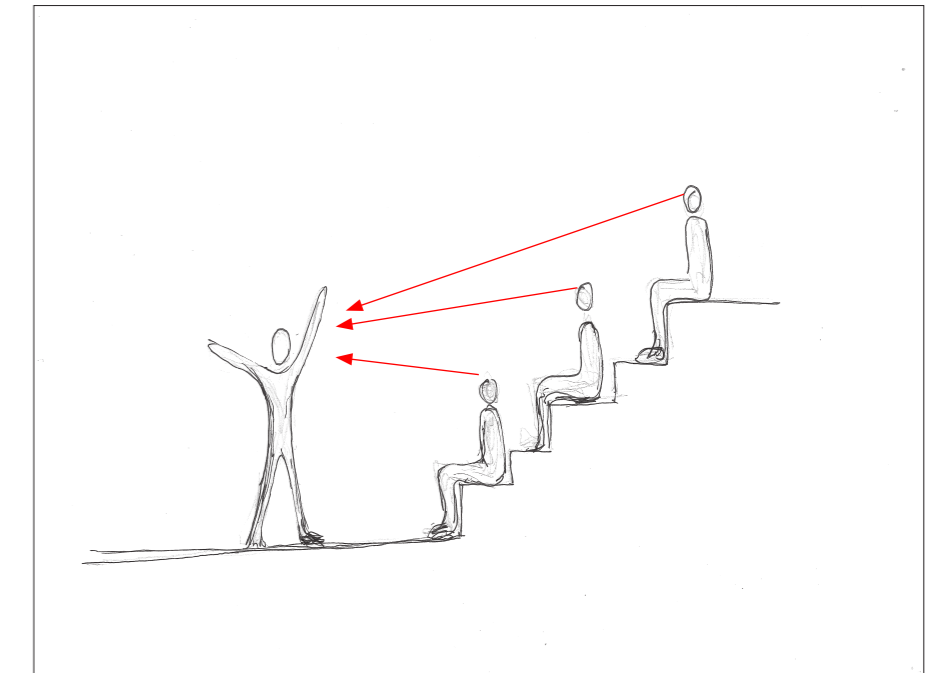
Spaces to see and be seen
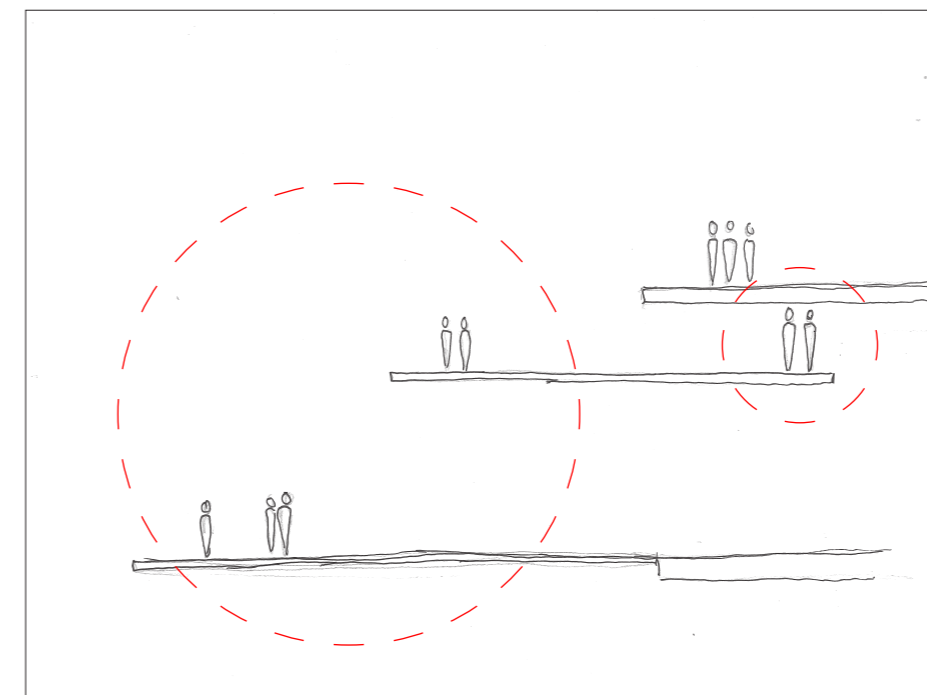
On stage and off stage spaces
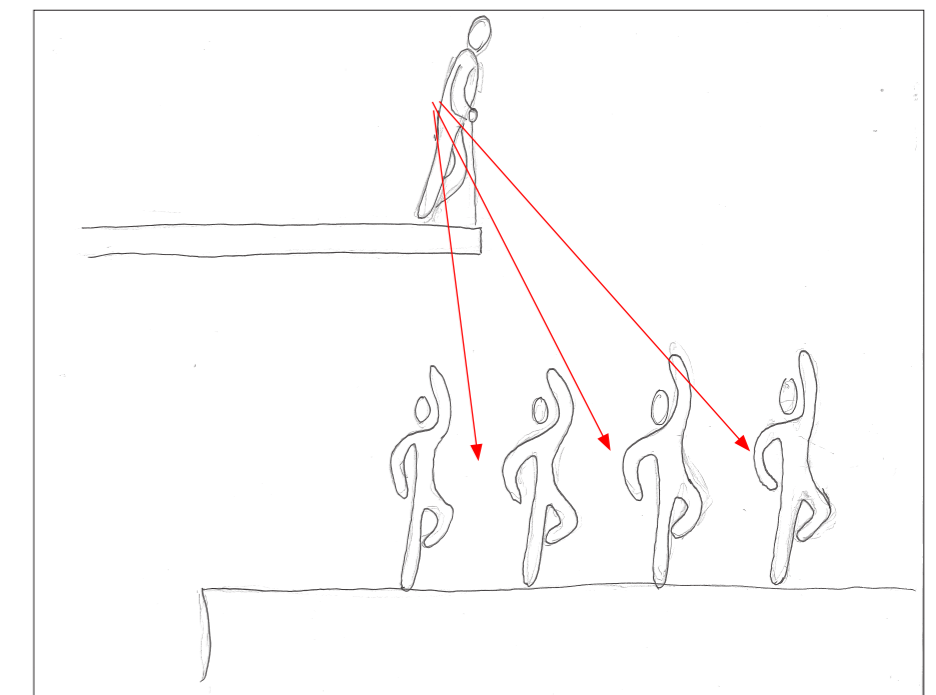
Public Space and Program Space overlap

ARCHITECTURAL IDIOM

The building is designed by contrast, ambuiguity and complexity. The rigid exterior is contradictory to the floating and organic interior atrium space, and the big and heavy building volyme looks to defy gravity. The continuous translucent facade is knitting together the airy atrium space with its flanking solid structures while also showing their differences. The continuous flooring material is stretching from one slab, across the balcony, to the other end of the building in order to connect these elements as one. However, the difference in shape and construction simultaneously highlight their difference. The two formal languages derived from the idea of form for movement versus form for idleness. The form for movement; floating, rounded and stream lined, are permeating the atrium space, while the form for idleness appropriated the programable spaces in the two ends of the building.
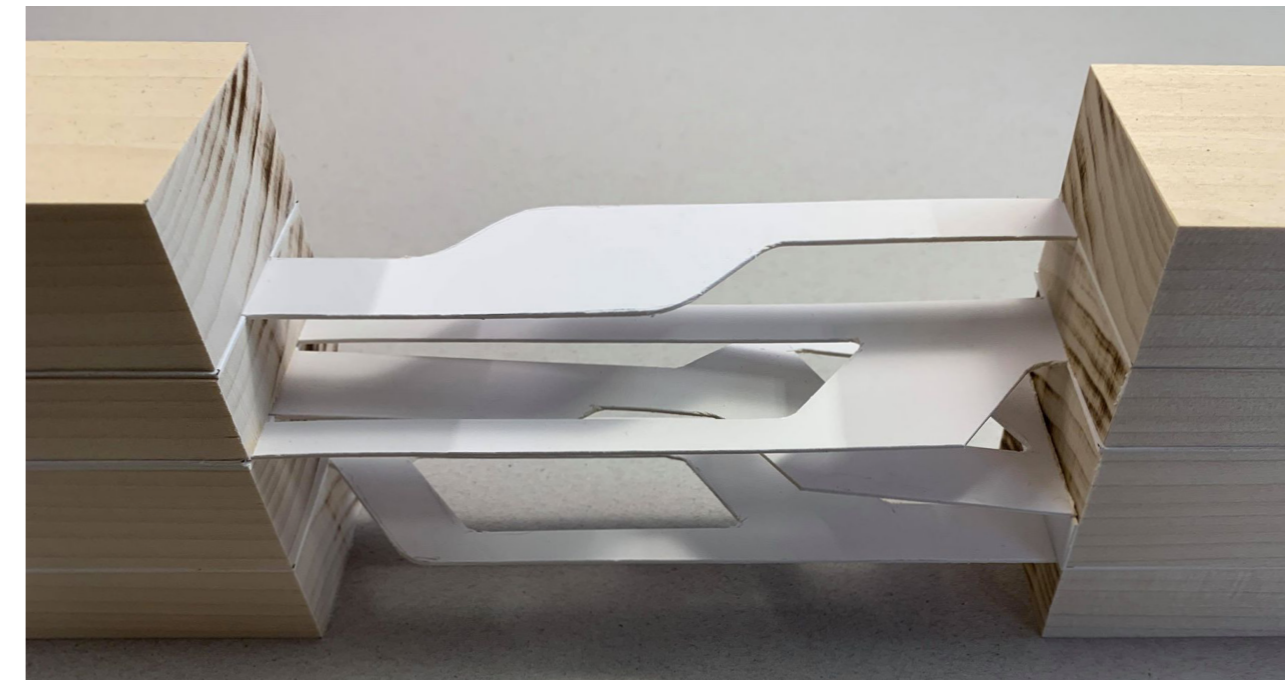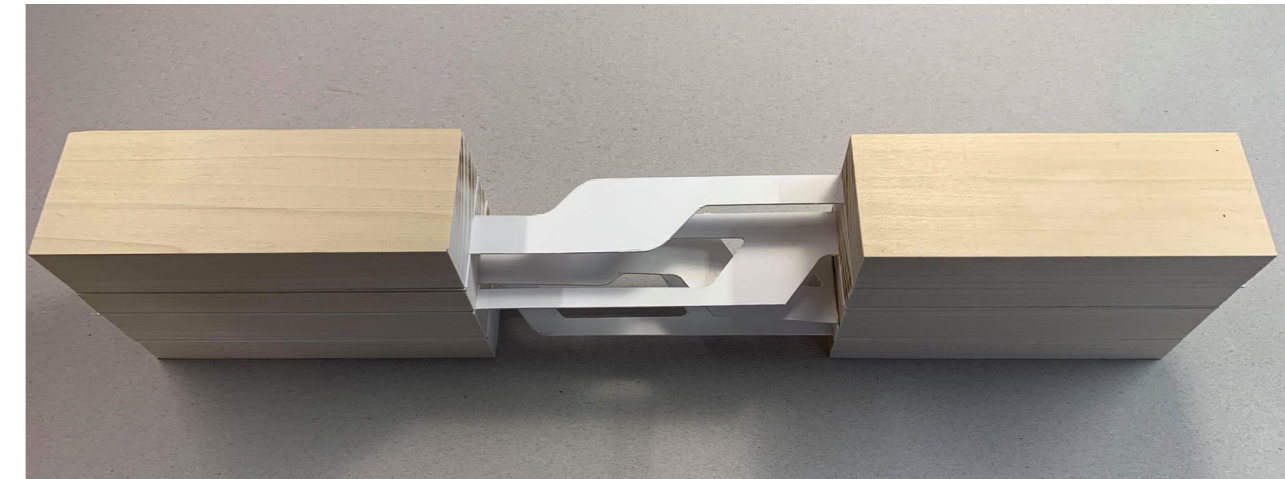
PROGRAM AND CIRCULATION

