DE VRIES ROBBÈ PERFORMANCE CENTRE Design of a performance centre in the vacant industrial site of De Vries Robbè Staalfabriek



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1.0 INTRODUCTION

The following report presents the process and result of the research based design project of De Vries Robbè Performance Centre, the design of a performing arts theatre and school in the old site of De Vries Robbè Staalfabriek in Gorinchem.

The research carried out along with the design concerns the historic continuity of a heritage site with the use of sensory design that refers to memories of people.

The report is structured in the following way: The literary research is first presented that includes the tools for sensory design and the stories of people interviewed for the research.

Secondly, the small design assignment is briefly presented before moving to the main assignment. The main design assignment is presented with the urban strategy first, then the massing, the programme and the final result.

Finally, conclusions from the design and the research follow.

2.0 RESEARCH

Architectural design in sites with rich history is a matter that deserves a lot of debate. Especially when buildings are still standing in the site, the decision whether to turn them down, keep them or transform them is not an easy one. How to remind visitors of the life that once stood there? And how to do this with architecture that is experience rich, and true to its time? These are not simple questionings but is the topic I will try to clarify with the following research.

Post modernism has aimed at keeping an architecture true to its Zeitgeist and still refer to the past, however this was done through seemingly copy pasted 2d collage on the façades, which had little or no relation to the building itself (Cutieru, 2021). Abu-Orf et al. (2020) talk about this duality conflict in architecture of the present and the past. The modern movement had a lack of commitment to the context's culture and history, while post-modernism, aiming to relate more to the context, lead to a superficial architecture that is overwhelming and does not really capture the essence of the past. A culture's essence is underpinned in the values, the traditions, the emotions and the concepts of the past; it cannot be properly represented by merely a visual image of ruins embedded in the new architecture, the falsification of history or the mimicking of the past (Abu-Orf et al., 2020).

To respond to post-modernism, Kenneth Frampton presented what we call Critical regionalism. He disagreed with the imitating nature of modernism towards the past and proposed a mediating position, where architecture is the result of the place without imitating the past and still representing an architecture of today, thus referencing the local in the globalized architecture trends (Frampton, 1983). However, Frampton's interpretations on architecture are mainly taken from a landscape perspective, where the architecture strongly responds to the landscaping demands of the site but not so much the cultural ones.

Several authors have presented in essays the correlation they see between remembering stories and experiencing architecture (Treadaway, 2009; Zumthor, 1999, 2006; Bloomer & Moore, 1979, O'Neill, 2001). Zumthor (1999) presents the potentials of memories

introduced in design processes. He claims that, for him, design is first thinking about what feelings and memories he wants to evoke in a place and then designing atmospheres that evoke those feelings and memories. Bloomer & Moore (1979) claim that haptic sensations are the first way in which we assign meaning to spaces, and that moving through buildings and being able to position oneself haptically is the way to stimulate experiences that relate to our human identity. They claim that our most fundamental recollection of memories is through haptic sensations and that these are what is missing in our globalized buildings of today. Bloomer and Moore were accurate by writing about the globalized senseless buildings, even when globalized architecture was even less present than today.

And even if Zumthor talks about thinking architecture, Bloomer and Moore present the issues of only visual architecture, and Frampton the importance of connecting to the past, it seems to be O'Neill (2001) to be breaking ground by presenting the possibility of designing architecture that relates to the context by using the haptic memories of those people in the context. She states that the main issues of Critical regionalism are the focus on the visual identity of a place and the assumption that all inhabitants of a place share the same visual idea of the identity of the place. Because we gain knowledge about a place by intimate contact, movement and physical work besides merely visual stimuli, we must understand those dimensions of perception as well to be able to refer to the identity of a place (O'Neill, 2001). O'Neill (2001) carried out a study in which she asked open questions to the inhabitants of a space about their experiences, so to gain an understanding of what they find important and what the identity of the place is for them. She concluded that memories of the place (either they were childhood memories or recent memories) dealt with adjectives related to the haptic senses and that there are the ones that produce a deep-rooted sense of place to the inhabitants.

According to Tanizaki. (1977), the architecture of today is mainly of visual impressions and shapes that reflect what technology is capable of. My research

question challenges this assumption and hypothesizes that architecture true to the Zeitgeist of today can still be designed with care for all of the senses and, not only, the visual. A second part of my research question asks whether sensorial spaces in architecture can reference the history of the context of the location. My hypothesis is that, because the senses bring back memories, tools for sensory architecture can be manipulated in such a way that the visitors will remember either past experiences in industrial surroundings or the social aspect of De Vries Robbè. My research question asks then: How can the tools for sensory architecture be used to remind visitors of the history of its context? And how can these be combined with a building that is true to its Zeitgeist?

The tools to achieve sensorial spaces

This section will firstly deal with the meaning of haptic or sensorial spaces, then, I will go more in depth into the reasons why it is important to go back to a sensorial architecture. This was partially covered in the introduction. Finally, I will present the result of the research into the ways in which we can achieve sensorial spaces. I have called these, tools for sensorial spaces.

Haptic vs sensorial architecture

Haptic architecture is mainly associated with the architecture that stimulates the haptic senses. These are the touch (generally associated with the hands) but also the weight, the movement, the position of the body, the balance and the muscular and joint sensations. Within the touch, there are still many sensorial mechanisms: the temperature, pressure, texture, hardness, weight and form of objects (Prytherch & Mclundie, 2002). I work on this definition but I do not use the word haptic so much, as to include the other senses as well: the acoustic sense, the tasting sense and the olfactory sense; although I mainly focus on haptic and acoustic sensations and how they relate to the visual sense to enrich each other (Pallasmaa, 1996).

The need for sensorial spaces

Architecture can be defined in many different ways. Böhme (2013) associates architecture with a corporal experience that individuals have when visiting an architectural space rather than only a visual experience. Pallasamaa (1996) as well. Juhani Pallasamaa defines the role of architecture as "enabling us to perceive and understand the dialectics of permanence and change, to settle ourselves in the world, and to place ourselves in the continuum of culture and time" (Pallasmaa, 1996). He states, placing his manifesto in parallel with Susan Sontag's beliefs, that we have lost our haptic architecture for a fully visual one, aimed at making a memorable printed image "fixed by the hurried eye of the camera". This results in the loss of quality, of the aura of architecture, of the soul of buildings, and this is why it is important to go back to a sensory architecture (Pallasmaa, 1996).

Buelow (n.d.) works on this definition of Pallasmaa to express her concern on how the mediation and simulation age is diminishing the opportunities for corporeal experiences in architecture and other interactions with our world. She uses the metaphor of a rotary phone to explain how, before, the engagement and movement was specific to the object and event. "With each number dialled on a rotary phone, your index finger travels a path of a specific distance and gathers a certain amount of resistance before you release the dial and hear it spin back into 'start' position." (Buelow, n.d.). Today, dialling a number on a phone is the same as doing any other task on the phone, there is no kinetic memory specific to the event. This is compared by Buelow (n.d.) to architecture and the loss of all the senses for the sake of only visual architecture.

All of the senses are the primary means with which users experience buildings and as described by Peter Zumthor in Thinking Architecture (Zumthor, 1999), the sense of sight is not enough for human beings to understand and use buildings, but they use their entire body to experience a space, building up to a deeper comprehension of it. Thus, they can react to the experienced atmosphere, interacting with the architectural bodies. When architecture cannot be experienced with more senses than the visual, it only achieves a partial experience and, the building, according to Zumthor (1999) as well as Pallasmaa. loses

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its aura.

Italo Calvino writes "If, of two arcades, one continues to seem more joyous, it is because thirty years ago a girl went by there, with broad, embroidered sleeves..." (Calvino, 1972), emphasizing how architecture is defined and enhanced of past memories of people, atmospheres being historically rich of human experiences. This relates to Matthewson (2009) People who live in glass houses, as he describes how glass has no aura because you can leave no traces in it, there is no history in it and no unique essence. It also only permits the flow of vision and blocks all other senses (Matthewson, 2009).

The tools for sensory architecture

The following section is divided in the different tools that are discussed in literature studied about the senses.

Contrast

Weber (1995) observed that there is a threshold of sensitivity that must be passed before the stimuli is detected by the sense (Prytherch & Mclundie, 2002). This leads us to think of contrasts in sensations as a way to trigger the senses as a first instance of experience. Zumthor, (1999) affirms that senses are generally triggered by contrasting elements, enhancing the different atmospheres and expressions that a simple space can have. Those can be aspects such as: low-high, dark-light, narrow-wide, soft-hard, quiet-loud, hot-cold etc. (Zumthor, 2006) With the aid of these contrasting elements, the architect is able to manipulate the atmosphere of that space and, thus, human behaviours are also influenced into a desired direction. That can be used in a sequence in space or within single space. Contrasting elements can even be put against each other, meeting and interacting with one another so that different expressions are colliding, and the human body is challenged to make sense of the variety of stimuli that is perceived by it.

Seauences

The creation of sequences of spaces, materials and expressions in combination with the use of contrasts is letting architecture stimulate the behaviour of people, to drive people, to move them. All the small elements in architecture are carefully designed to provide experiences and to trigger human emotions.

Details

The character of a building should be represented in all its scales, starting from the distant view in its surrounding environment and until the smallest detail of the building. Those details are the ones that bring the soul of the building closer to the human scale, making it more accessible for people to experience and reflecting the basic principles of that building. (Zumthor, 1999)

Body-centered

Because humans move in their bodies and interact with buildings with their bodies, architecture should have a body as well, with which the human bodies can interact (Pallasmaa, 1996; Zumthor, 1999). Humans should be able to move through the building and act within the building while the building, with its body and mass, should be able to move the humans within it.

Materials

The use of materials is a very relevant aspect in the expression of buildings and in their interaction with the users. The meeting points between different materials, the joints and edges and the way that they relate to one another in the large and small scale are intricate elements that are taken care of to define certain experiences of a space for the visitor. Furthermore, materials, are not free-standing elements that mean something by themselves. They are a mere tool that architects should expose the essence of in architecture by using their relevant characteristics and qualities and by giving them a suited role in a specific building. Then they become meaningful and vibrant in their context, setting a desired atmosphere and stimulating certain behaviours or feelings in the users.

Light (and none)

One of the most relevant contrasting elements in architecture is light and shade. Shadow can be used as an ornament in a space devoid of any other kind of decorative elements. (Jun'ichiro Tanizaki, 1977) In those kinds of spaces, simple volumes are added just to give depth to the shadows and to create different levels of attention. More than that, shadows are providing intimate spaces in which behaviours are again stimulated and serene, quiet environments are created in order to allow for humans to live and feel safe and calm in those

architectural bodies. Finally, shadows give depth and focal points in architecture, while also concealing other elements of a space. This gives humans the freedom to fill the unseen or undistinguished parts of a space with the use of their own imagination. When something is lit in a shaded environment, it immediately becomes the centre of attention, leaving the rest in a peaceful semi-darkness that allows serenity and other senses that vision to thrive and more comfortable situations and conversations to happen. In this way, human behaviour is stimulated and shaped by the play of light and shadows. But if no shade/ light contrast is present, other means of stimulating the human mind are distinguished, such as adding accent colours.

Temperature

Surfaces and materials are known to us. If for example I say that I sat on a concrete bench is different than if I say I sat in a wooden bench. We are aware that certain materials have different temperatures in the same environment, and the combination of them can express a certain directionality in intimacy perhaps, where the warmer materials are the more intimate spaces. Temperature is also felt with colours as colours have different visual temperatures that can enrich our haptic sensations. Sometimes these are related with the material temperature, such as with a warm coloured wood or with grey concrete; but sometimes these attributes can differ such as with a warm coloured stone or with aluminium hit by the sun.

Echo

Acoustic conditions of spaces are crucial for the proper functioning of a performance theatre; however, they are also very determinant for how a space is experienced. Spaces like churches, where there is a lot of sound resonance, intimidate us to be quiet, because we know that if we make a sound, this will be very loud and people will turn around to look at us.

Big spaces that are usually silent also cause that effect, even with not so resonant surfaces. Memories come to me of entering a big library or a big museum space. When I see other people that are silent in such an imposing space, I feel afraid of being the one that breaks the science.

Buelow (n.d.) describes a similar experience in the Jewish museum in Berlin. "As the visitor approaches from around a corner, they encounter what a friend described to me as "a murky hollow volume pierced by light from a skylight above... it made me want to be completely silent... to affect very little so I could experience the space at its essence. Of course, after a moment, you see these faces, and know that you're allowed to walk on them, but understand that there's a reverence to the space. When you step on the pieces... the faces... the metal clinks and echoes, and if you are very quiet the echo becomes very loud. The space was powerful." (Buelow, n.d.)

Mass

Exposed mass makes us more aware of our body and the relation between this and the space (Zumthor, 1999). Massive elements makes architecture more relatable to us and it evidences the bodily nature of it. Becoming more aware of our body is a way to activate haptic senses and focus less of our attention is solely the visual stimuli.

Scent

When I was a kid, we would go by car to the seaside with my family every year. The trip was 4 hours long, which feels very long for a kid. After all the highways, when we were close to get to our destination, I would lower the car window because I liked the smell of the salt from the sea in the air. Today when I smell humid salty air around me, I remember the yearly routine of lowering the window and smelling the sea. It makes me feel happy to remember this smell and the excitement of finally arriving at the seaside.

Smells make us remember as I illustrated above with a personal experience, this can be integrated into architecture to remind visitors of particular moments or special experiences they have had. Different materials for example produce different smells, or arrangements of spaces can be manipulated in order to drive the scent from one space to another (Pallasmaa, 1996).

Taste

According to Pallasmaa (1996), the visual sense can awake the sense of taste by the associations we have collected from our memories. Architectural space can

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trigger the sense of taste mainly by olfactory or visual associations and remind visitors of the memories that lead them to such associations.

<u>The essence of the past: memories of De Vries Robbè</u> Memories of the inhabitants of Gorinchem on De

Vries Robbè as an industry and on its impact on the city and people are being collected with the campaign "Wat herinnint u over De Vries Robbè?".

In this section, the memories are presented as narratives. A first section presents narratives I generated from images of De Vries Robbè Staalfabriek. A second section presents narratives I recollected from people about industrial spaces and about De Vries Robbè.

