

THE FUTURE HERITAGE OF ARTIFICIAL LANDSCAPE

challenging the concept of aesthetics and exploring identity in the
reinterpretation of industrial entities



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2025

Examiner: Joaquim Tarrasó

Supervisors: Åsa Setterby Modéus & Maja Hjertén Knutson

"I feel the whole discussion about how we can build the future architecture still takes its starting point in a very old-fashioned way on looking at resources, where you accept that you always go out in nature and harvest your materials, you process them and then they can take part as a building component later on in architecture. But when we look at the buildings being built today, most are actually built in areas where you already have buildings, so I feel there is something counterintuitive to that. I feel we have to be better at looking at the resources that we have already processed, resources that we have already put in this world. And not just for saving energy and saving resources, but also because they are embedded with a lot of poetic qualities, they have traces of history, they have their own narratives. If we work with these materials in the right way, we can use that as a stepping stone to create architecture that works like a bridge between the past, present and potentially towards the future."

- Søren Pihlmann on Danish Pavilion at 2025 Vennice Biennale

Thanks to

Åsa and Maja, for your invaluable mentorship and thoughtful guidance in design decisions.
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And to each other—for the support, encouragement, and motivation throughout this procces.

The future heritage of artificial landscape

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Master’s Program of Architecture and Urban Design (MPARC)





Abstract

With the contemporary world becoming more conscious of the choices made concerning use of natural resources, industrial areas are going through a shift of perception, and their future is uncertain. As they are examined, a question is posed whether they represent heritage, lives of the former generations, or are simply parts of a rather regrettable past.

The purpose of this master thesis was to investigate the potential shift in perception of post-industrial spaces and prove that they should be considered as future heritage. It has aimed to challenge the commonly accepted idea of aesthetics and find appealing qualities in the artificial landscapes created due to human activities. It concentrated on the reinterpretation and readaptation of post-industrial structures and emphasized the need for new nature in those areas. The project area was located in the city center of Gothenburg, focusing on Rosenlundsverket - a power plant located on the riverbank of Göta Älv.

By conducting multiple site visits and collecting accessible archival material, the site and its context were analyzed, treating Rosenlundsverket and its surrounding landscape as one entity. Utilizing the research by design method, volume studies have been conducted, determining the most suitable

design option for the site. Reference projects were treated as case studies, and design methods present in them were transferred into the design. With the aid of transformation theories, a new narrative was suggested for Rosenlundsverket.

The proposed reinterpretation of the building suggested exploring it as a part of the public realm and reintegrating it with nature. The thesis has also proposed new functions for the existing building in the form of an art museum and a club, with the contemporary additions complementing them with art studios and an auditorium. The landscape design took the form of a park situated around Rosenlundsverket and proposed a new nature design language for the city. The design proposal is represented in the form of drawings and visualizations that emphasize the design concept and contrast between old and new. The design proposes a space that should be for all, making heritage tangible and approachable while simultaneously enhancing the identity of Rosenlundsverket and carrying it further into the future.

keywords: *identity, heritage, artificial, landscape, reuse*

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Artificial landscape as heritage

With the exploitation of earth's resources emerged the term of artificial landscape - anything that we encounter nowadays and is man made. The usage of term "landscape" works as an excuse for humans. All the chaotic entities that have been constructed somehow become unity when the word "landscape" comes into play.

Industrial areas seen as traces of our activities are an inextricable part of contemporary cities. They are engraved in the cityscapes and it is hardly possible to picture urban areas without them. At the same time, they are perceived as a regrettable part of the reality that we, as humans, have created due to our activities and exploitation of natural resources. Their often prominent locations lead to constructing spatial and mental barriers within the city network and simultaneously contributing to the image of industrial areas being hidden in plain sight and deliberately overlooked (Braae, 2015).

The scope of what we consider to be heritage is expanding and gradually taking immaterial and emotional aspects into consideration. Our perception is becoming more conscious as we begin to ask ourselves the question what is meaningful, why and to whom. The practiced everyday emotional attachment to commonplace comes in to play and experts that used to judge beforehand what heritage was are now equal to non-specialists in judging a place's worth (Braae,

2015). The new interpretation of cultural heritage is reflected in attempts at linking preservation, re-use and what was once considered worthless in a traditional sense.

Currently, we have reached a point where it is not sustainable to build anymore. Even though we might have not felt the scarcity of resources substantially just yet in our everyday lives, the sooner we begin our journey towards working with existing landscapes on everyday basis the better for us and our planet. It is necessary to develop a sensitive and understanding approach towards the land that we utilize and how it has been already formed and altered in order to cater our expanding needs.



Thesis questions

How can we redefine the aesthetics of artificial landscapes, often seen as by product, and incorporate them in contemporary city planning?

What are the key challenges in repurposing industrial buildings for contemporary urban use, and how can these be addressed in the case of Rosenlundsverket?