The programs of the building are stacked at the two ends of the building, connected by balconies in the central atrium space. At the first floor there is a café, as well as study rooms and a recreation part where the visitor can play pool and shuffleboard.

The floors above contains a dance studio, as well as space to create film and music. The second floor has a screening room / cinema and the top floor has a performance venue for conserts and dance performances. When unused, that venue is turned into a dining area for the bistro.

The programmatic mix of dance, film and music can hopefully cross-ferilize within the building, turning the building to a creative hub for art development.

The circulation is a two level system. The building contains three heavy concrete cores reaching through the building. These contain elevators and fire escapes, as well as shafts for wiring and piping. The main circulation runs through the central part of the building as a more experience based system of grand staircases and balconies.

To get to the rooftop park the visitor have to take the elevators or the long escalator from the pier below the building. This escalator is also thought of as an experience, traveling from groundlevel, up through the building, and leaving the visitor at a lawn approcimately 30 meters above sea level.

PUBLIC SPACE OUTDOORS
PUBLIC SPACE INDOORS
MUSIC DEPARTMENT
FILM DEPARTMENT
DANCE DEPARTMENT
MAIN COMMUNICATION
SECONDARY COMMUNICATION

METAL FRAME
CORRUGATED PLASTIC SHEETS
WEATHER PROTECTING FACADE

METAL FRAME
GLASS FACADE

METAL RAIL
PERFORATED SUNSHADING
OUTER FACADE STRUCTURE
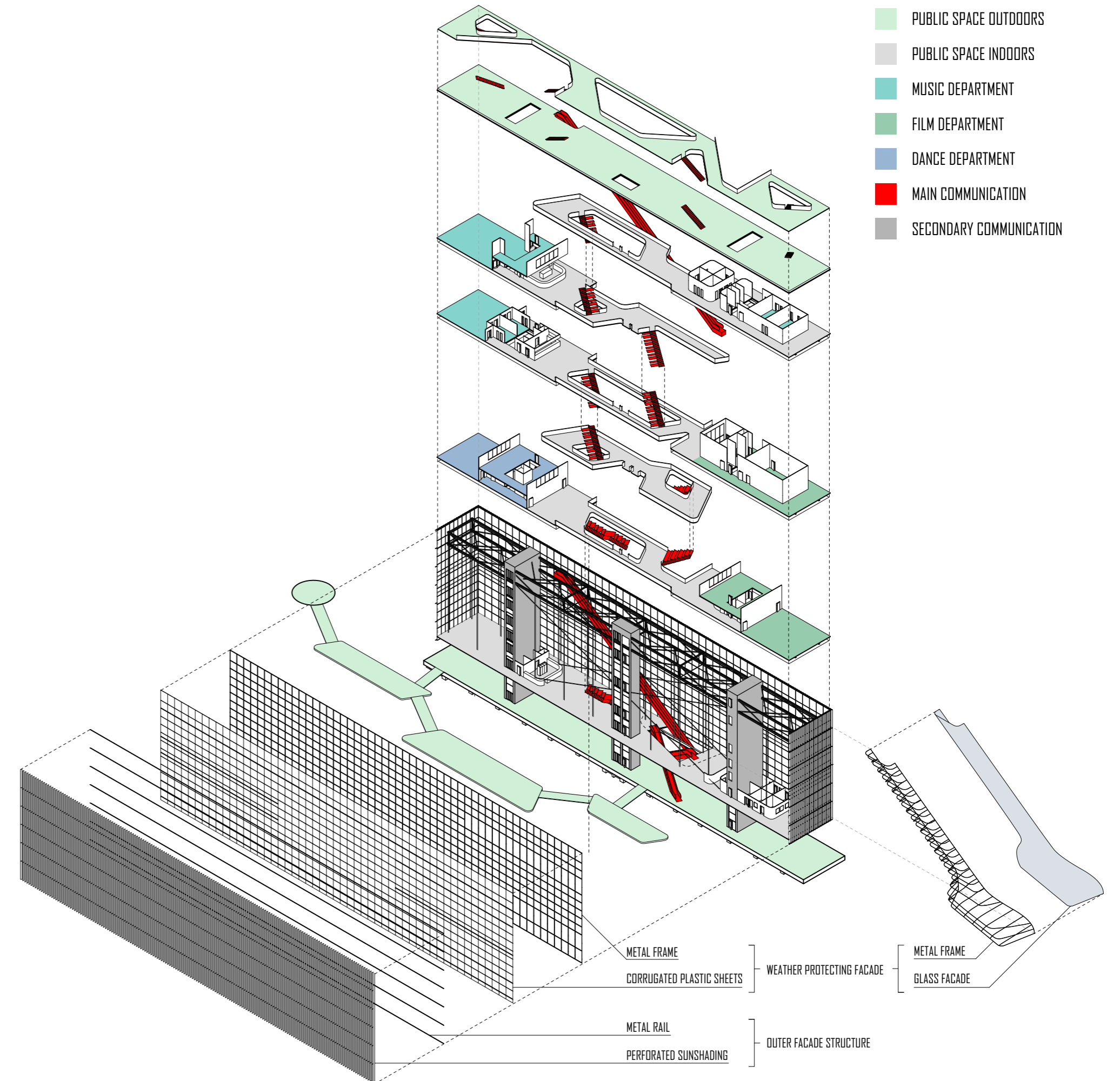
CONSTRUCTION

The building is constructed like a suspension bridge, with three heavy concrete pillars lifting the building of the ground. Together these pillars are carrying a huge truss beam. To strengthen the structure cross wires are added. These are ment to strengthen the construction from horisontal loads (wind).

The floor slabs are then hanging from the truss beam by steel wires. Since it is a construction of hanging, rather then stacking, the dimensions of the vertical wires can be quite modest.