The memories of photographs

"The spaces are very regular, almost as if one had drawn a grid in the plan and arranged the tables with a measuring tape, with equal spaces between them. There is a lot of light coming from the window that occupies the full wall, so the workers have a lot of light when eating. But the wooden structure that outlines the planes of the room brings some depth and warmth, they make shadows on the wall. You can see the manual work in the making of the building"

"Occluding edges hide the river coast and reveal it as you walk. The orthogonality of buildings is mixed with diagonals spanning in all directions, there are cables to transport the steel and of cranes. The floor is like a storage room, you need to be careful when walking."

"The light comes from above, from the angled skylight, so half of the room is dark, and half is light. You can understand the structure in the lightfull side, but the dark side gives you less information, it feels more intimate."

"The noises of the people playing ping-pong resonate in the hall. There is also people talking, they are all having a break from work, or study. The high ceiling allow the sounds to resonate, and the high walls are divided by the brickwork that changes above 2 metres."

"The steel needs to become hot to be moulded into the final products of De Vries Robbè. When it is, it becomes red, like a completely different material than what it is when it is cold. There is a dramatic contrast visible with the same material. It can be deadly burning when you see red steal, but dead cold when you see it black."

"There is a break point between the open part of the facade and the closed part of it. The horizontality of the break mirrors the horizontality of the people standing in front of it. The roof makes a space for the people, they seem in a way connected to the building, because they are not completely outside."

The memories of people

"Entering a huge scale and being lost, losing the sense of sight, the space smells of cold humidity. I hear everyone else walking, all the minimum sounds resonate in a cathedrally sacred way, so everyone is quiet. Slowly all sorts of diagonals and rings of the roof structure are revealed."

"You imagine how a steel plate feels like, the rough, the cold. It is not embracing architecture, it is dangerous architecture."

"It was like a big envelope for machines, there was a lot of light but it did not make it inviting because it is out of proportion. It seems like humans are second, after machines."

"I felt like the space was impersonal, like a void. It almost feels like an outside space because it does not embrace you, I felt wind but I do not know if there was really wind or if it was just that I felt it by how empty the space looked."

"I met my husband in De Vries Robbè Staalfabriek, it was in a huge space where our eyes crossed paths"

"Working there was contradictory at times, the place was very strict but it was also like a family"

From these memories, testes have been performed along the design process to replicate the feelings that were recollected from the research

3.0 SMALL DESIGN ASSIGNMENT

Materializing the pavilion was a careful decision taken after considering the site's background, the concept, the relation with the investigation on the senses and model experimentation. From the start, steel was considered as a suitable option as the material expresses the fluidity of the concept's materialization and the connection to the site, while the old structures could be reused to make the pavilion. However, other options such as a mesh with a plaster finish, an organic lattice, a mesh with a cloth coverage were as well considered. Regarding metals, experiments were made with only corrugated surface, but the linearity of the material took away importance from the lines that the pavilion follows.

The result was recycled steel from the old structures but embossed with points that give shadow and detail. They work in such a way that the surface of the pavilion not only changes with the time of the day and also becomes more interesting as you get closer but it also stimulates the touch when walking on in and by inviting a hand to run along it.













The pavilion starts when you see the change in pavement along the street, which then leads you to a stair going down.

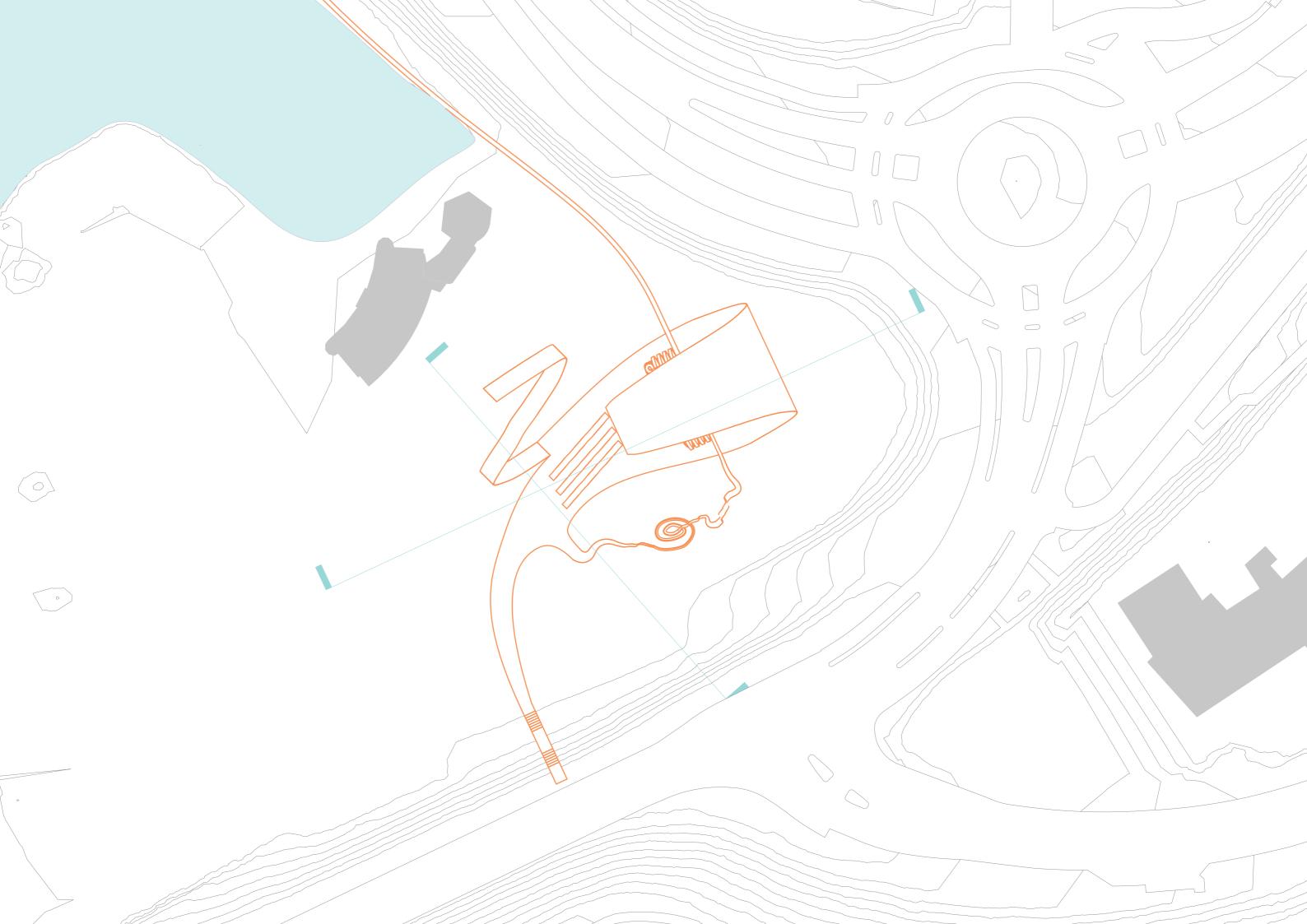
The stair becomes a path that unfolds into an S enclosing a café and private functions of the pavilion. On the other side, the path twists goes up and down and rolls into opportunities to play for kids, so that the experience of the pavilion is fun for everyone.

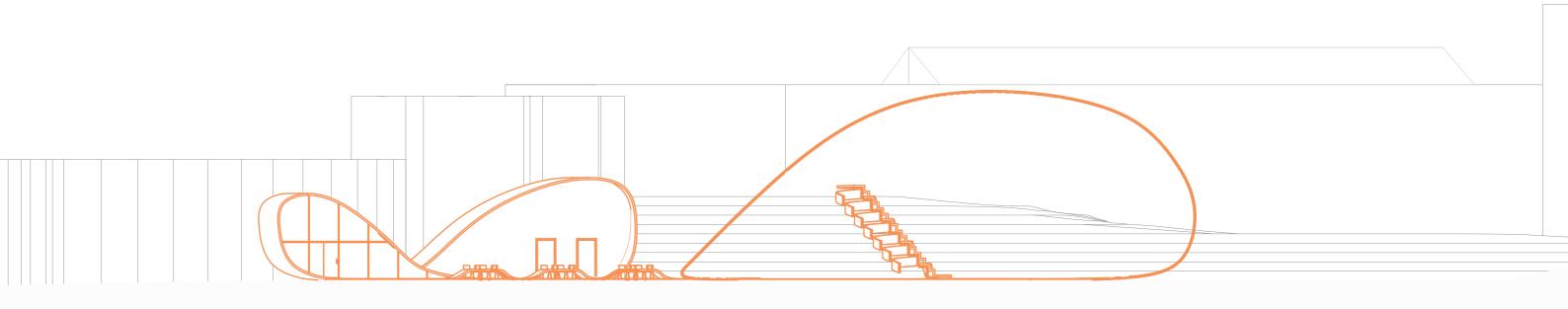
The main line of the path, however, goes ahead and becomes the roof for the audience and presentations. As you go up the seating it comes to realization that the seating is only a continuation of the playground that once it met with the path it started going regularly side to side while getting higher and more backwards, until it met the stairs that go down and become a path again, leading to the tow-path from where we can also start the experience.

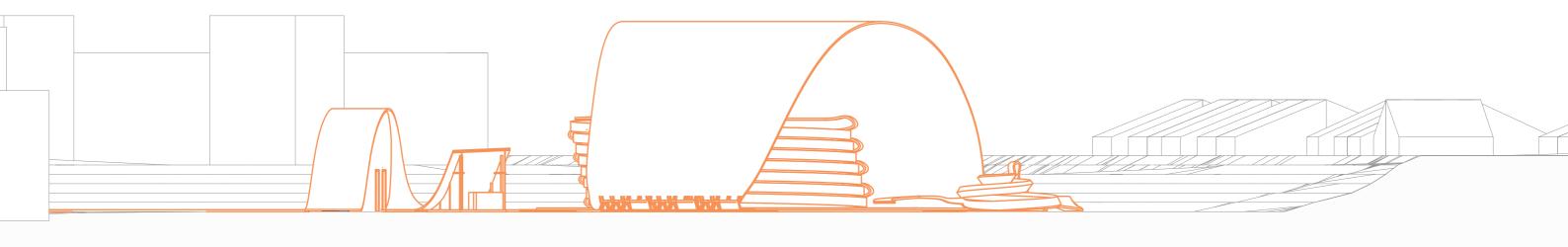
Site plan

Scale 1:500







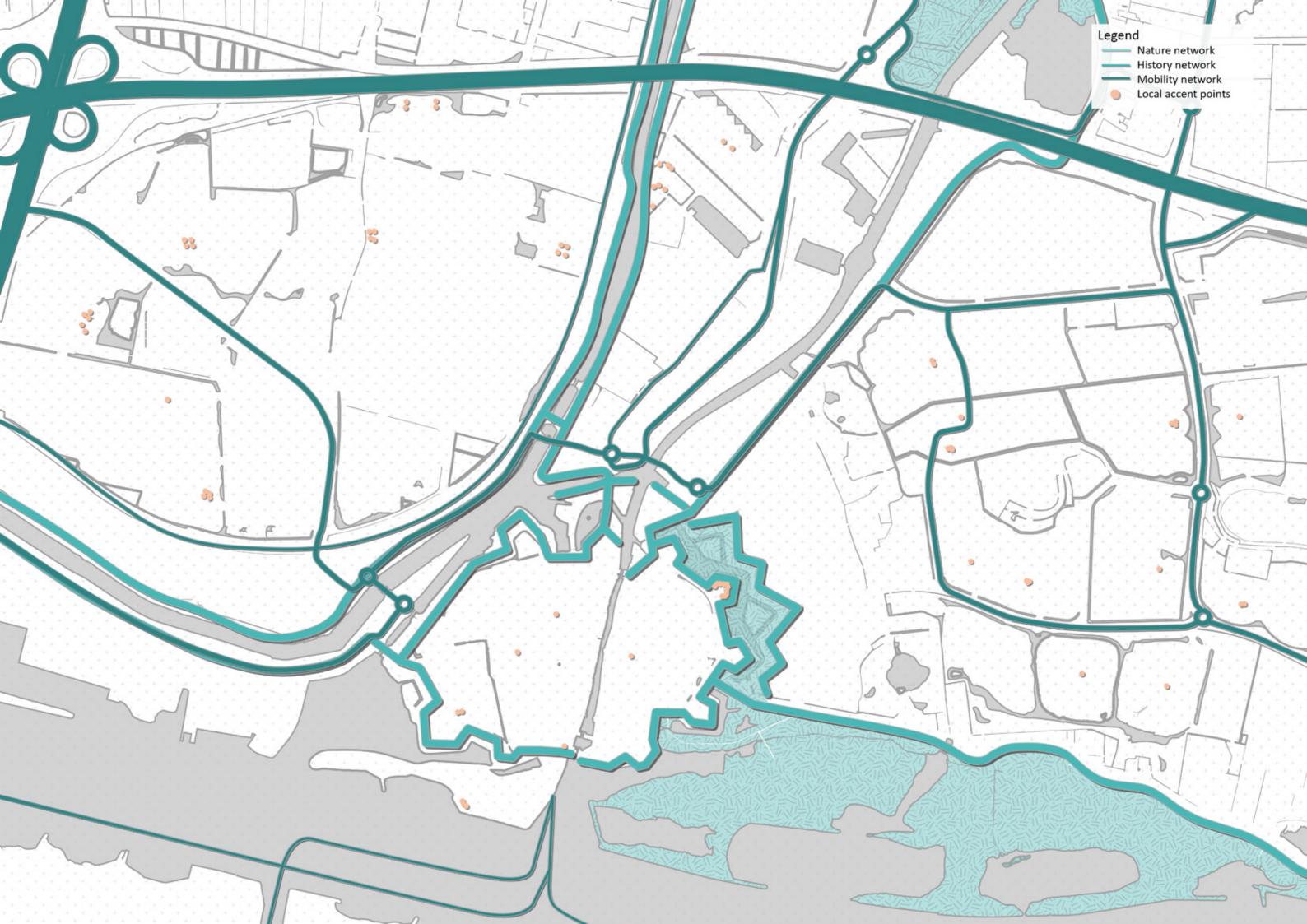






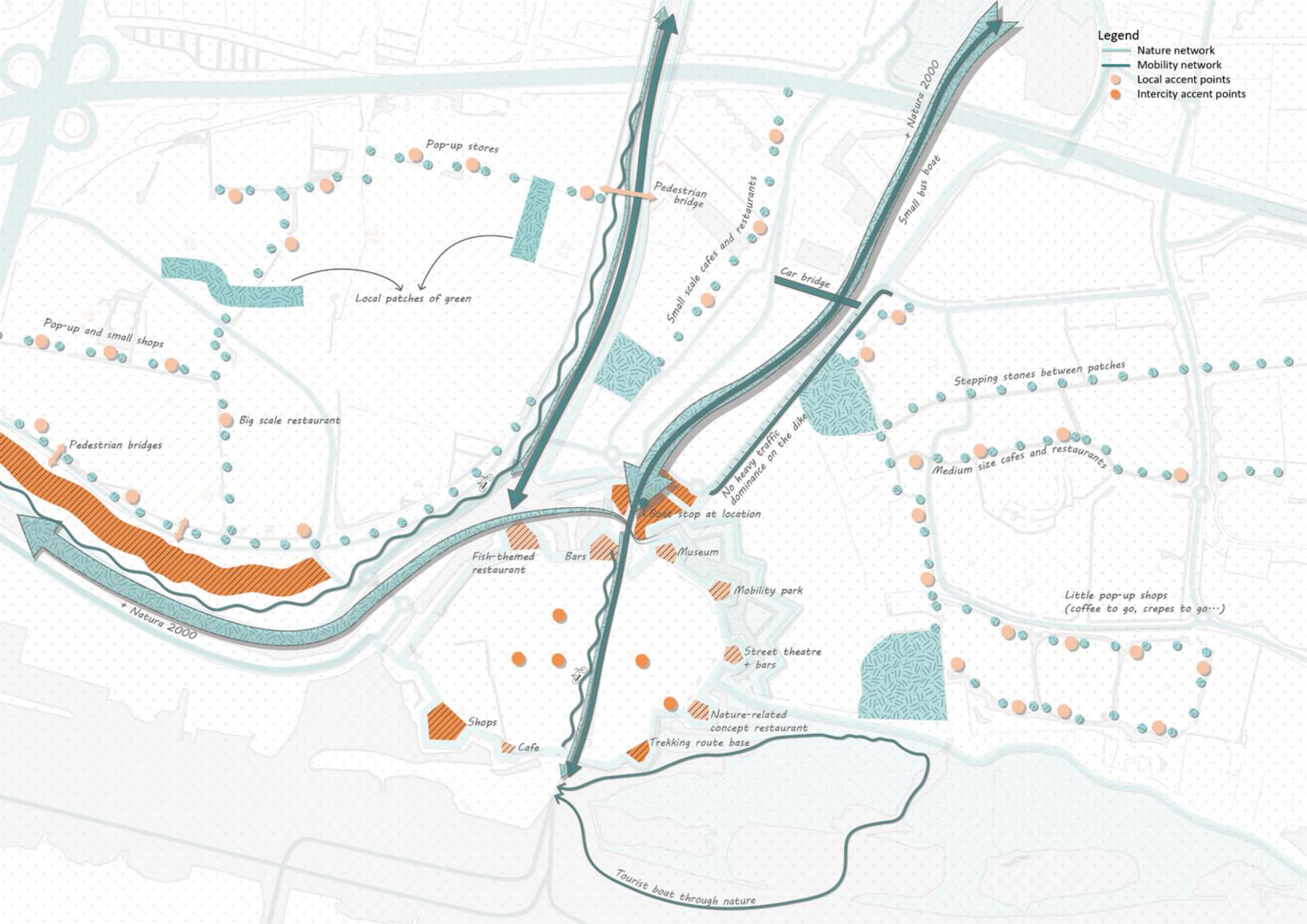
4.0 URBAN STRATEGY

The urban strategy was based in the memories of the people interviewed. The strategy is based on the networks of history and nature with a focus on community spaces, such as the factory was.



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Scale 1:10000



5.0 MASSING

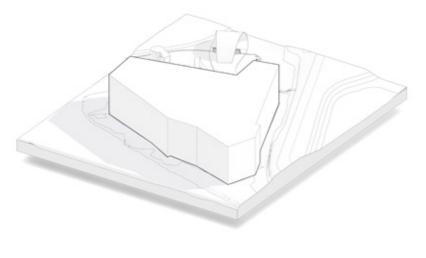
The strategy taken for the plot took the elements from the urban strategy to the smaller scale, the concepts based on routing and sightliness that referred to the old industry and history were the focused, as well as the creation of centre points to meet.

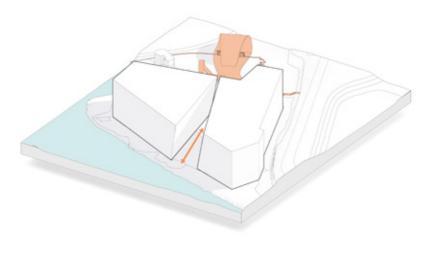
The massing was shaped by creating connections and desired expressions. The old structure was chosen to be removed due to its loss of architectural quality and structural properties, as well as by the fact that keeping it is a superficial way to keep the historical continuity.

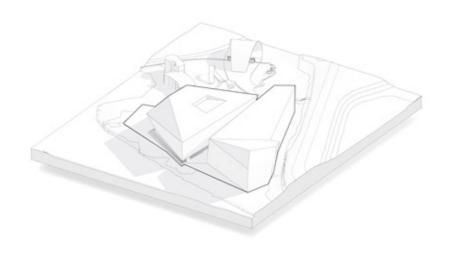
The massing was shaped by several versions of model making, and the criteria for evaluation was the desired massive and sculptural expression, that would blend to the surroundings and allow both a human scale and a machine scale, such as De Vries Robbè.

The public spaces are mainly 3: a square towards the water, a square that puts together the Rotonda gebouw, the pavilion and the informal lecture space in the ground floor of the performance centre, and a roof terrace connected to an elegant restaurant that overlooks the city.

The routing around the mass is based on three paths: the entrance from the city, the entrance from the water and the passage through both building masses.







FULL EXTRUSION

CONNECTION

FINAL SHAPING



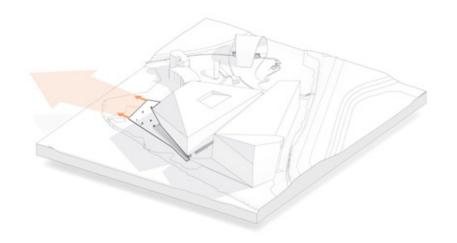




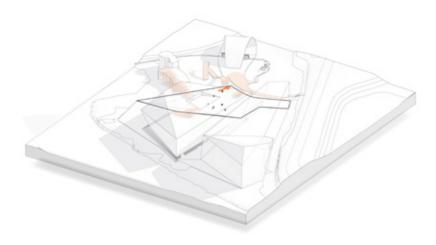




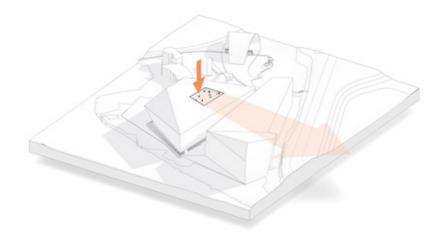




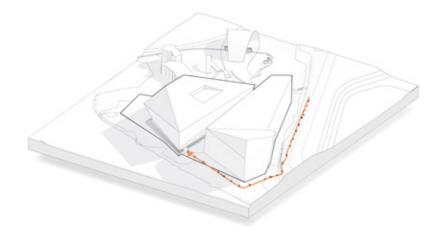
SQUARE OVERLOOKING WATER



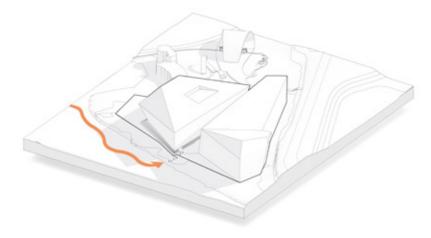
CENTRE POINT BETWEEN SURROUNDING BUILDINGS



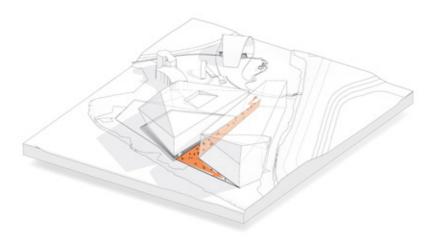
LOOKOUT TERRACE







ENTRANCE FROM WATER



CONNECTION PASSAGE





6.0 PROGRAMME

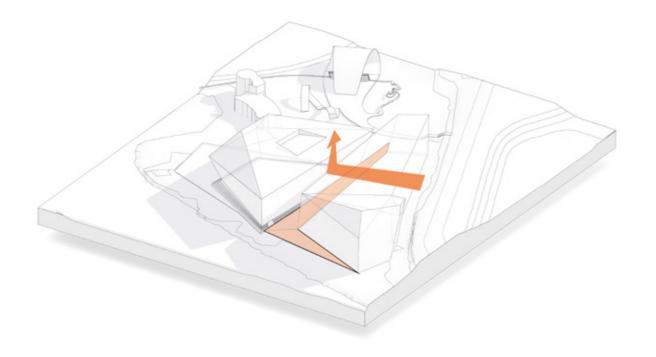
The two masses are separated into the performance centre (towards the water) and the school (towards the city).

The programme for the design is based on the idea of creating contrasts between the really large scales and the smaller scales. Moreover, the programme strives to function not only as a routing experience but as a efficient machine.

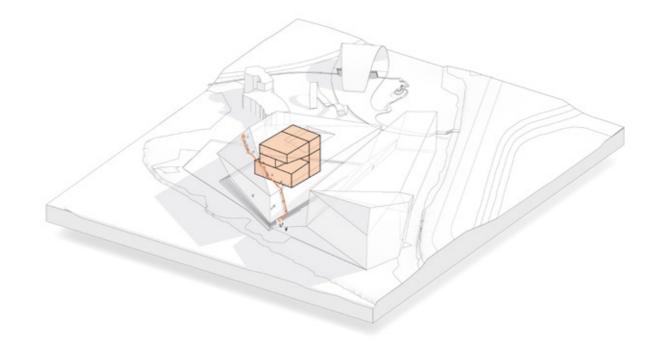
For this, the ramp connects the two building masses underneath, perceivable to the visitor of the site, but allowing to create a single expedition point for both the school and the theatres. Moreover, it allows the connection for the performers to move from the school to the backstage, and for the artist's residencies, located in the school mass, to have a more private entrance.

The performance halls are stacked one above each other while the stairs have a more linear routing. This allowed for a more efficient backstage but a more sensory visitor experience.

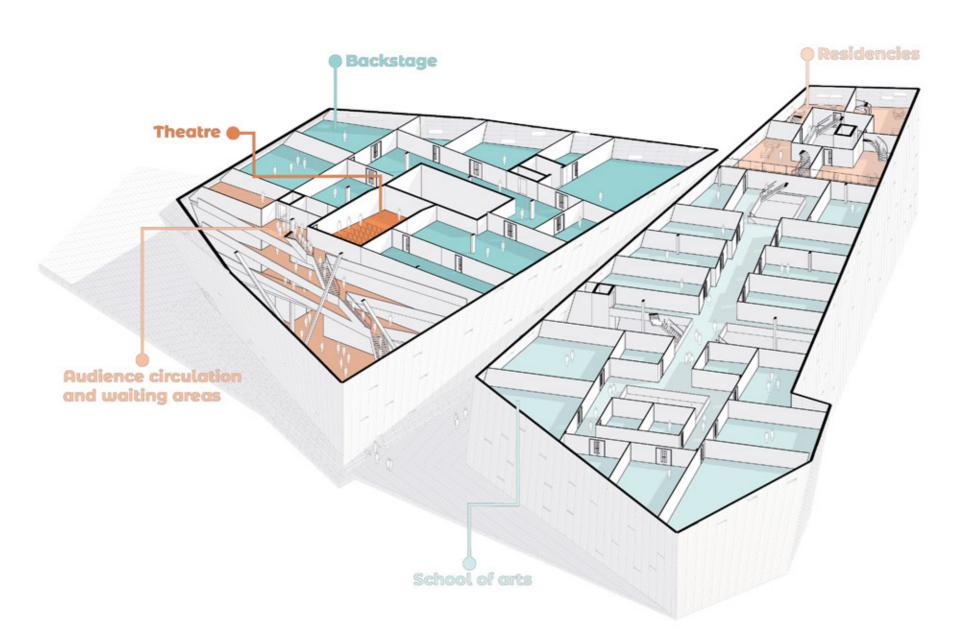
The division of the internal spaces can be seen in the axonometries presented in the following page.