With the floor slabs on place, the next step is to connect them using balconies. These are not ment to handle the same load and can therefore have neater dimensions as well as a free form expression. To stabilise, and to make the structure weather protected, a two layered facade skin is added.
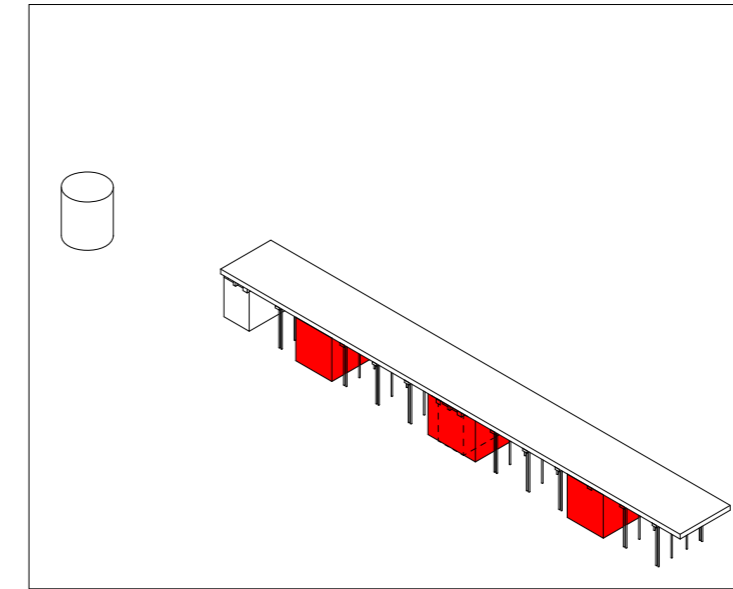
1. Reenforce the pier construction.

2. Three concrete pillars carries the building.

3. A grand truss beam connects the pillars at the top. Cross wires are added to protect the building from wind loads.

4. Floor slabs are hanging in wires from the truss beam.

5. Balconies are added to connect the slabs.
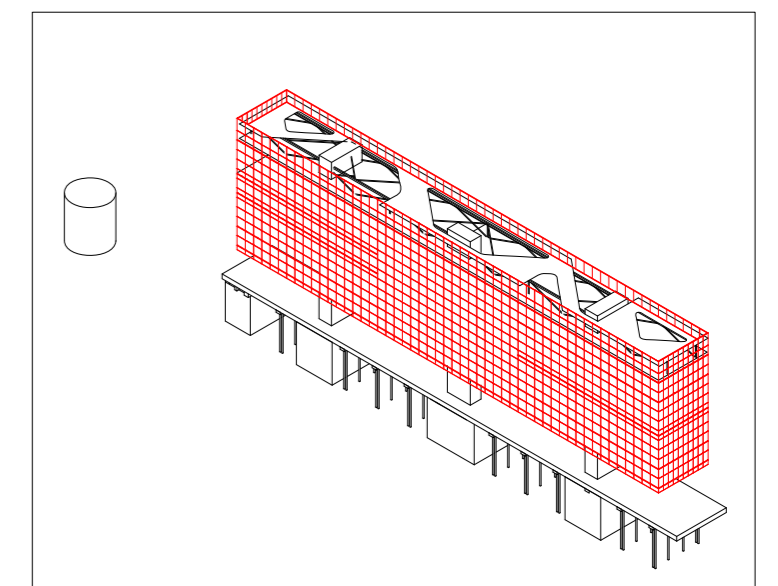
6. A two layered outer shell is added to protect the building from weather as well as stabilizind the hanging structure.

FACADE SYSTEM

The facade is a two layer design. The inner is a weather protector consisting an aluminium framework and polycarbonate sheets. The exterior system is a shading structure to protect the surface from sunloads while also diffusing the rigidity of the inner facade framework.

The inner facade system is stabilizing and increasing the rigidity of the hanging floor slabs connecting their edges to the adjacent floors. The floor slabs are constructed by two thick steel beams which are held up by wires to the truss in the roof. These beams are then carrying the concrete slab.

EXTERIOR STRUCTURE
- metal rail

EXTERIOR SHADING
- white expanded metal sheets

TRANSLUCENT FACADE
- polycarbonate

FACADE FRAMEWORK
- aluminium profile

CONNECTIONS
- metal connections, connecting the outer shading system to the facade framework

150 mm CONCRETE SLAB

850 mm STEEL BEAM

SUSPENDED CEILING
- white perforated metal sheets

cc 2000 mm

cc 4600 mm

SPACE WITHIN STRUCTURE
- installations (water, ventilation etc.)
- hidden lighting
- sound absorbers

SPACE WITHIN STRUCTURE
- installations (water, ventilation etc.)
- hidden lighting
- sound absorbers

PLANS

The plans are ment to show how the central balcony space and the programmatic spaces relate to each other. They are furnished both to prove that the building works, that all requred spaces fit into the volume, but also to highlight how the furnishing itself could subdivide the space to different rooms. That is important in order to follow the concept of teasing the visitor to explore the building.

The site plan on next page are mainly ment to show how the pier relates to the close surroundings. My idea is to create a plaza in front of the pier, an arrival spot where the visitor can park their bike or scooter before entering onto the pier. The plaza also houses a small café and public restroom pavilion to provide services for the visitors who are not planning to enter the main building. I also imagine the restrooms to be open around the clock to further make this public space attractive even when the main building is closed. The pavilion also helps to frame the square without blocking the view of the main building from afar.

I have tried to keep the pier as it is, just providing a concrete tile flooring to give it a slightly more furbished expression. I do not believe that this space need more additional features. It is protected from rain by the building above, as well as lighting during the darker hours. This space, as an exterior floorslab with very well defined edges, can house a large variety of activities; dance and music performances, exhibition space, open air cinema etc. To leave this space as unprogrammed as possible is important, since the visitors themselves can decide where to hangout, and what to do.

The floating platforms are ment to provide additional variety of spaces and also to let the visitor to come closer to the water. Here one can sit and dip the feet in the ocean, or even take a swim when the weather allows. The bridges are also connecting the pier to the existing cylindrical concrete fundament just outside the pier. My intention is to use this spot as a barbecue place and "off-stage" space where a group can hang out by them selves.
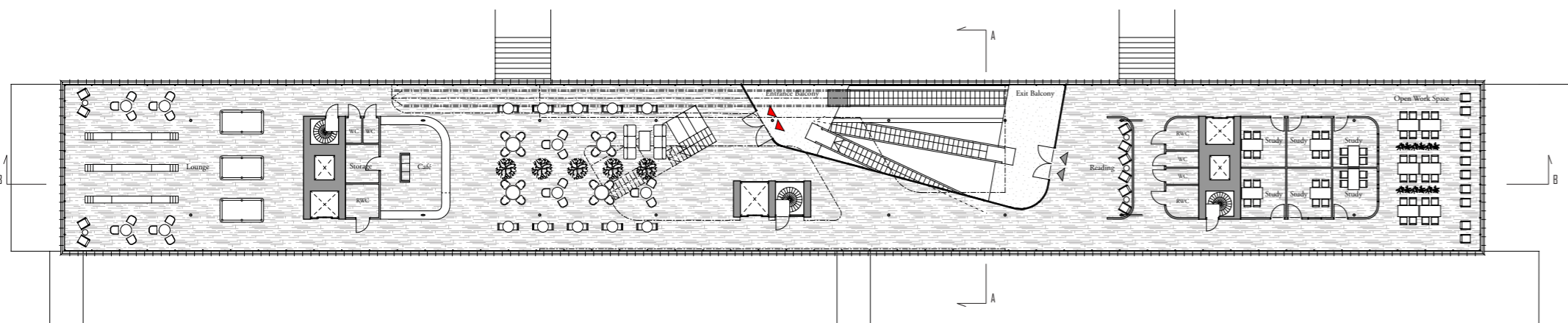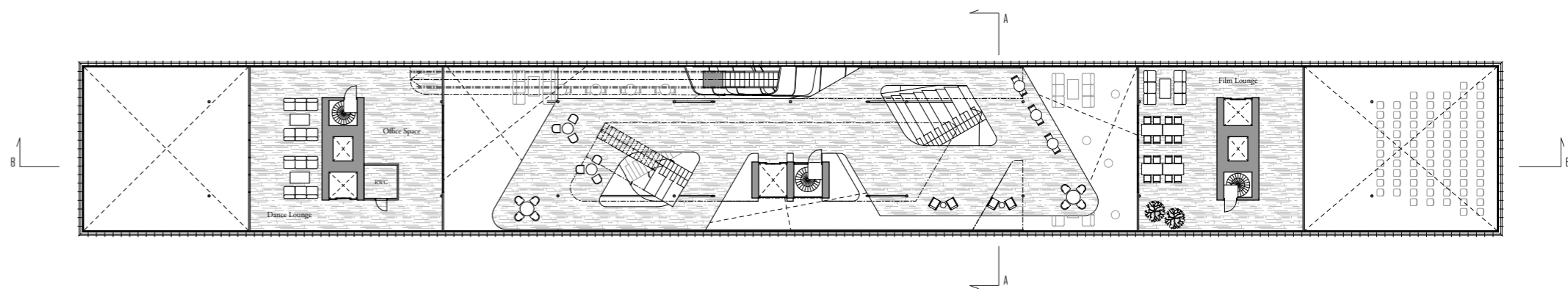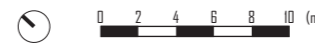