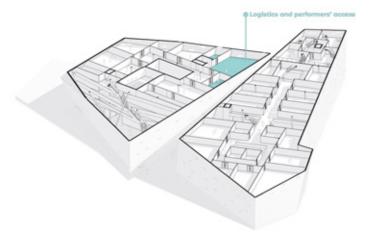


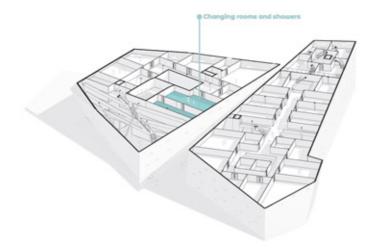
LOGISTICS CONNECTION BELOW RAMP

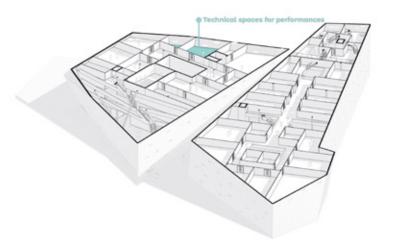


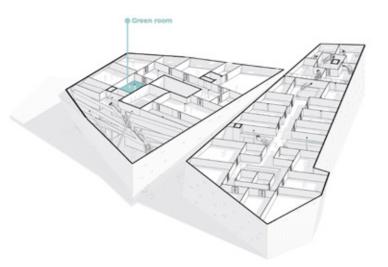
STACKING OF PERFORMANCE HALLS

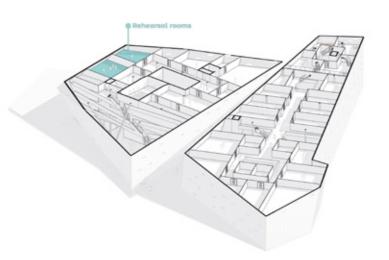


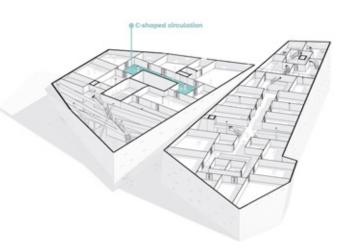


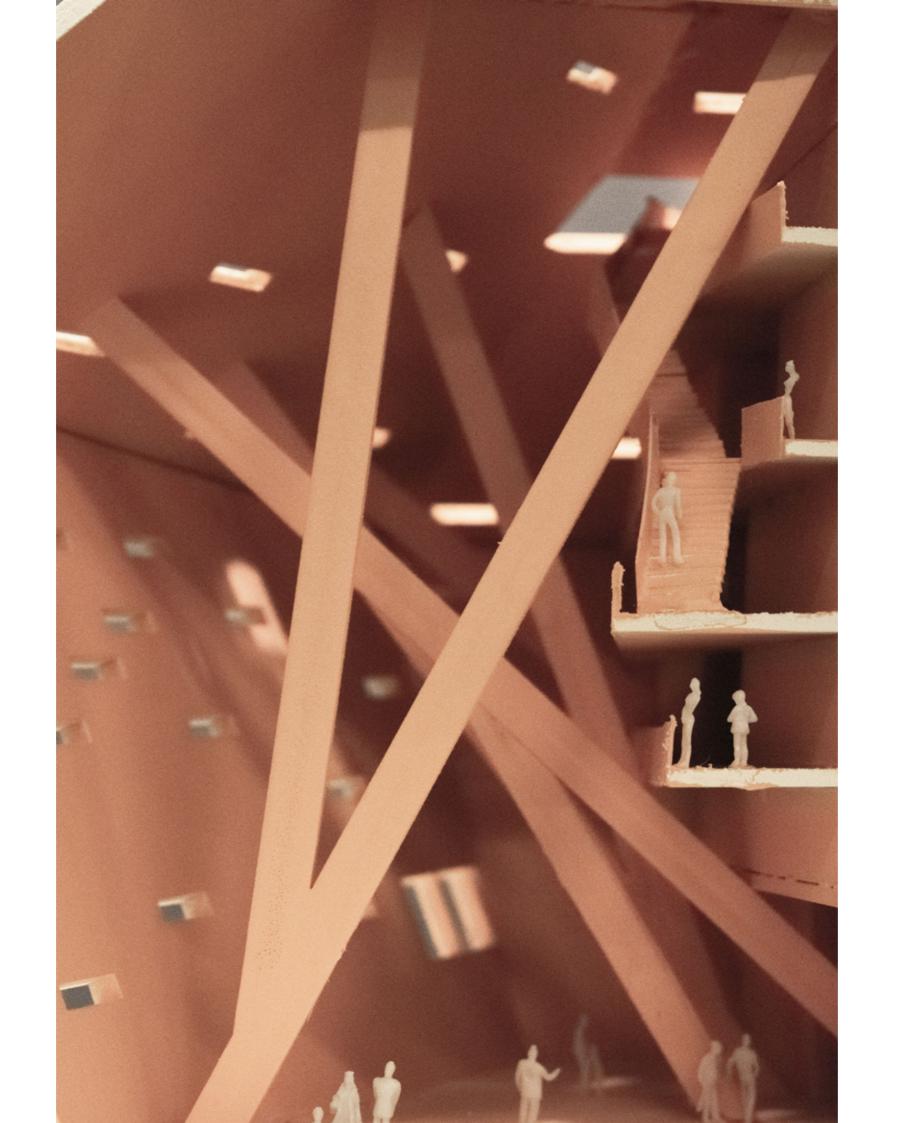


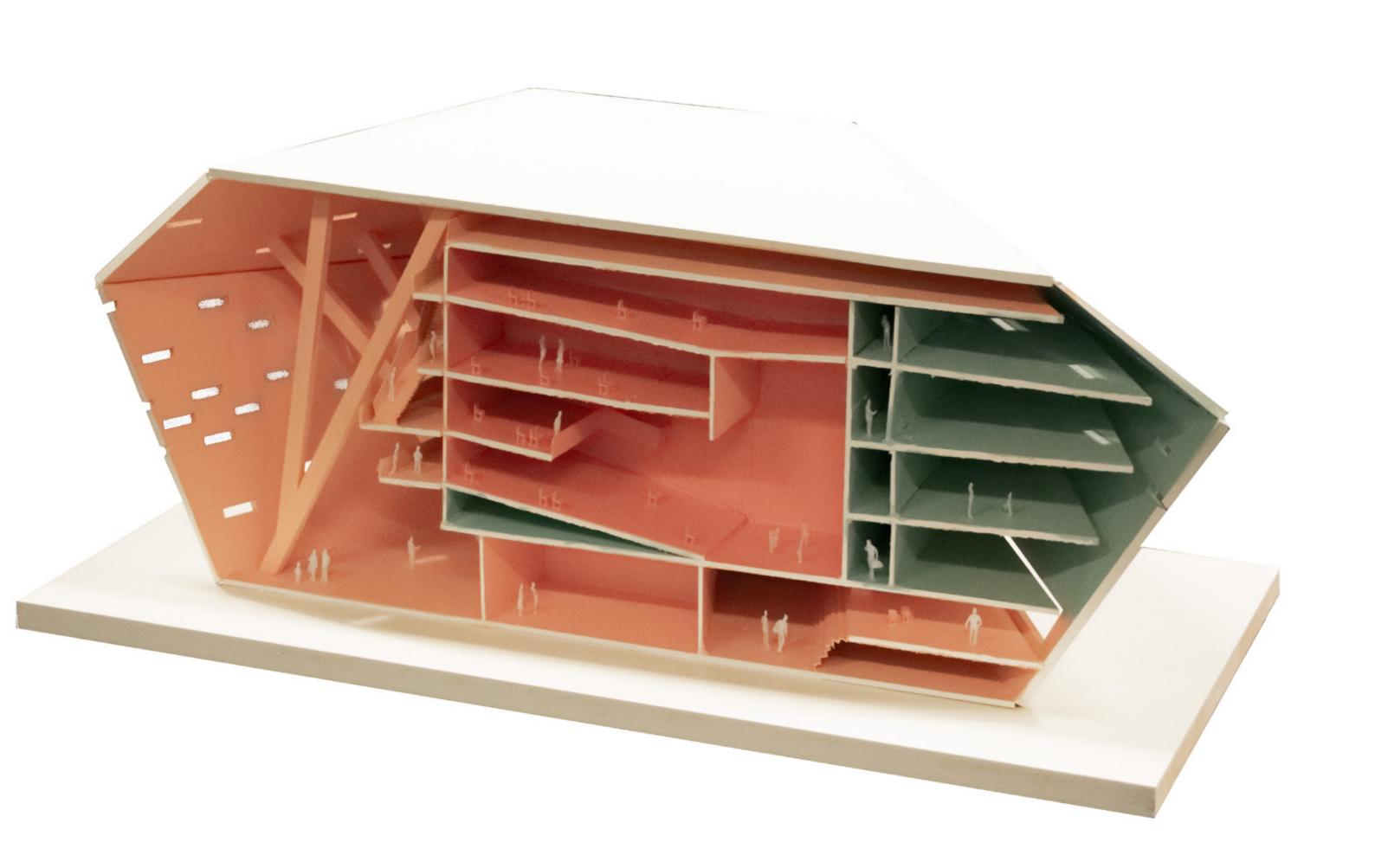






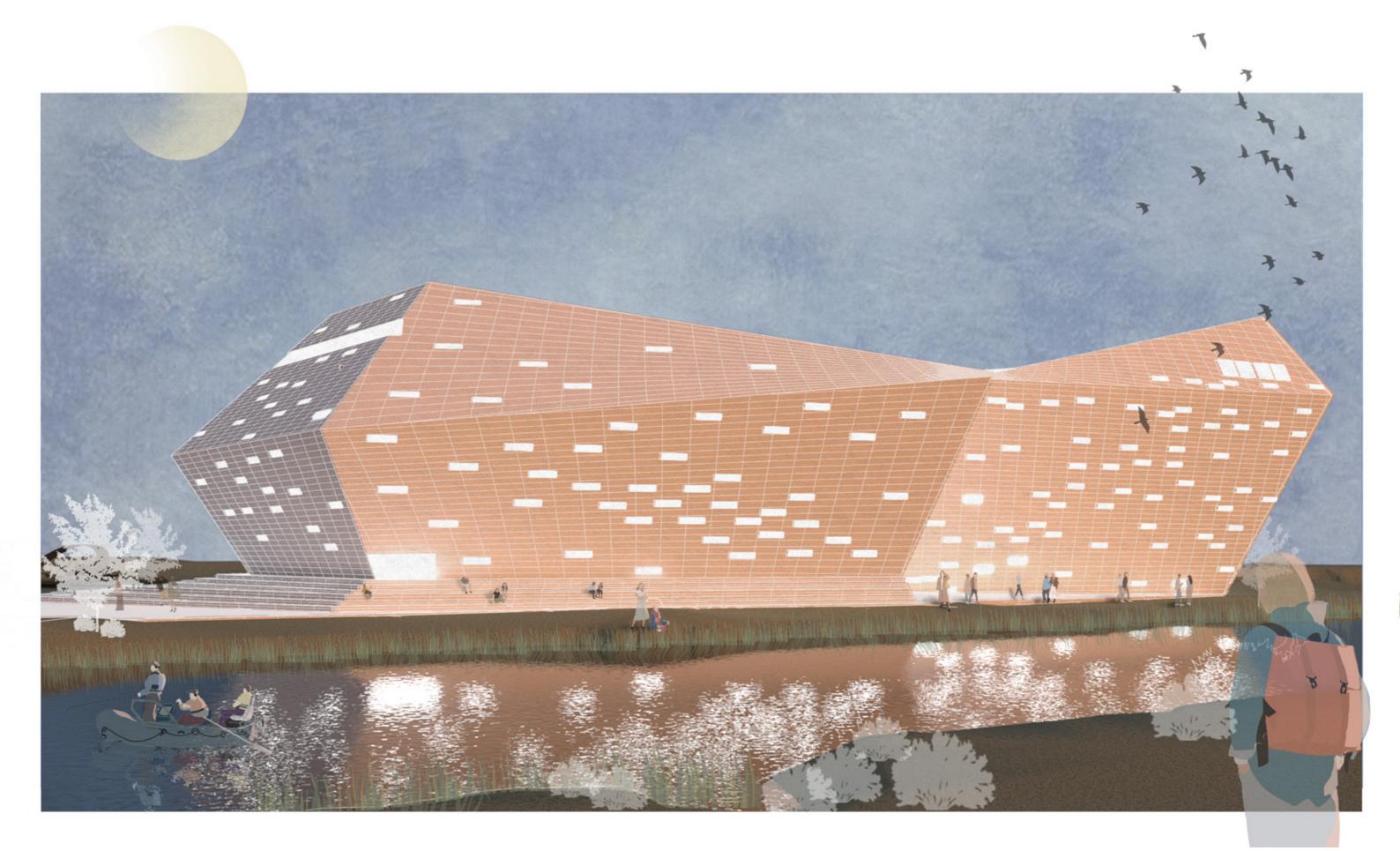


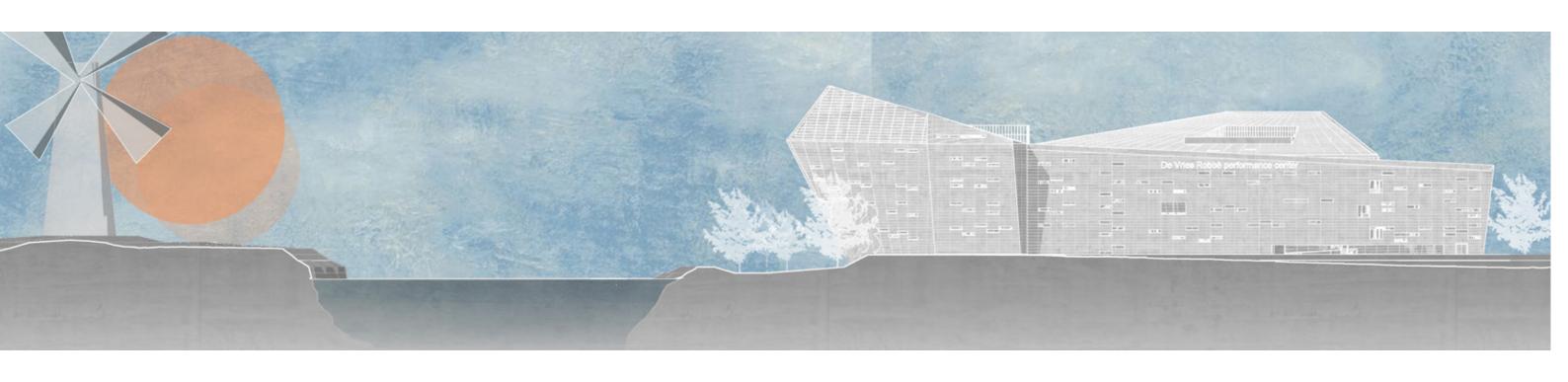


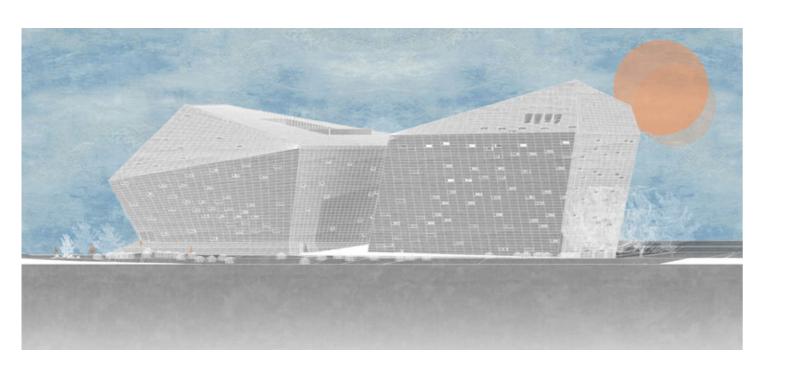


7.0 FINAL PRODUCT

The final product is presented in the current section. Elevations, floor plans, sections, and perspectives are first presented on the overall design product. Then, details are presented on the foyer, which is the area that I chose to focus in. This is due to the importance of it as a first impression of the building but also because of the spatial qualities of it.