SITE PLAN

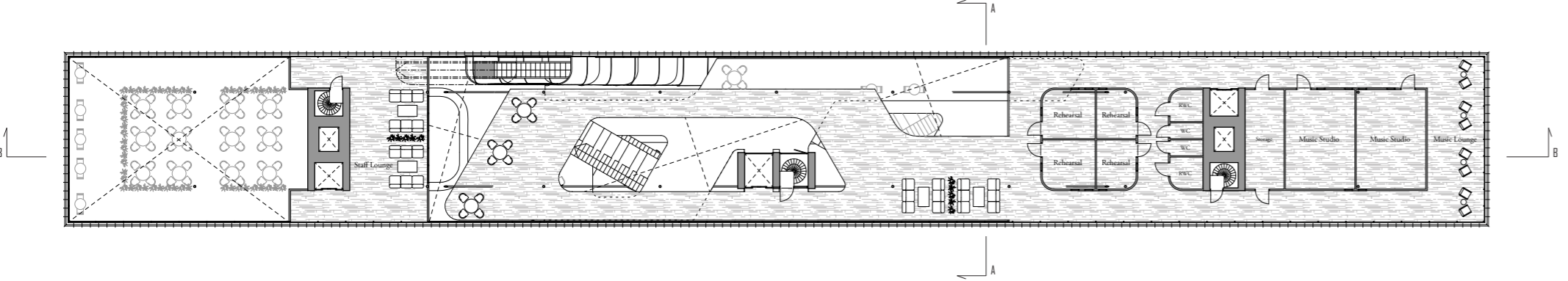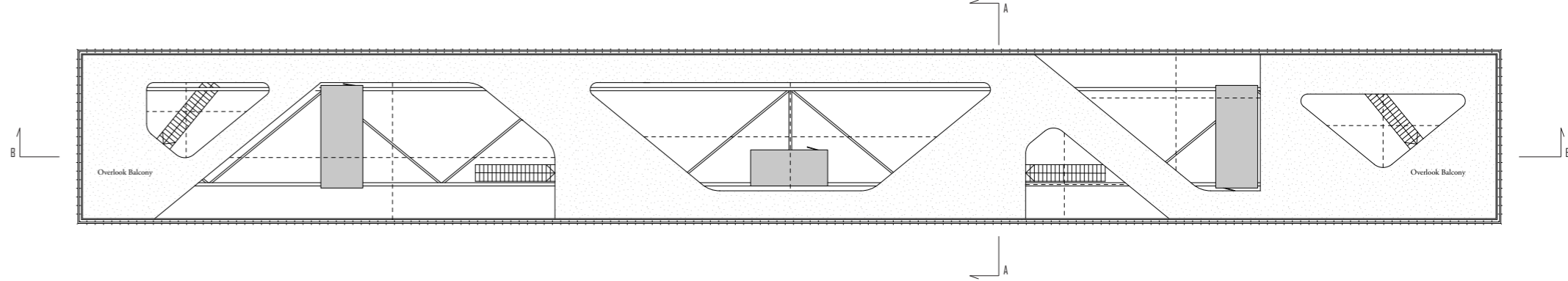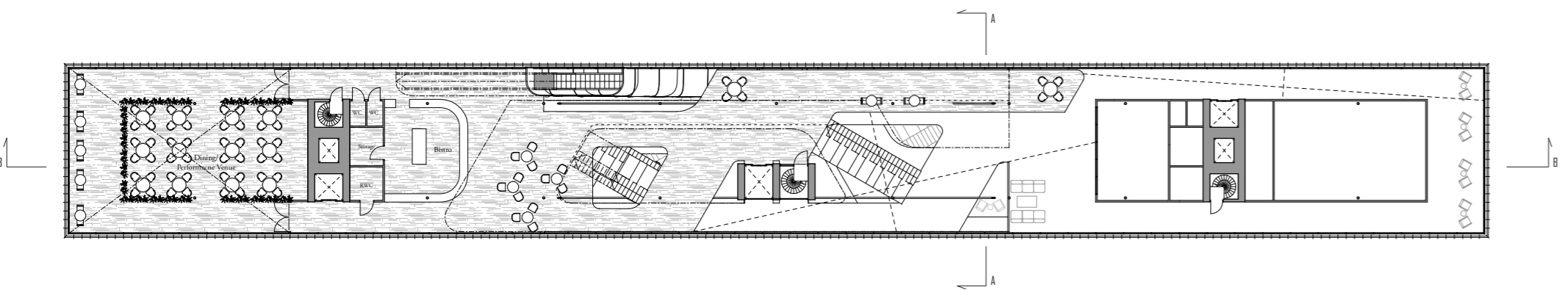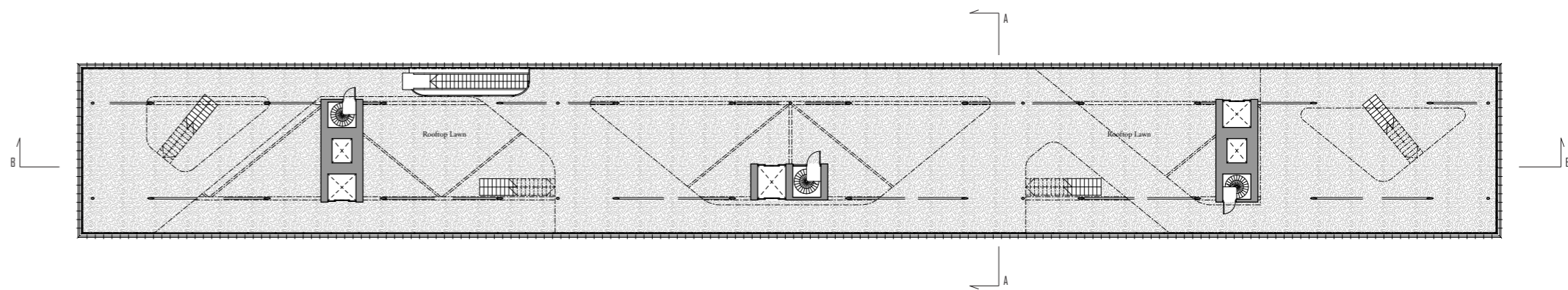0   5   10   15   20   25   (m)
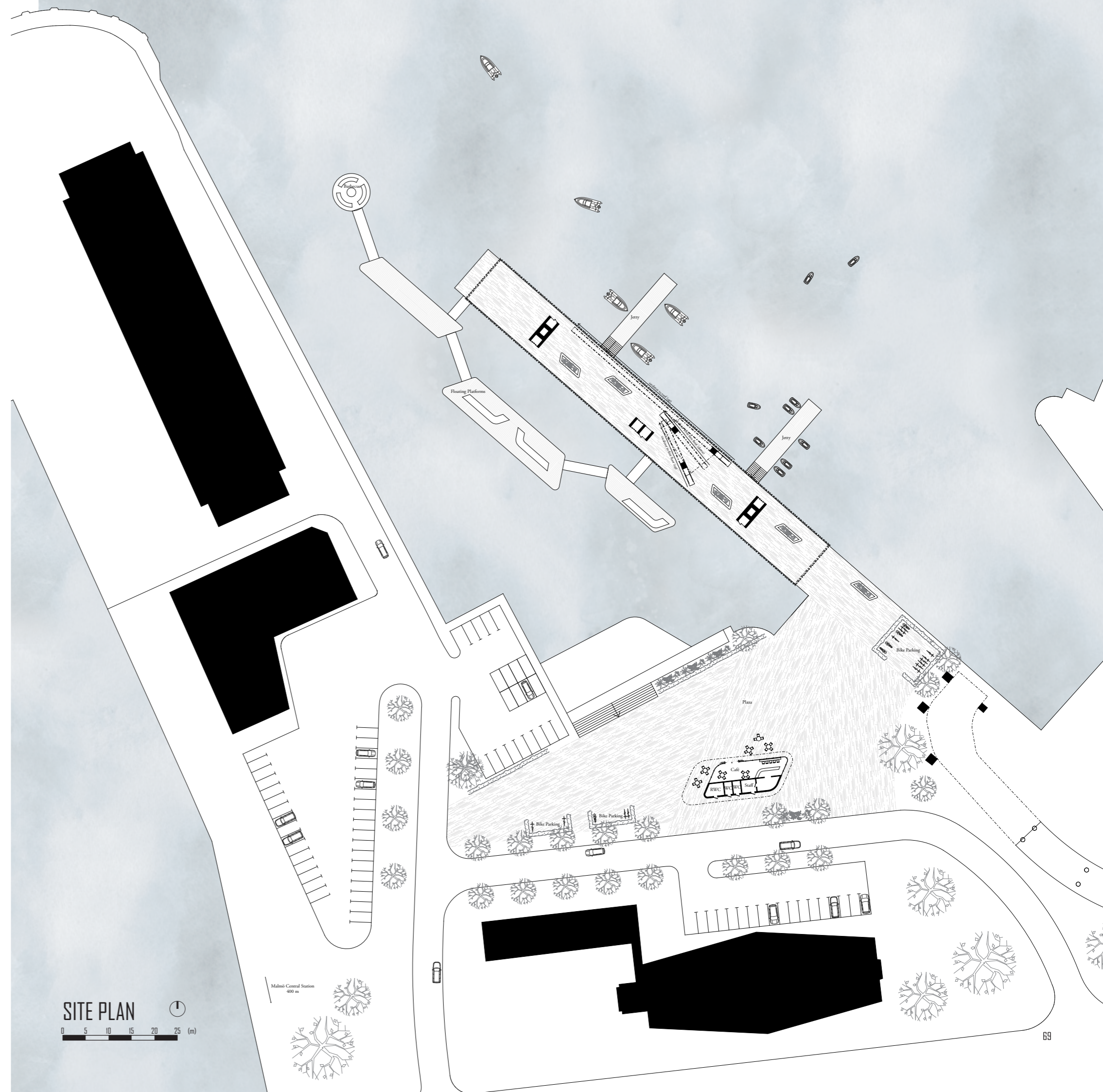
FLOOR PLANS
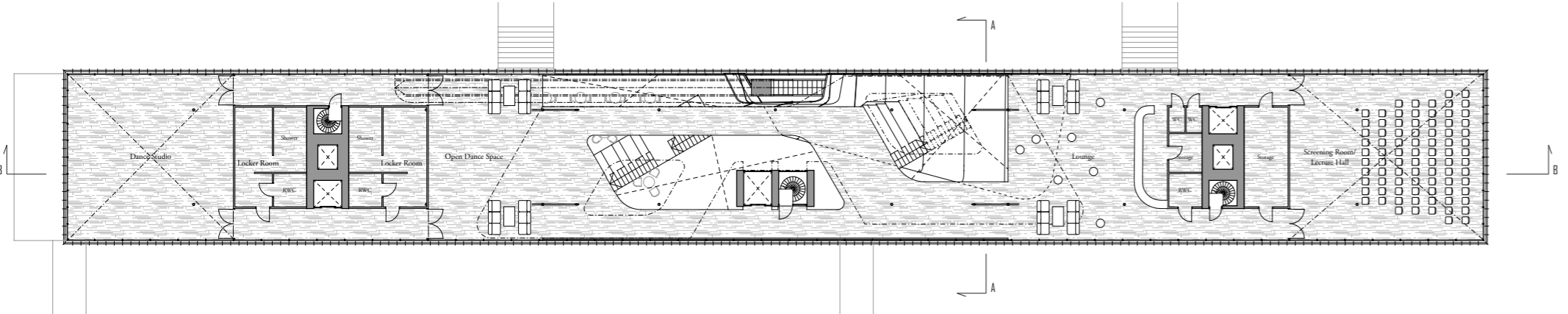
FLOOR 2
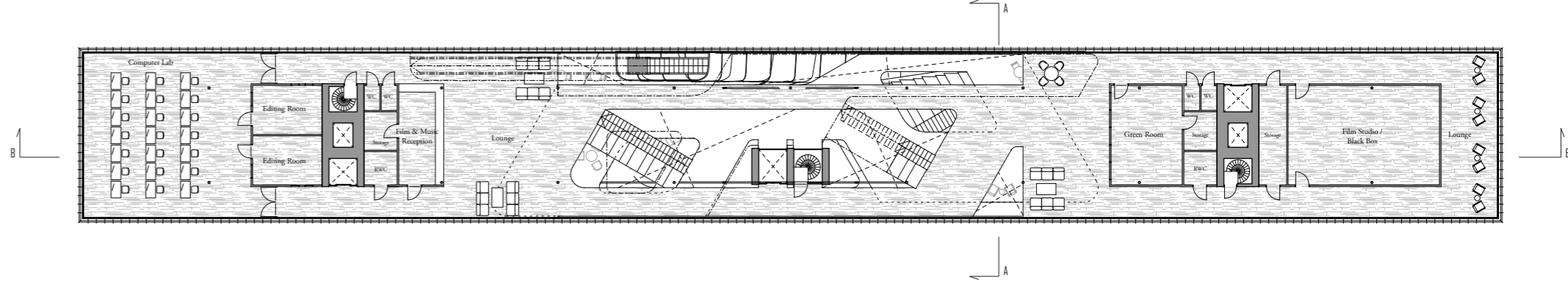
FLOOR 3