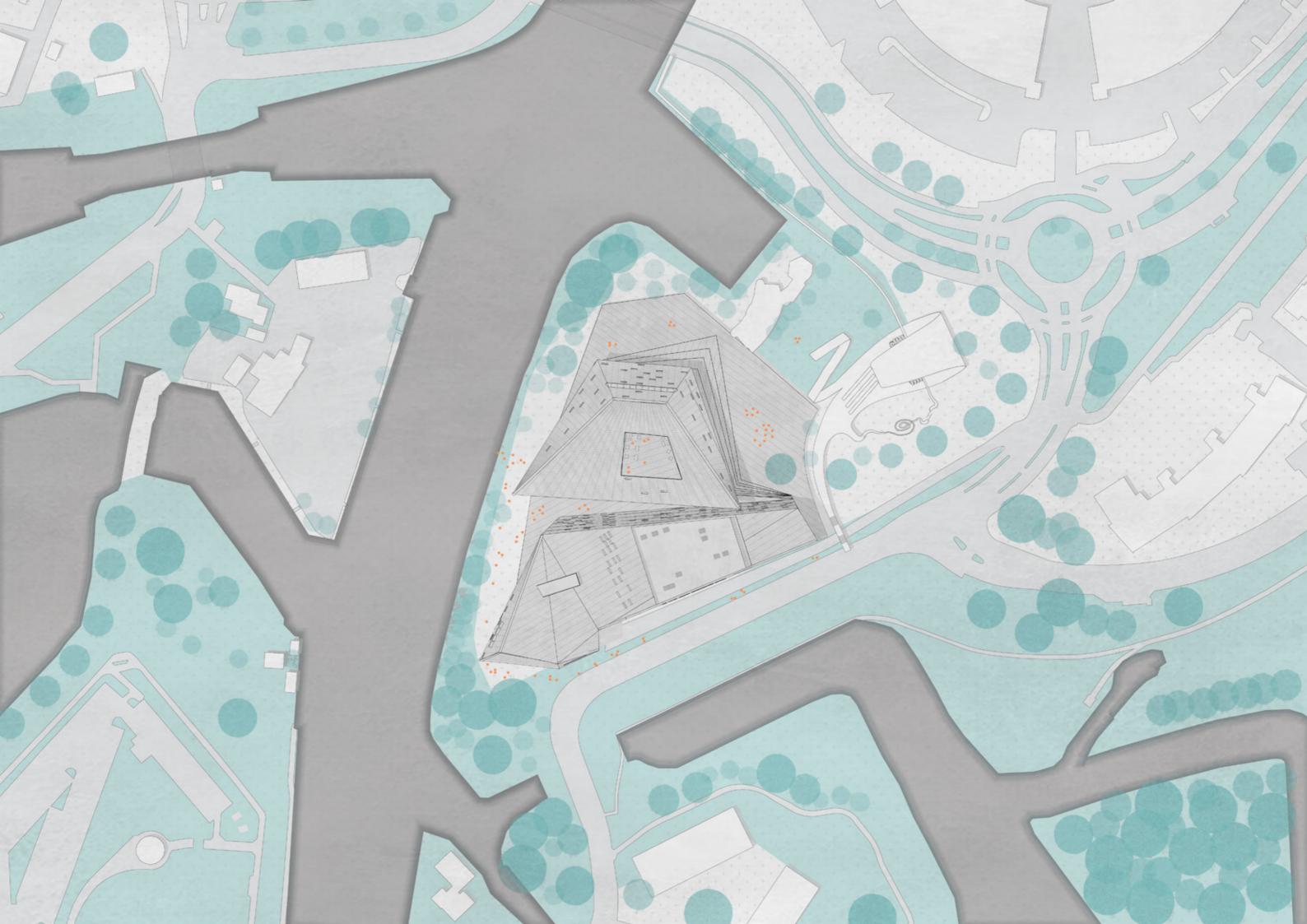




"The spaces are very regular, almost as if one had drawn a grid in the plan and arranged the tables with a measuring tape, with equal spaces between them"

Scale 1:1000

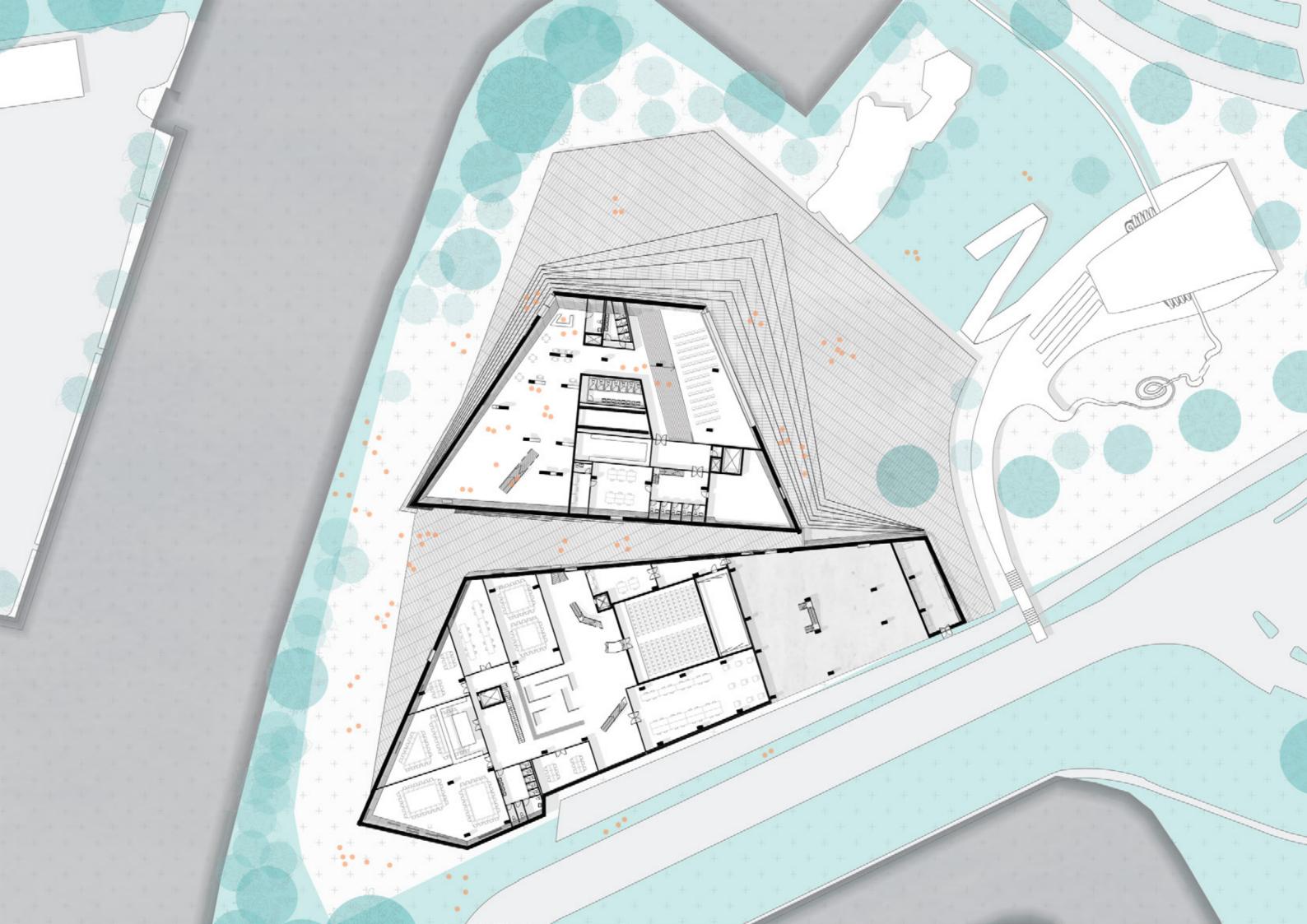


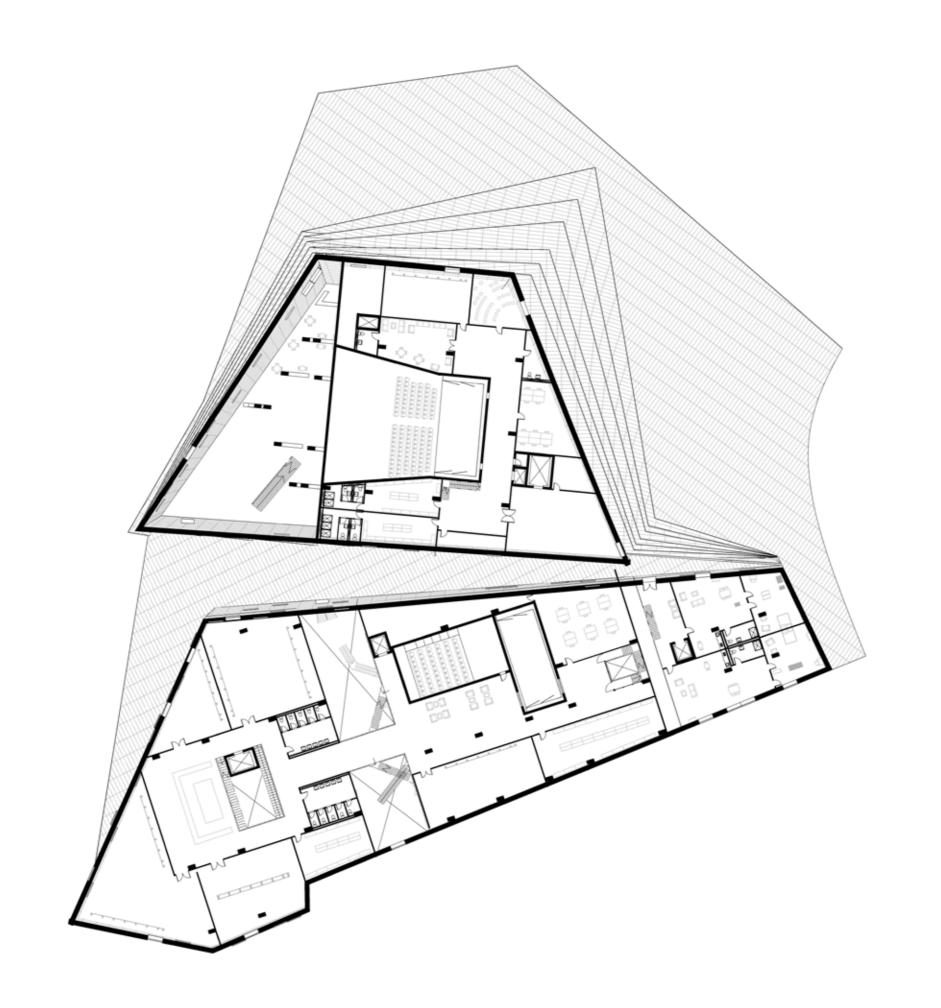


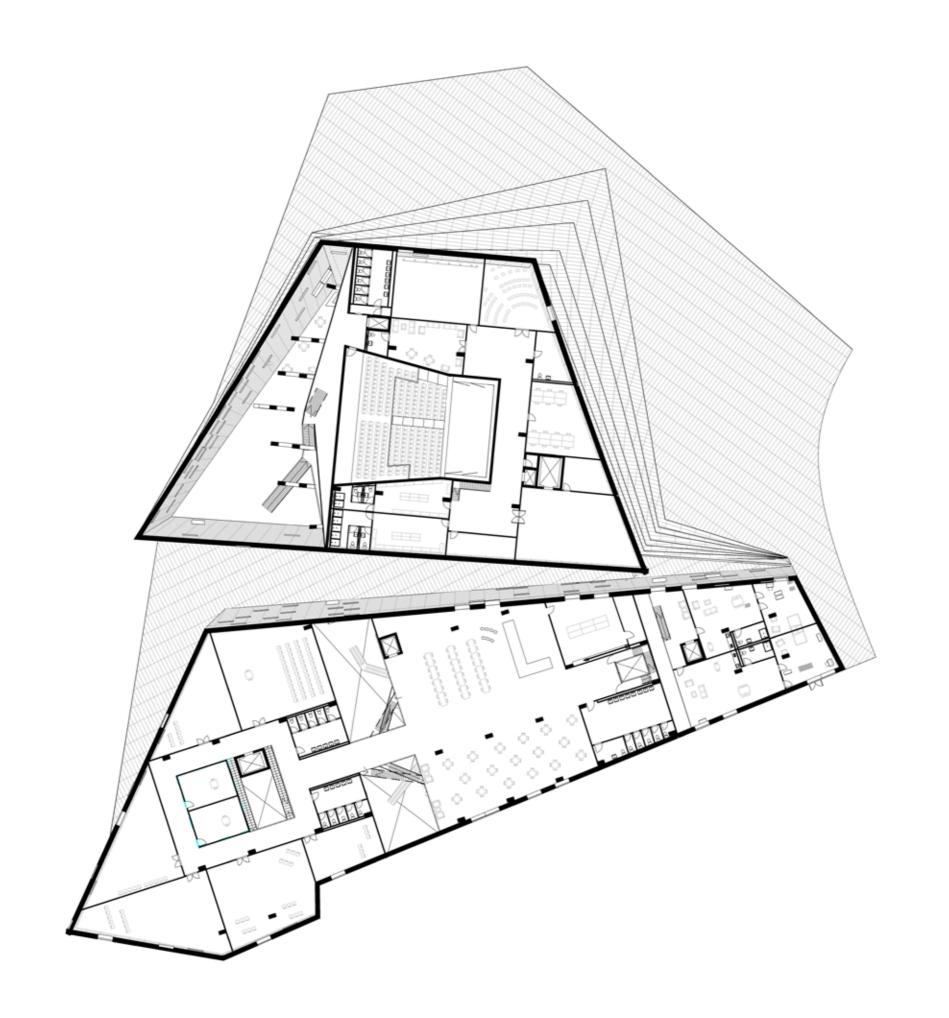
Ground floor

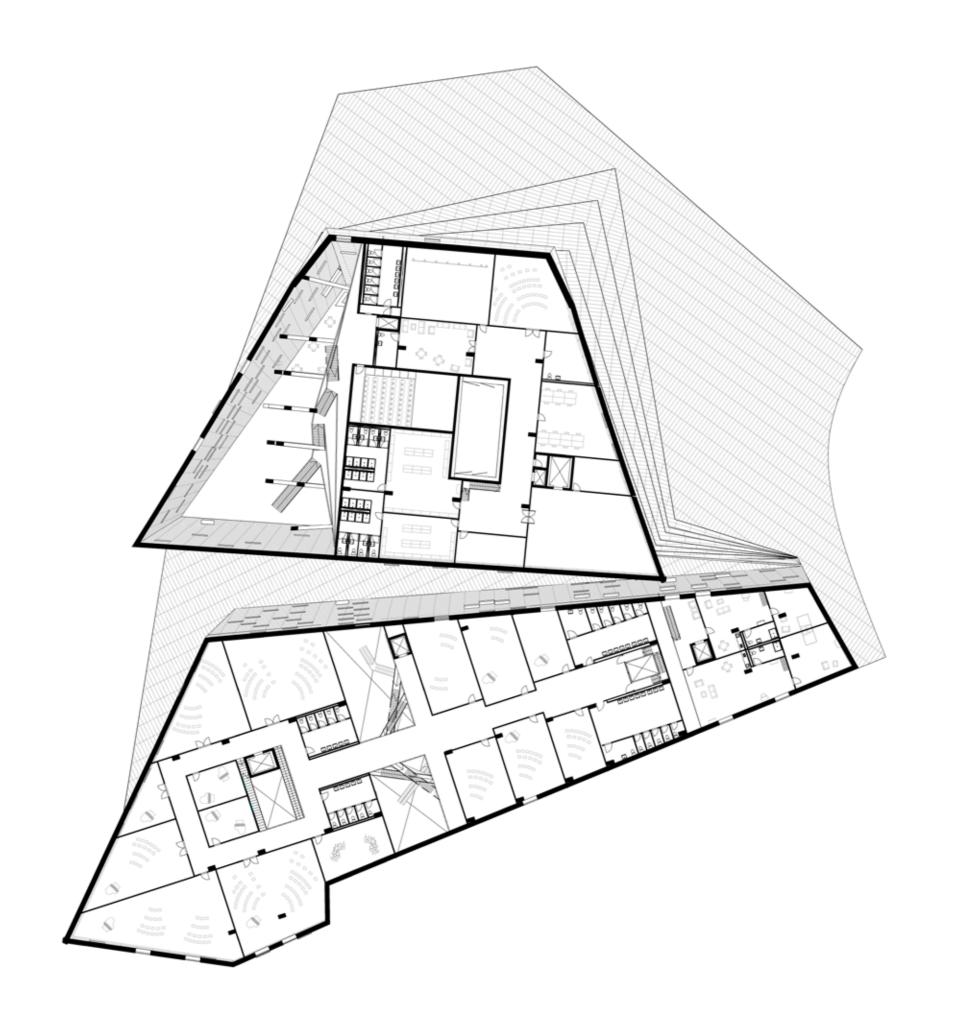
Scale 1:700

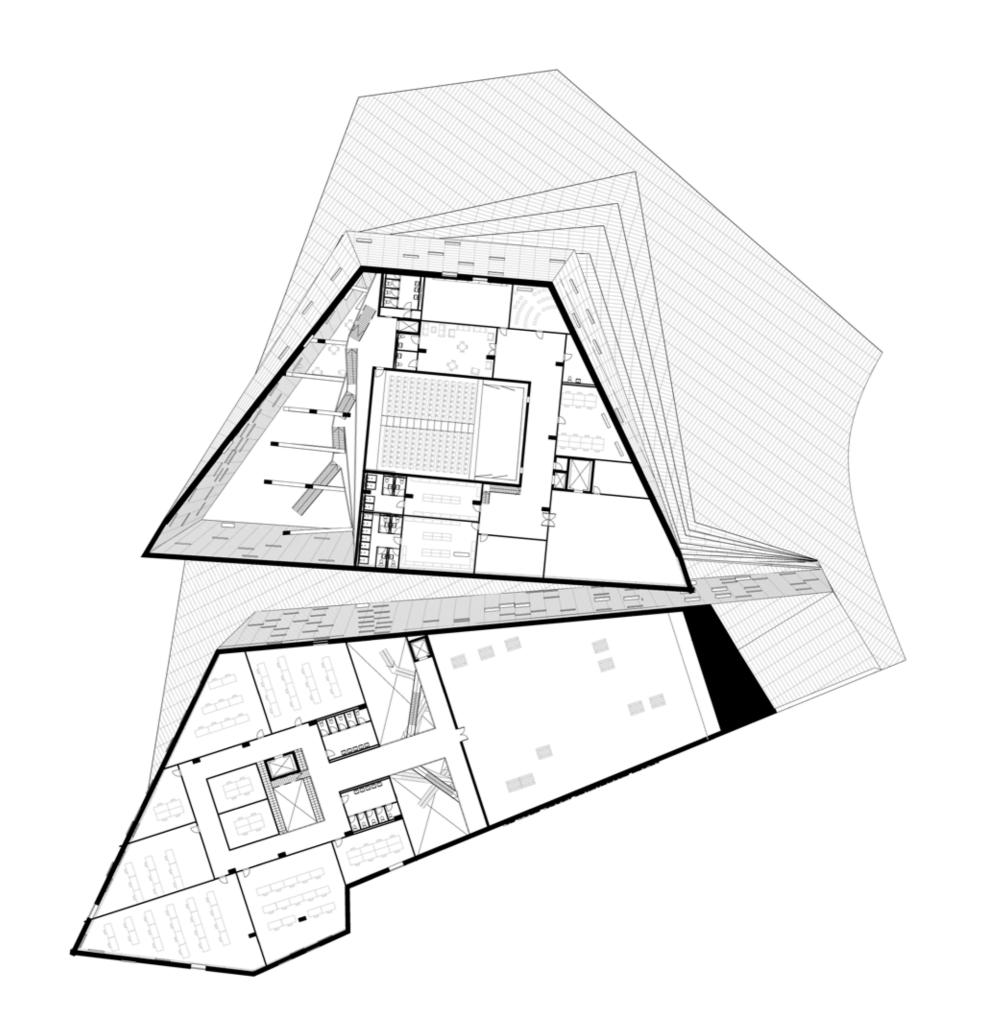


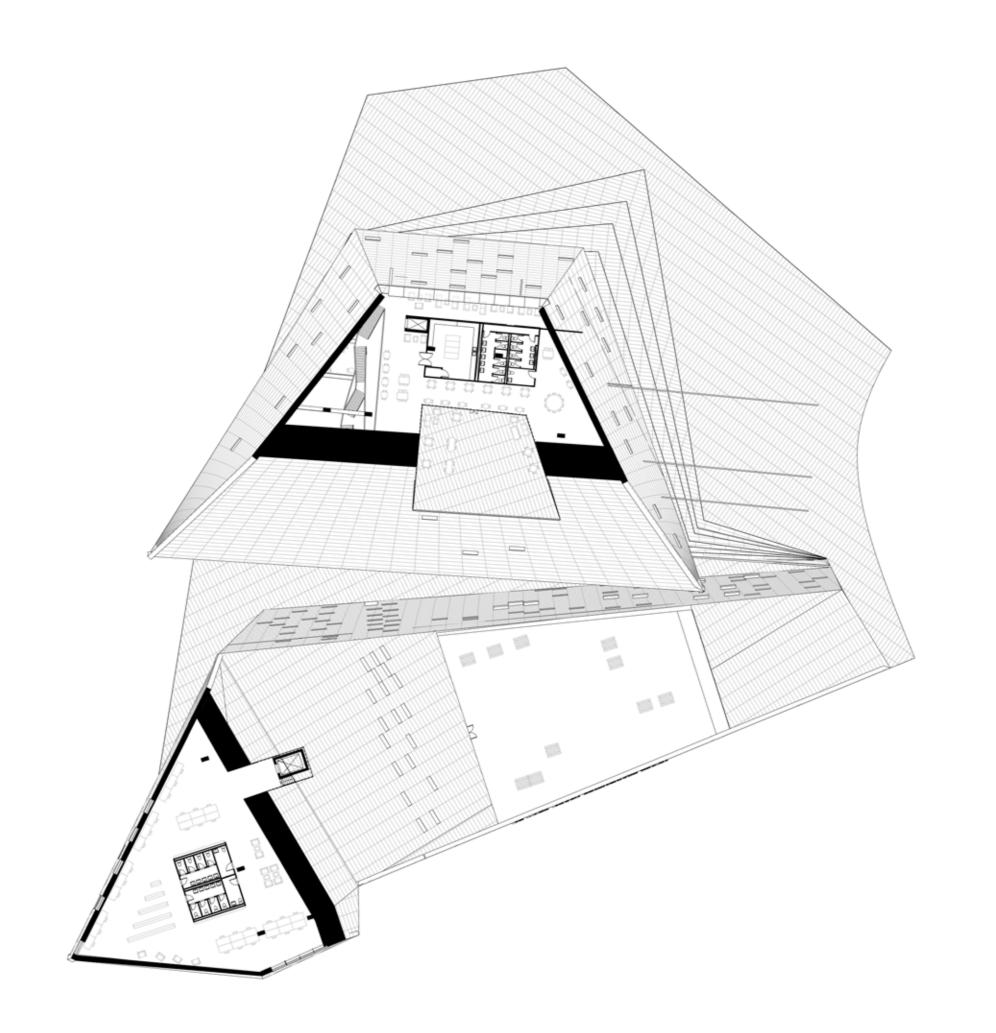










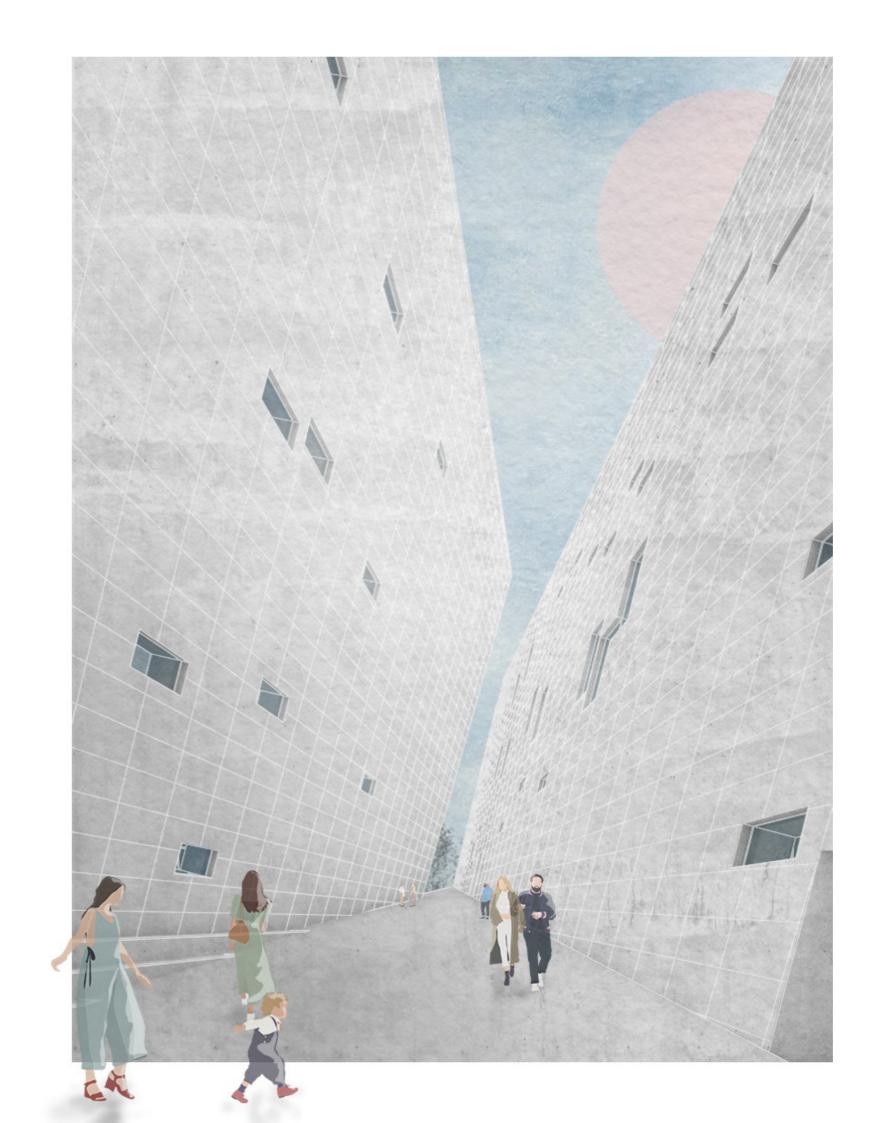


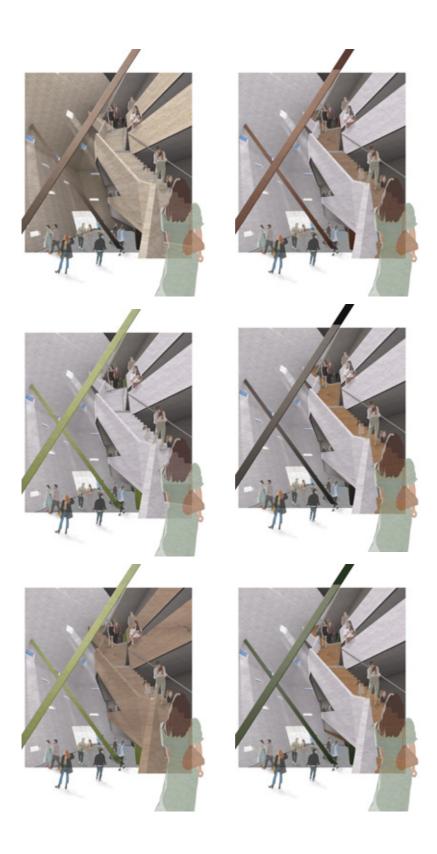






"I met my husband in De Vries Robbè Staalfabriek, it was in a huge space where our eyes crossed paths" "Entering a huge scale and being lost, losing the sense of sight, the space smells of cold humidity. I hear everyone else walking, all the minimum sounds resonate in a cathedrally sacred way, so everyone is quiet. Slowly all sorts of diagonals and rings of the roof structure are revealed."