FLOOR 1

FLOOR 2.5

ROOFTOP PLANS

FLOOR 5

ROOFTOP BALCONY

FLOOR 4

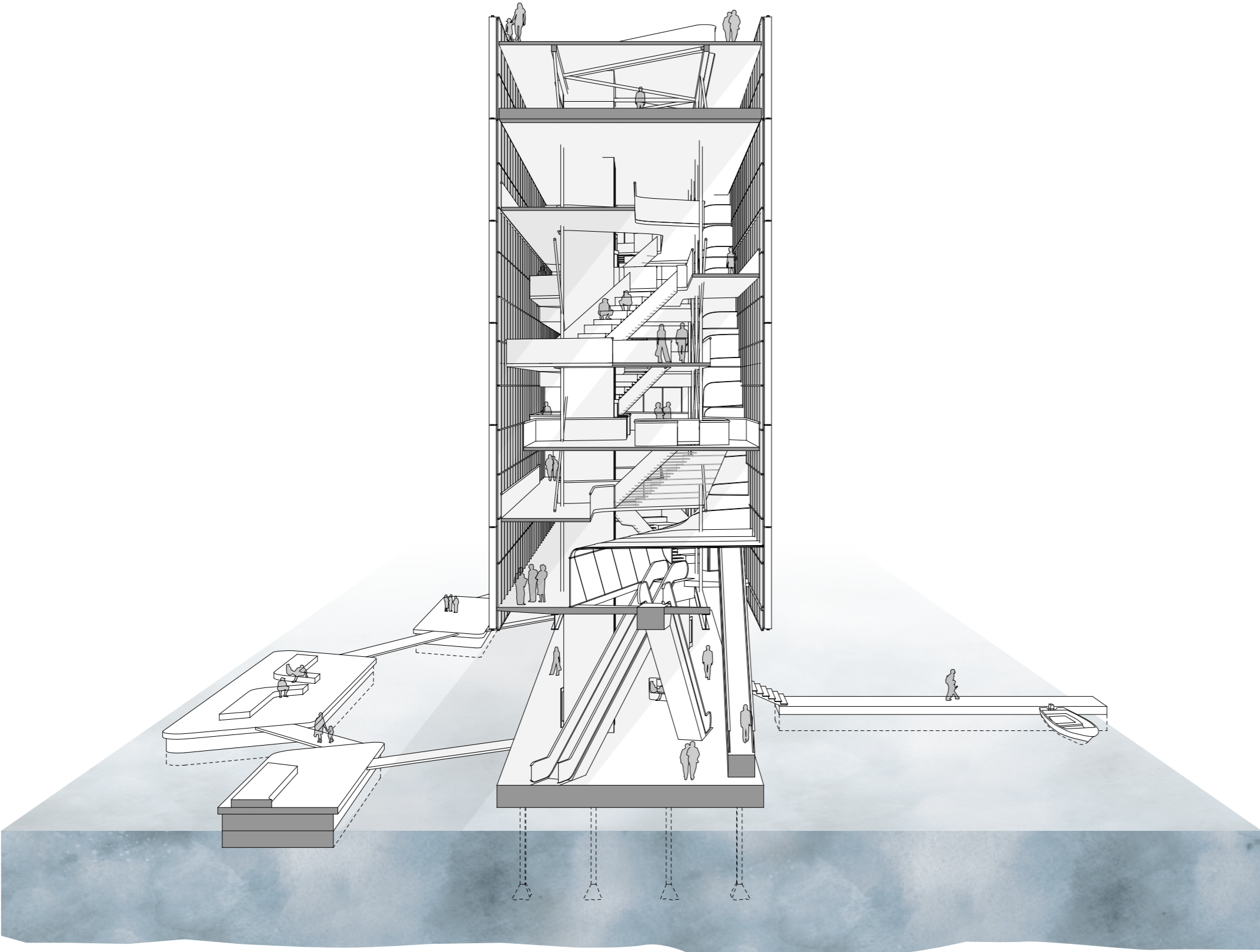0 2 4 6 8 10 (m)

ROOFTOP LAWN

0 2 4 6 8 10 (m)

The interior is ment to feel roboust and resillient jet inviting and home-like. Since the core of this project is that the building is for all of Malmös citizens, it is important not to make it to fancy and in that way alienate some of the visitors. It is, however, still ment to be a beautiful space to spend time in. The honest, natural materials; metal, glass, concrete and wood are providing the interior with a calm and relaxed atmosphere.