The foyer is were all of the elements come together.

The columns spanning diagonally, with their huge scale, remind of the machine scale and the industrial. The dark green contrasts with the light that comes from the angled walls remind of the experience that is seen in an industrial building.

The total height represents the machine scale, and the regularity of the tiles and windows, which is also visible on the outside references the arrangements seen in the drawing rooms of De Vries Robbè.

A small part in the foyer leads to the informal lectures space that is connected to the square, this space has a height of less than a single storey and is materialized in wood. The materials and the connection to the square are a memory of the community of De Vries Robbè Staalfabriek.

The wood cladding starts with small details in the foyer, which create a connection between the contradiction that De Vries Robbè was: a community and a machine scale industry.

On the left, several material experiments can be found. With these, the different feelings that the contrasts, textures and reflections would create were tested until they matched the feelings described by the memories.



The combination drawing shows a full section of the facade from the foundation to the roof. The space is above the informal lecture hall located in the ground floor.

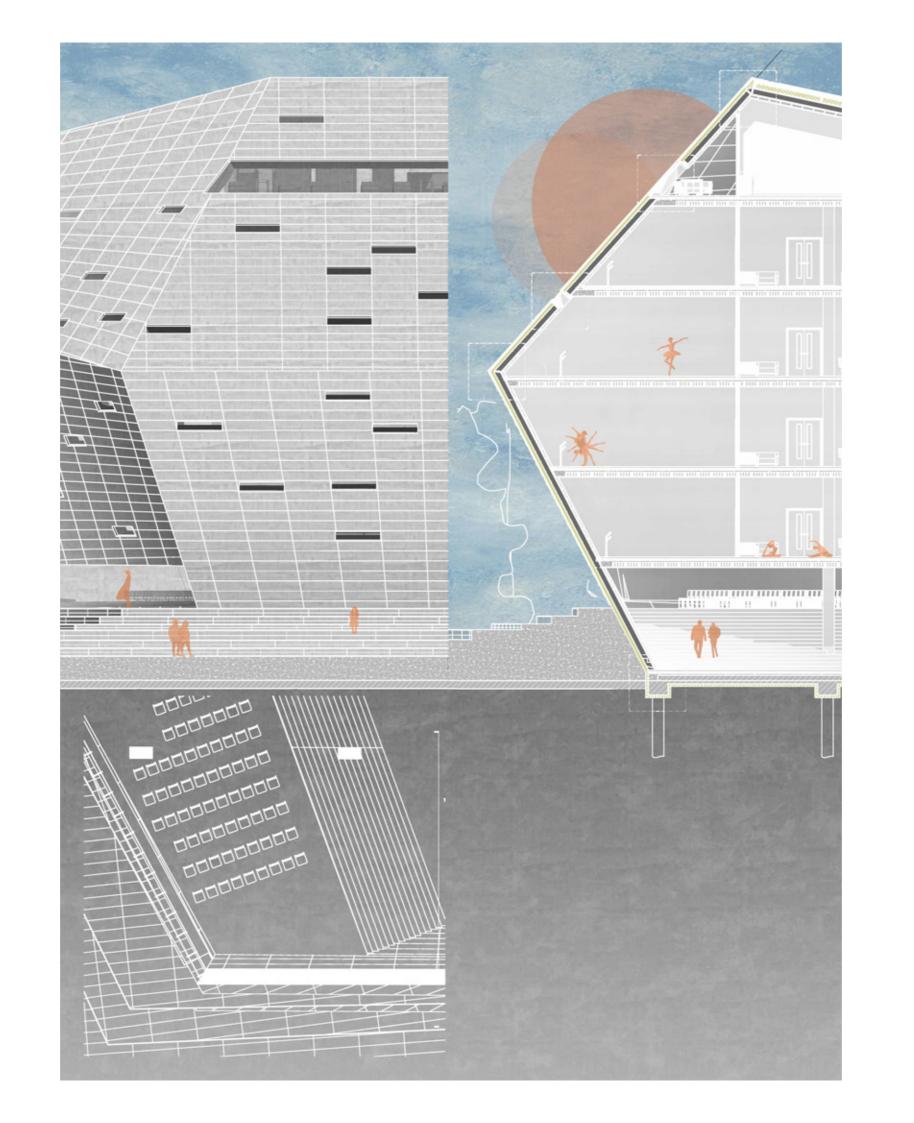
The details following show how the structural and technical demands were solved for the design.

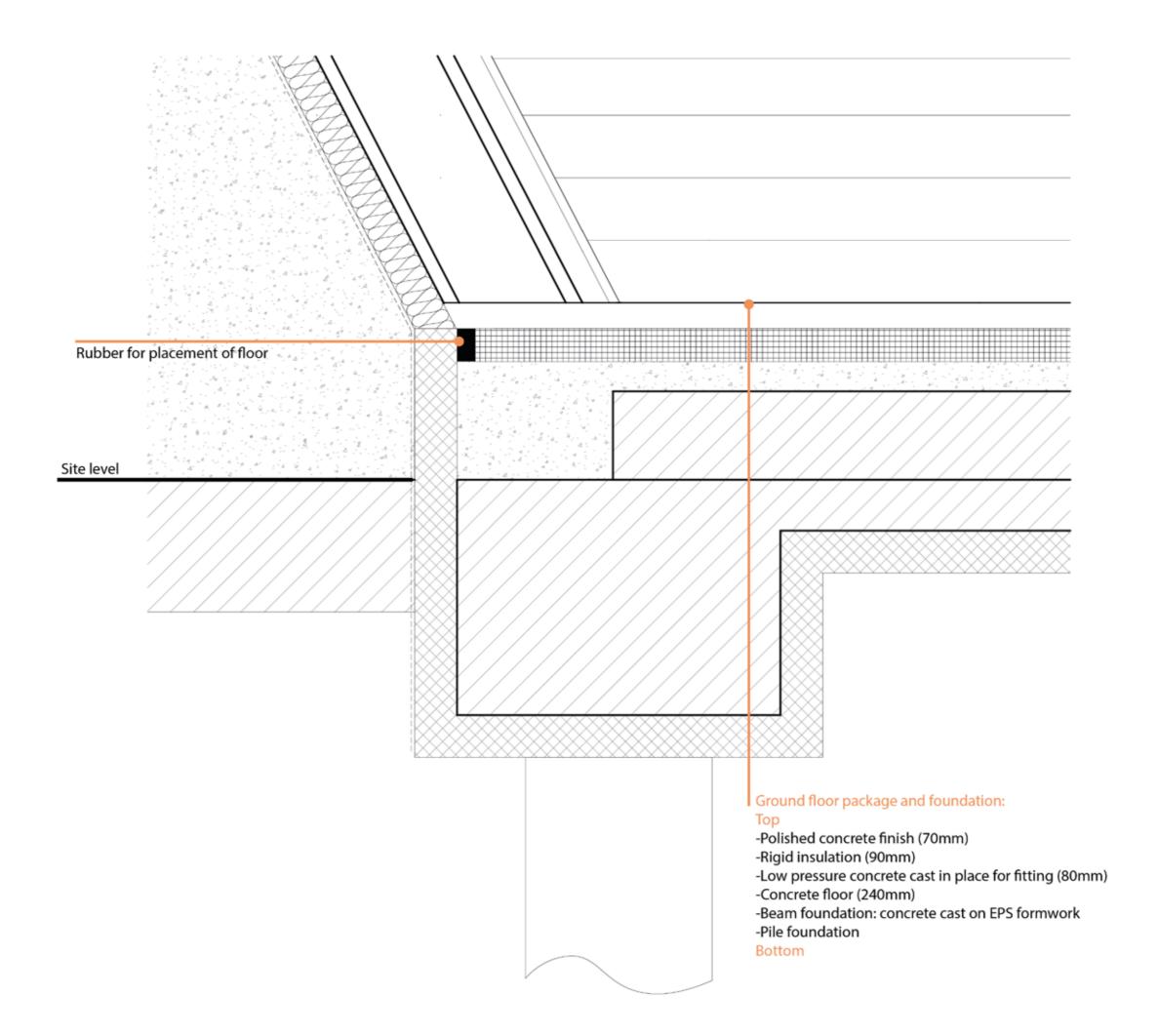
An internal gutter and drainage system in the facade allows for the angles in the walls and the depth of the window without collecting water.

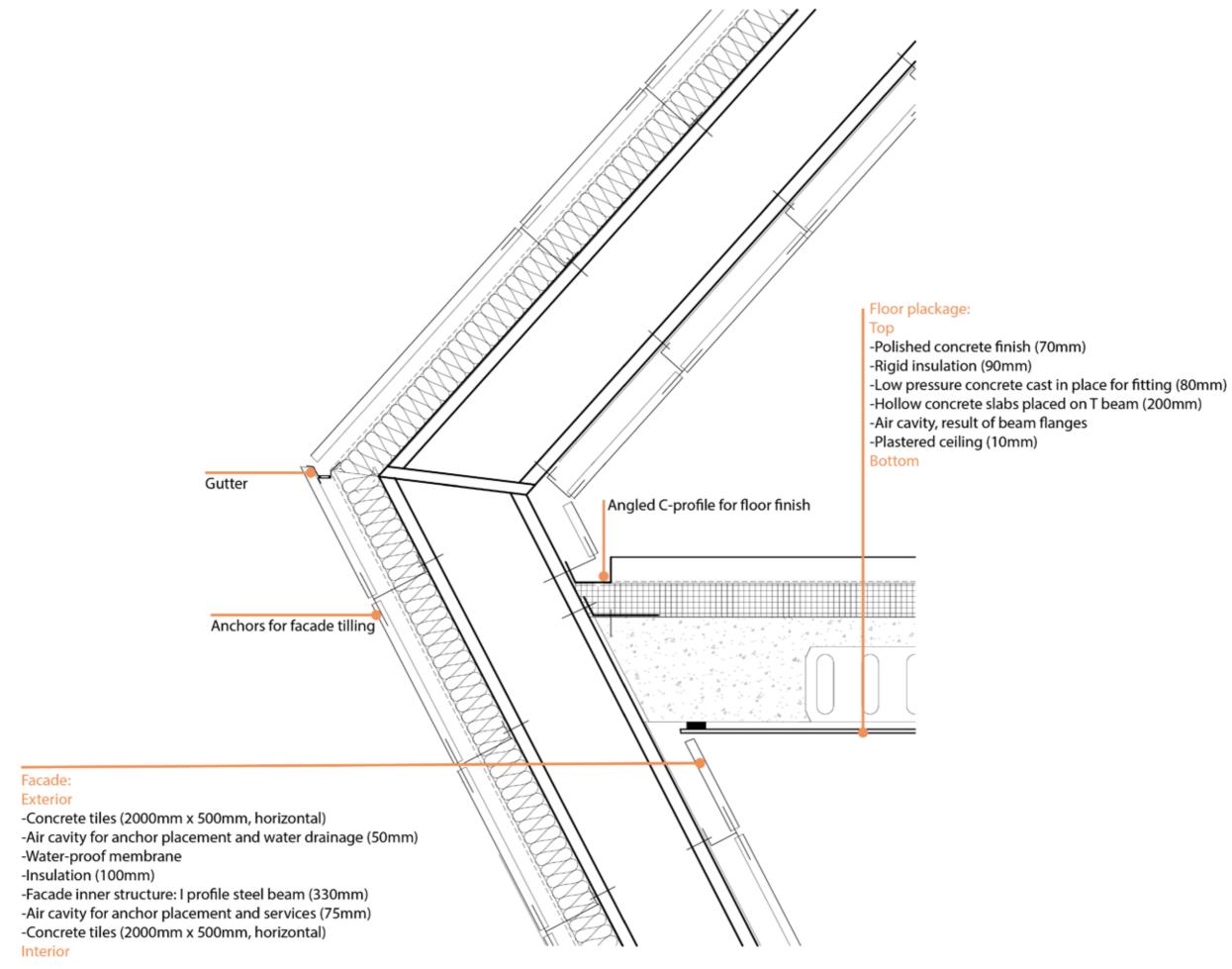
The beam connections allow for the sharp angles in the expression of the facade, which then generates sharp, ornamental shades in the faces of the mass.

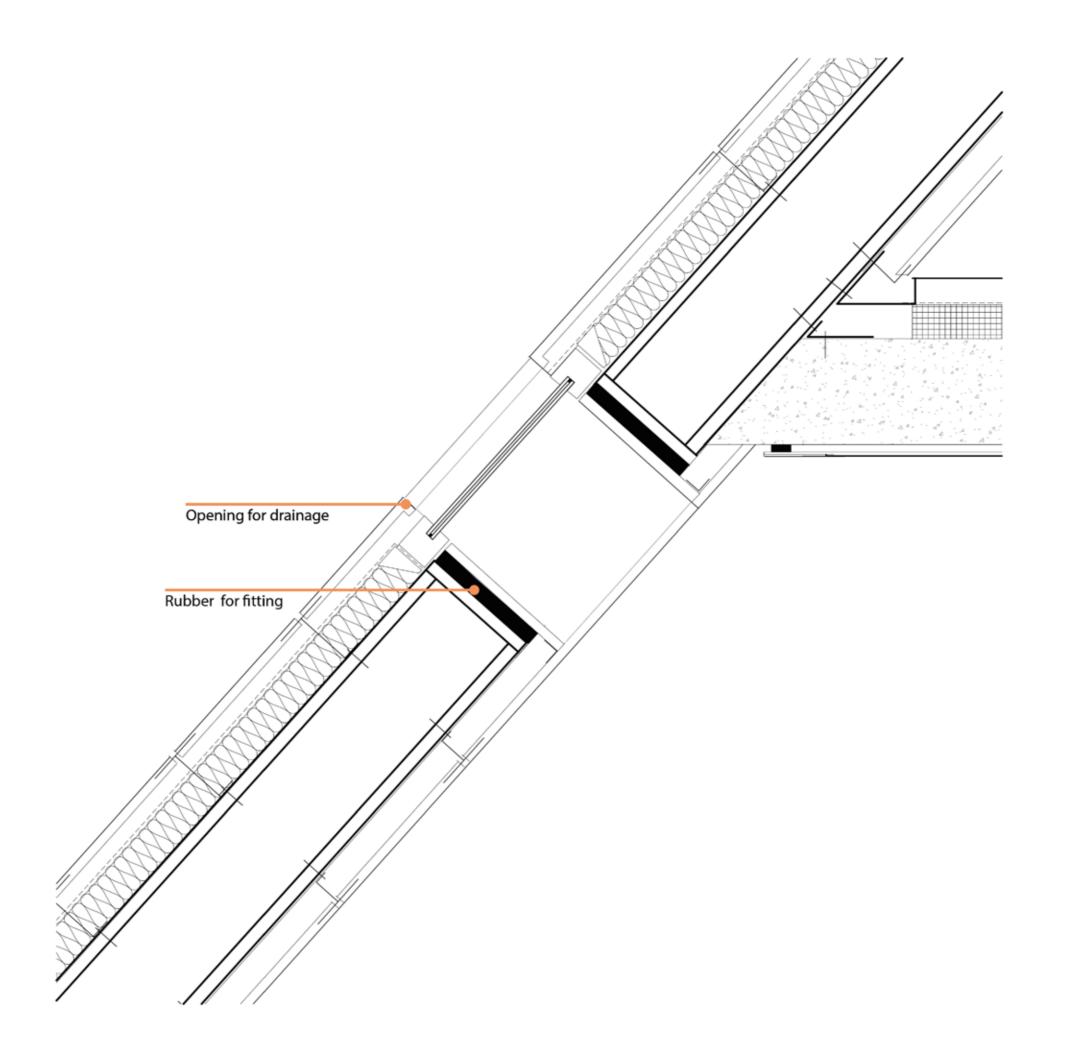
The floor finish detailing allows for the windows located in line with the floor.

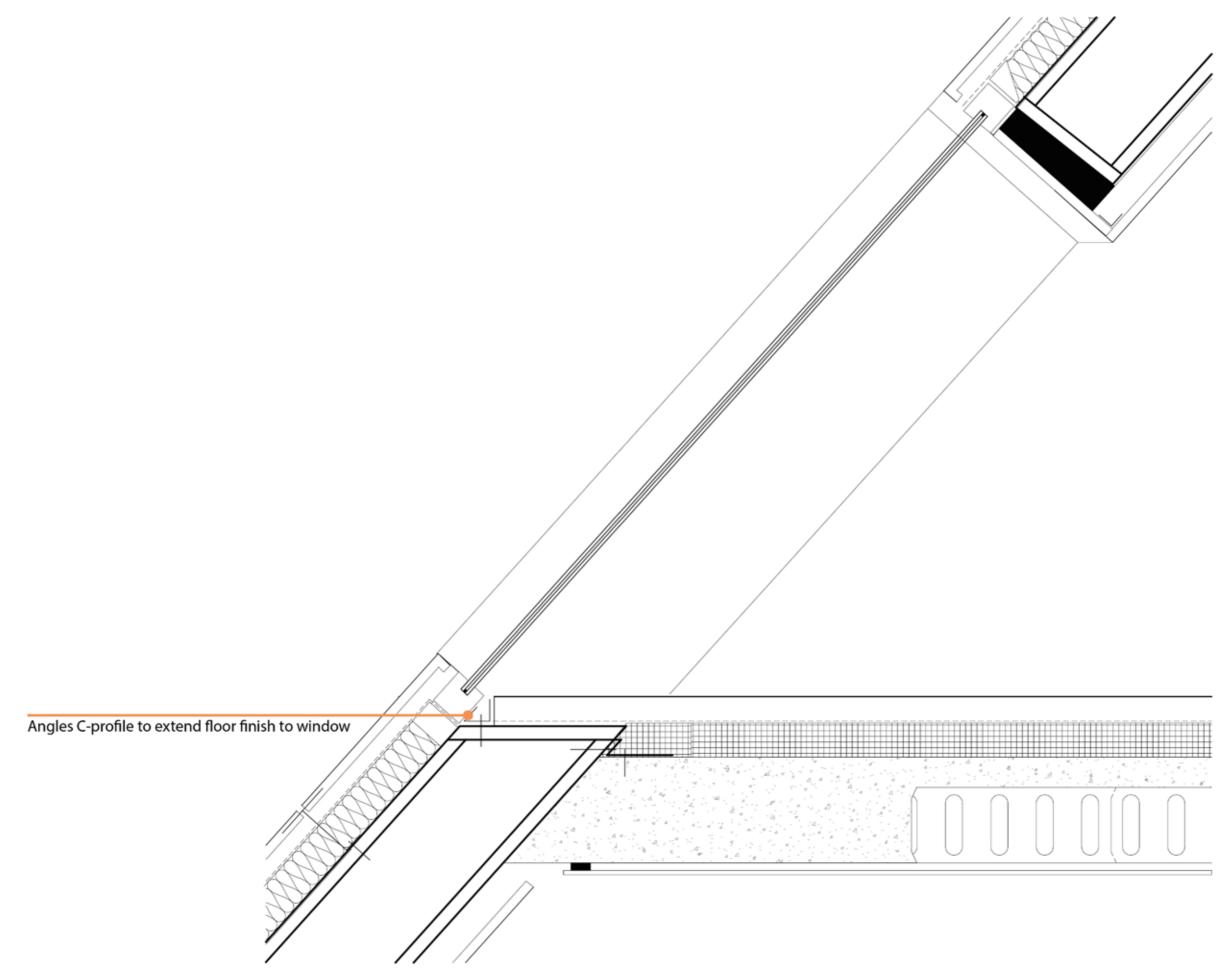
The details can be found from the lowest to the highest.





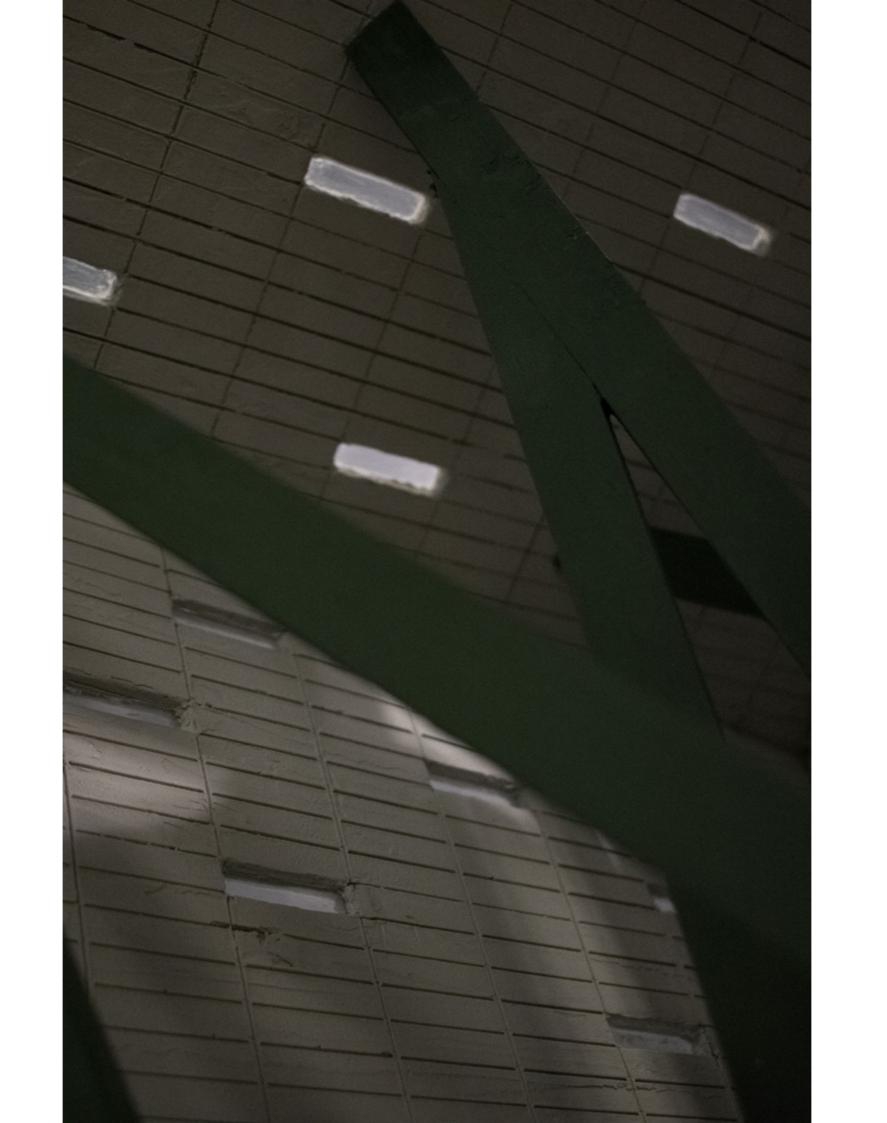






-Concrete tiles (2000mm x 500mm, horizontal) -Air cavity for anchor placement and water drainage (50mm) -Water-proof membrane -Insulation (100mm) -Truss system (spans perpendivular to view) (250mm) -I profile steel beam (330mm) -Air cavity for anchor placement and services (75mm) -Concrete tiles (2000mm x 500mm, horizontal) Bottom Separation walls: Left -Plaster finish -Gypsum board 0° (12mm) -Gypsum board 90° (12mm) -Structure of wall: C-profiled metal stud filled with insulation (80mm) -Gypsum board 90° (12mm) -Gypsum board 0° (12mm) -Plaster finish Right

Roof package:



8.0 CONCLUSION

The research and the design have shown that it can be possible to remind visitors of specific feelings that relate to the history of the context.

The design presents an architecturally qualitative solution, strongly based on the principles of research, model experimentations and context.

How can the tools for sensory architecture be used to remind visitors of the history of its context? And how can these be combined with a building that is true to its Zeitgeist?

The tools for sensory architecture can be manipulated to trigger certain senses in the visitors of a building. When an emotion that was mentioned in a narrative wants to be replicated in the building, materials, connections and sequences can be designed in such a way to produce that emotion. The main test for this is model making. A building that is true to its Zeitgeist can be designed so not to be a glass box overflown with light and instead seek to represent the globalizing trend with a building that allows for sensory-rich spatial experiences. By mass modelling, making pictures, sketching over pictures and modelling again these compromises can be achieved. Looking at reference projects and analysing them it is also evident that not all global architecture is senseless as Jun'ichiro Tanizaki (1977) described.

"The light comes from above, from the angled skylight, so half of the room is dark, and half is light. You can understand the structure in the lightfull side, but the dark side gives you less information, it feels more intimate."

6.0 BIBLIOGRAPHY

Abu-Orf, H., Wafi, S., & Abuorf, H. (2020). A Continuity of the Past in Contemporary Architecture: Investigating a "Cultural Continuity" A Continuity of the Past in Contemporary Architecture: Investigating a "Cultural Continuity." International Research Journal of Advanced Engineering and Science, 5(1), 288–294.

Bloomer, K. C., & Moore, C. W. (1979). Body, memory, and architecture. Yale Univ. Pr.

Böhme, G. (2013). Atmoshere as Mindful Physical Presence in Space. Www.oasejournal.nl. https://www.oasejournal.nl/en/lssues/91/AtmosphereAsMindfulPhysicalPresenceInSpace#021

Buelow, M. (n.d.). AN ARCHITECTURE OF HUMILITY: The Need for Haptic Spaces in an Age of Simulation. Retrieved April 16, 2022, from https://www.acsa-arch.org/proceedings/Annual%20Meeting%20Proceedings/ACSA.AM.99/ACSA. AM.99.70.pdf

Cutieru, A. (2021, August 9). Re-evaluating Critical Regionalism: An Architecture of the Place. ArchDaily. https://www.archdaily.com/966401/re-evaluating-critical-regionalism-an-architecture-of-the-place

Durmus Ozturk, S. (2012). Change and Transformation in Architecture: On the Concept of Zeitgeist.

Frampton, K. (1983). Towards a critical regionalism. Modern in Denver. https://www.modernindenver.com/wp-content/uploads/2015/08/Frampton.pdf

Griffiths, A. (2018, July 14). Studio Libeskind's Museum of Zhang ZhiDong references Wuhan's industrial past. Dezeen. https://www.dezeen.com/2018/07/14/studio-libeskinds-museum-zhang-zhidong-wuhans-architecture/

Italo Calvino, & Weaver, W. (1972). Invisible cities (pp. 90–91). Harcourt, [Post.

Jun'ichiro Tanizaki. (1977). In praise of shadows. Leete's Island.

Matthewson, G. (2009). People who Live in Glass Houses: Walter Benjamin and the Dream of Glass Architecture. O'Neill, M. E. (2001). Corporeal Experience: A Haptic Way of Knowing. Journal of Architectural Education, 55(1), 3–12. https://doi.org/10.1162/104648801753168765

Pallasmaa, J. (1996). The eyes of the skin. Chichester Wiley.

Prytherch, D., & Mclundie, M. (2002). So, what is haptics anyway? Weber, Katz and Beyond: An Introduction to Psychological Studies of Touch and the Implications for an Understanding of Artists' Making and Thinking Processes A Guide to Haptics Applications in the Digital Realm.

Treadaway, C. (2009). Materiality, Memory and Imagination: Using Empathy to Research Creativity. Leonardo, 42(3), 231–237. https://doi.org/10.1162/leon.2009.42.3.231

Zumthor, P. (1999). Thinking architecture. Birkhäuser.

Zumthor, P. (2006). Atmospheres: architectural environments, surrounding objects. Birkhäuser, , Cop.