The LED loops underneath the balconies are enhancing the formal language of the balconies and guiding the visitors eye upwards throughout the building. These are also a way to lighten up this space without additional light armatures which would disturb the clean and honest feeling of the space.
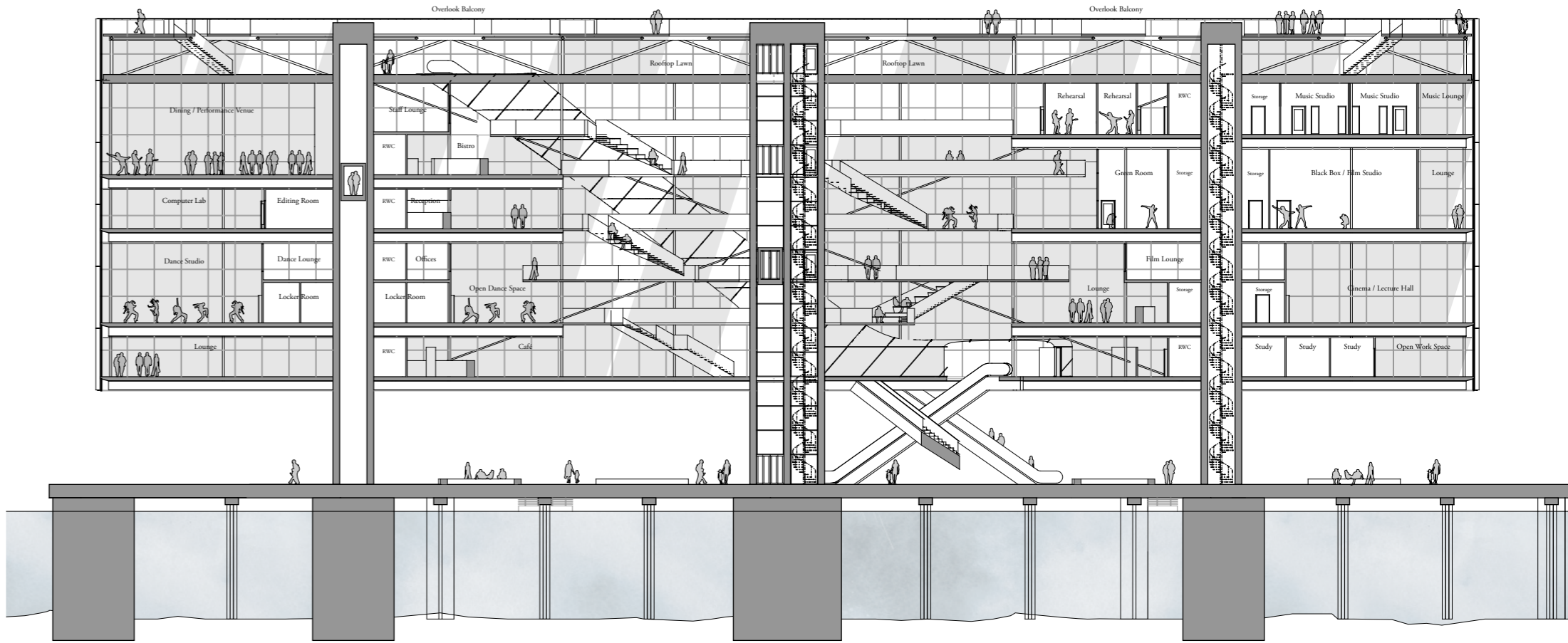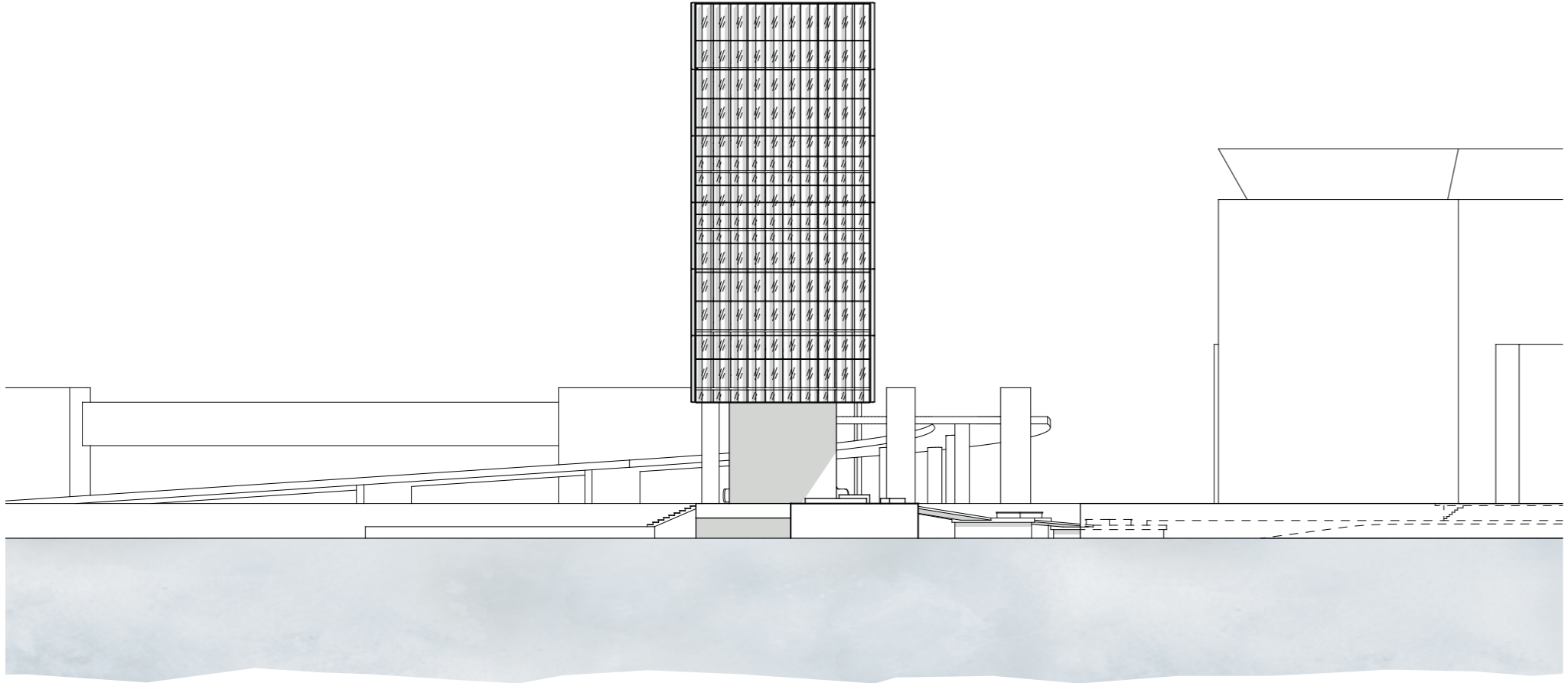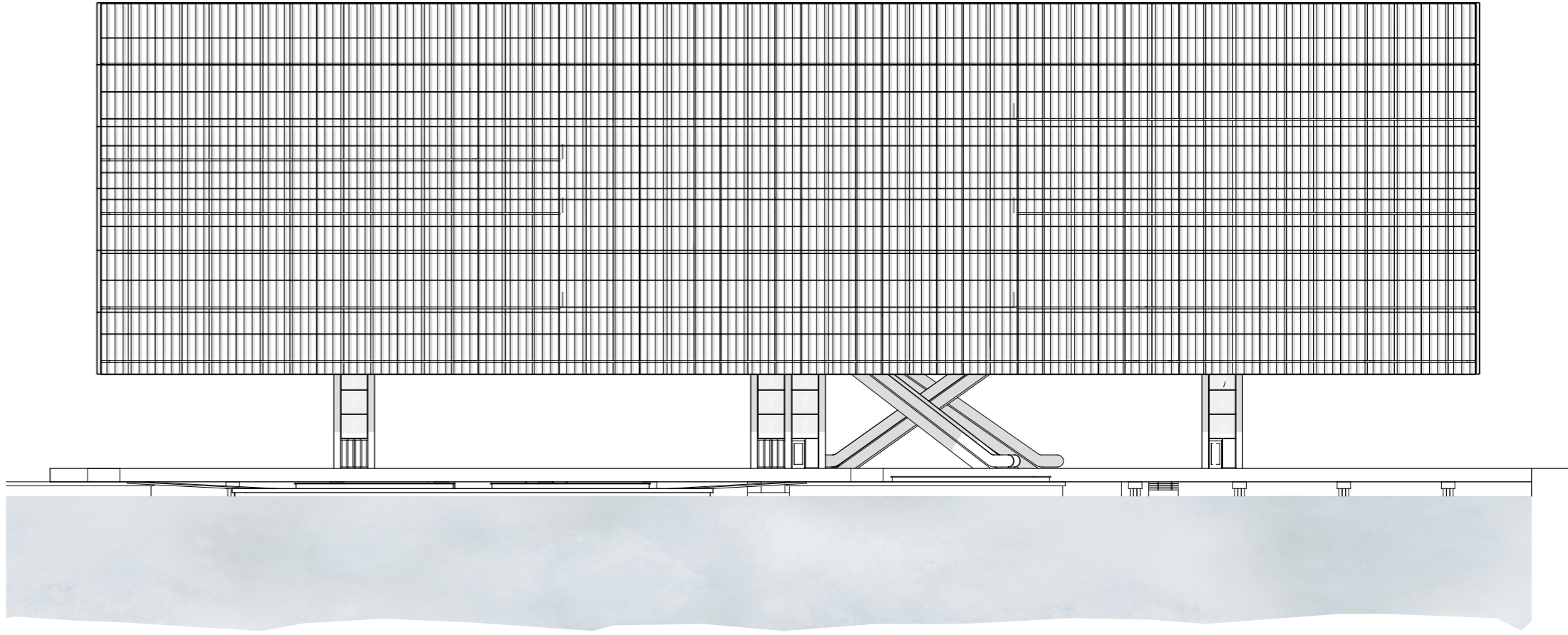
SECTIONS

SECTION A_A

0 1 2 3 4 5 (m)

SECTION B_B

0 2 4 6 8 10 (m)

FACADES

NW FACADE

0 2 4 6 8 10 (m)

SW FACADE

0 2 4 6 8 10 (m)

PHYSICAL MODEL

■ Because of the complexity of the project I decided to build a physical model to fully explain how different spaces and floors relate to one another. The model is build with cardboard, acryllic and 3D-printed plastic details, and it is standing on a thin black reflective cardboard.

The laser cutter was my main tool to build the model but I decided to do the communication; stairs and escalators in the 3D printer. Because of the geometry of the entrance pavilion I also decided to 3D print that piece.

My main problem with this model was that its scale (1:200) is to small to build it structurally in the same way as the real building. The floor slabs aren't hanging from the top beam but are instead fixed to the central core and the facade. The warping of the floor slabs are partly due to this structural shortcut, but also because of the material itself and how it behaved in the laser cutter.

The model is divided into three parts to highlight their different characteristics and language, but it also enhances the understanding of spatial relationships when the observer him/herself puts the pieces together. One of the sides are intentionally left without a facade to make the inderior easier to read.
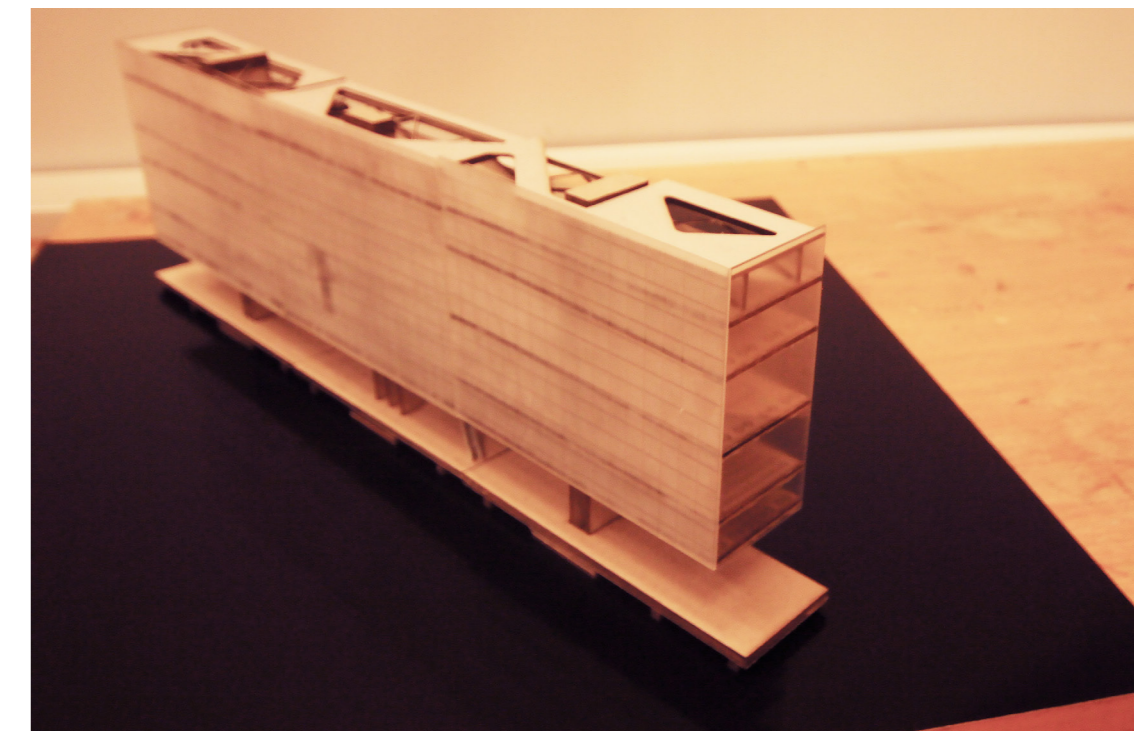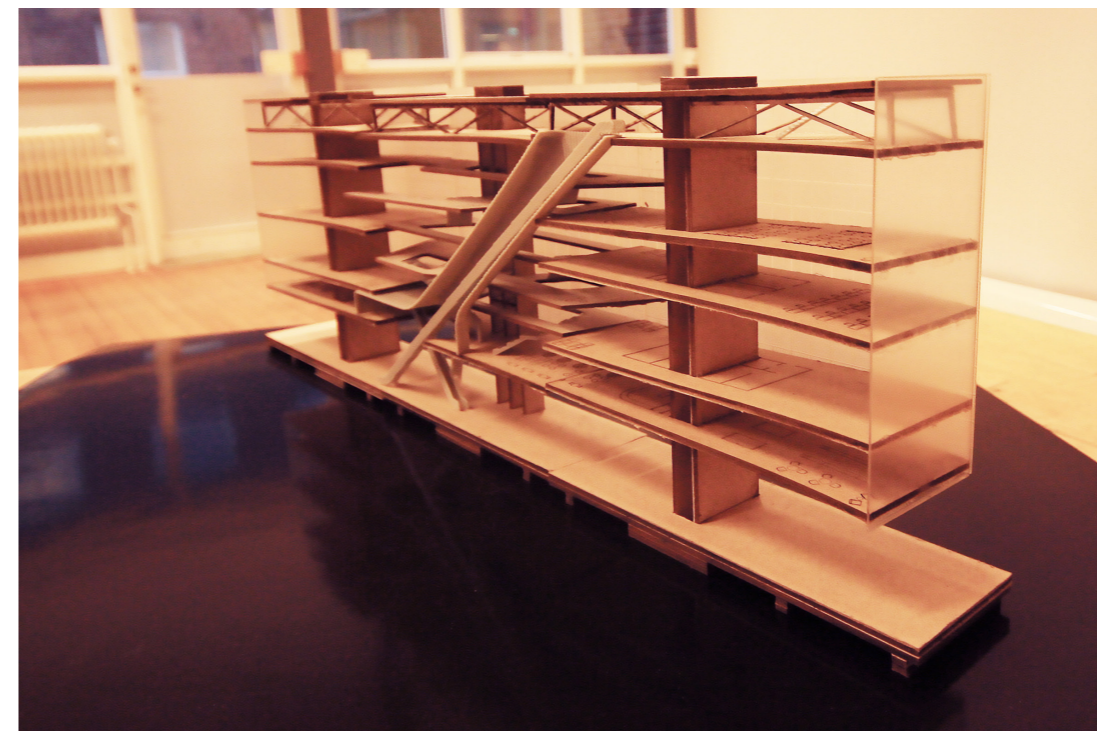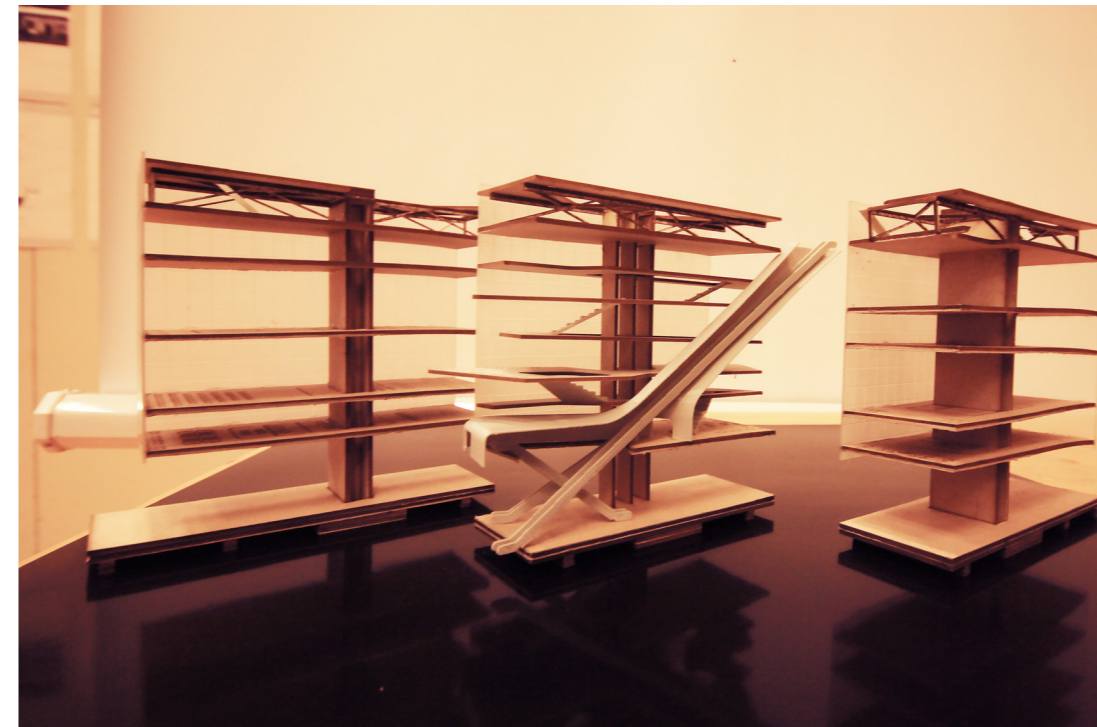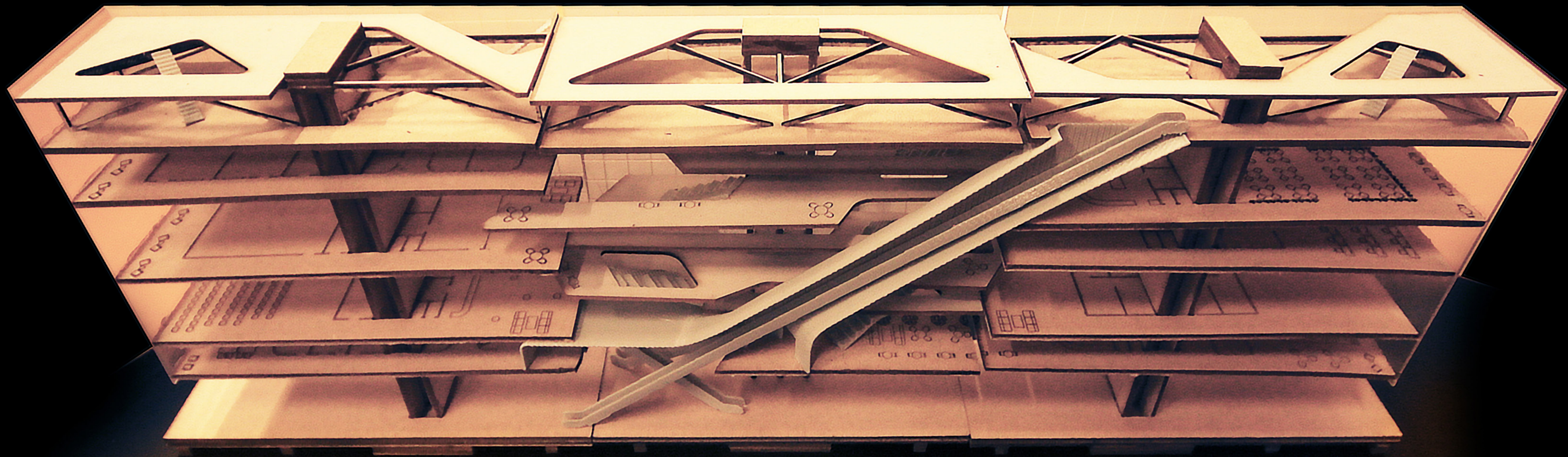
WALK THROUGH

━━ This segment contains a series of simple visualizations leading the reader through the building. When looking at them, always keep in mind how the project is designed to trigger curiousity. Think of how the architecture draws your attention beyond what is portrayed in the image itself, further into the project.

From afar one can see that something is happening behind the facade, and getting closer the color and direction of the escalators are contradicting the rigidity of the volume. The intense entrance situation which are then contrasted by the harmony within the atrium space.

The Pier seen from Malmö University

The Pier seen from the entrance square

The entrance situation
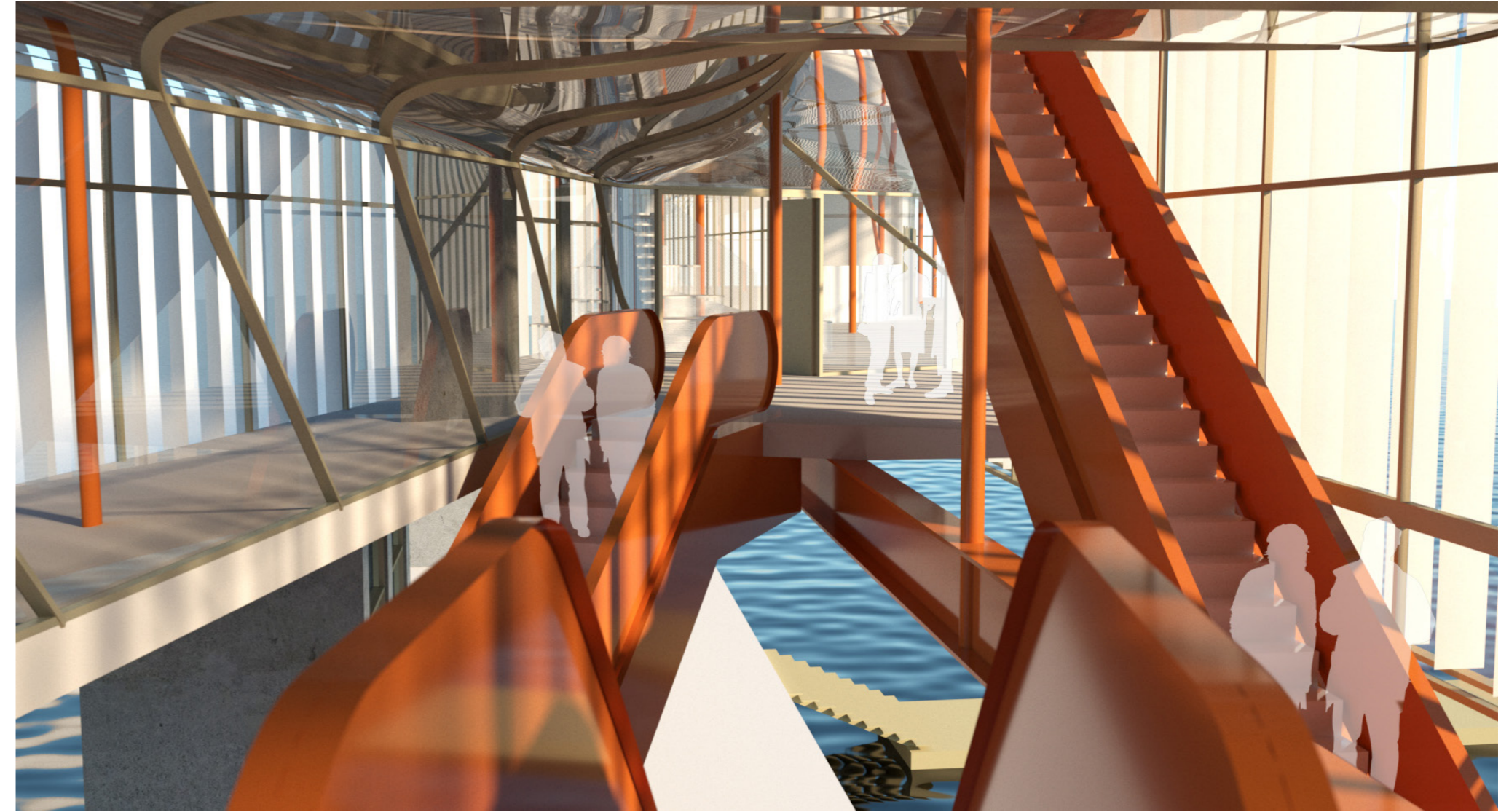
The dance studio

The rooftop lawn

The Atrium Space (Left)

The observation bridge

The exit situation

SUMMARY

■ The project is a generator for public life in Nyhamnen in Malmö. Through an architecture of curiosity, designed with a wide variety of different spaces, exterior as well as interior, The Pier is providing Malmö's citizens, and especially its young population, with rooms for personal development and recreation. Because of the modernistic open floor slabs, the building can house a variety of programs, and can be altered over time, to meet new needs of the future. The Pier is a transformative and flexile structure which will provide space for a diversity of uses and interpretations by its visitors, and the programmatic spaces are designed to easily adapt to new programs. The changes of program can easily be done without affecting the exterior at all.

Because of the nature of the area at the moment, a time gap before the transformation from harbour residue to vibrant inner city, it is of great importance that the program of the project can be altered to also fit the needs of the future, when the new area is built. I also strongly believe that this project, housing creative and developing acti-vities, and simultaneously highlighting a generally neglected group in society, is a powerful physical representation of a progressive and democratic line of thought. The best locations a city has to offer should be for the people of the city rather than for the richest who can afford to buy a property there. This project, both symbolically and physically, are claiming land exclusively for everybody, and will do so over time.

REFLECTION

▬ This project is a post in the debate about the need of public space, both interior and exterior, in the city. The ever expanding internet revolution are affecting the physical world in ways we could not imagine ten years ago, which in turn forces us to reconsider the needs, functions and values of public space. Now, more than ever before, we need to use design to create urban life, and The Pier is an example of that kind of social investment in a city.

The project highlights an often neglected group of people, adolescents, and both literally and conceptually puts them on a pedestal. It is of importance that we allow this group to become part of society, since they are the citizens of tomorrow. If we provide spaces to meet and develop, the necessary platforms to become good citizens, we increase the chances that they will become good, caring citizens. At the age when people are curious, open minded and formative, a platform like this increases the chances that people will meet across racial, economical and cultural backgrounds. This will lead to a greater understanding of the diversity of the citizens in Malmö and therefore also reduce the fear for "the other". Public platforms like this are important tools to reduce the segregation in Malmö.

The project is taking place in a time gap at the site, the gap between heavy harbour industry and a grand extension of Malmö city center. To place The Pier, an attractor point, in this area and time is of great value to connect the future to the present. This project will bring people to Nyhamnen, making it less alien and therefore also increase the public interest in the area. The Pier will be good for the city as well as profitable for the developers of the area.

The building, due to its size and structure, will be expensive to build and do not have any immediate revenue, but the project can be profitable in the long run because of its flexibility. It can house loads of different programs and are therefore resilient even in the future. It will also increase the value of the area which is about to be heavily developed in the upcoming decades, and in that way partly finance itself. One can also argue that this kind of investment in the social realm will increase the happiness and wellbeing of the citizens and, in turn, reduce medical costs and increase the living standards for people in generations.

The Pier is pinpointing changes and transformations in a variety of scales, from the individual development to societal changes due to technological development. The modern lifestyle are transforming due to the width of services one can find online. Citizens do not longer need to go to shops and services which lead to a decrease of public life. The Pier is designed through theories regarding the transformation of adolescents, from children to adults and the project is taking place in an area of transformation, from harbour industry to a vibrant extension of the city center. The building itself is designed to easily adapt to new programs, to transform along with its society.

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THE PIER

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