Intention

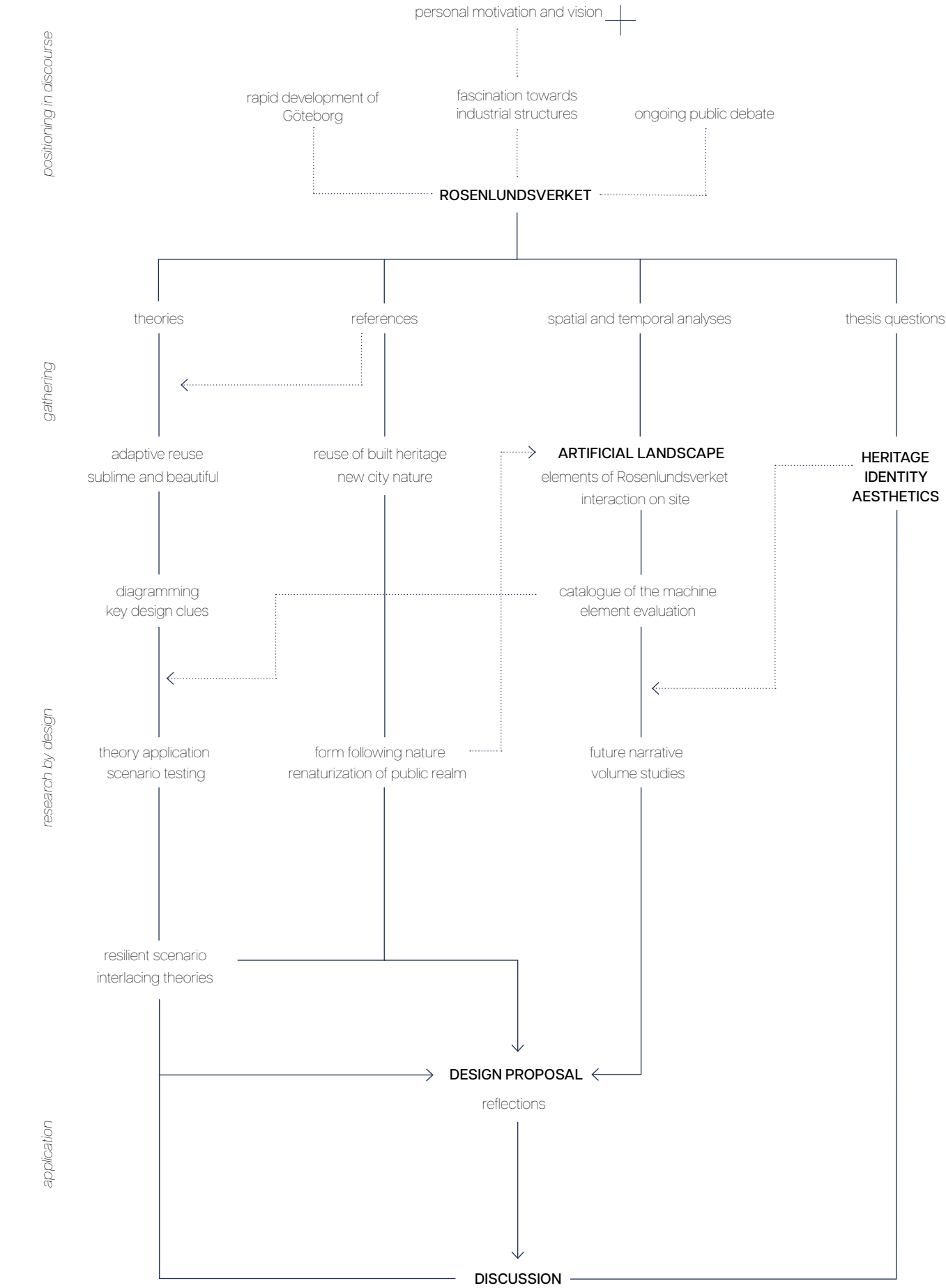
The intention of this thesis project is to present a future vision for Rosenlundsverket, seen in the context of this research as an artificial landscape. It aims to explore the powerplant’s identity, heritage, spatial characteristics and aesthetic values. Through this investigation, the research will aim to define Rosenlundverket’s potential future use and its role within the city’s fabric. This thesis seeks to challenge traditional views of aesthetics and anticipate a shift in how post-industrial landscapes are perceived. The project will also explore the notion of heritage and whether industrial areas can be embraced as part of such, moving beyond their evident associations with negative environmental impacts and resource exploitation.

Delimitations

This project does not aim to praise industrial activities nor prolong them. It acknowledges them and their consequences while seeking ways to alter them and include them in the city fabric.

It will not seek to provide an interpretation of Rosenlundsverket as one building but as a part of a system, fully integrated in the landscape around it. It will not provide detailed solutions for all the spaces within the project.

Due to Rosenlundsverket being under a Protection Act (2010:305), drawings of the interiors are not public and cannot be shared due to security reasons. This means that the drawings of the powerplant are created by authors of this thesis are speculative and only suggestive of what the reality might look like.



Method

This thesis has been treated as a back-and-forth process, interlacing various design tools. It has been conducted through spatial and temporal analysis, literature and theory studies which touch on and convey the idea of heritage, identity, artificial landscape and post industrial structures. The outcome of the thesis is a design proposal that aims to determine and accentuate the presence of Rosenlundsverket in the city's tissue while expanding on the idea of a common public realm that is also closely intertwined with the natural environment. The project works on multiple scale planes simultaneously with a firm emphasis on how they intertwine and inform design decisions.

The process is based on "research by design" and can be divided into three phases. However, none of these phases are considered "closed" due to the fact that they are in constant dialogue with one another, informing and educating decision making on all stages and scales.

phase I - exploration

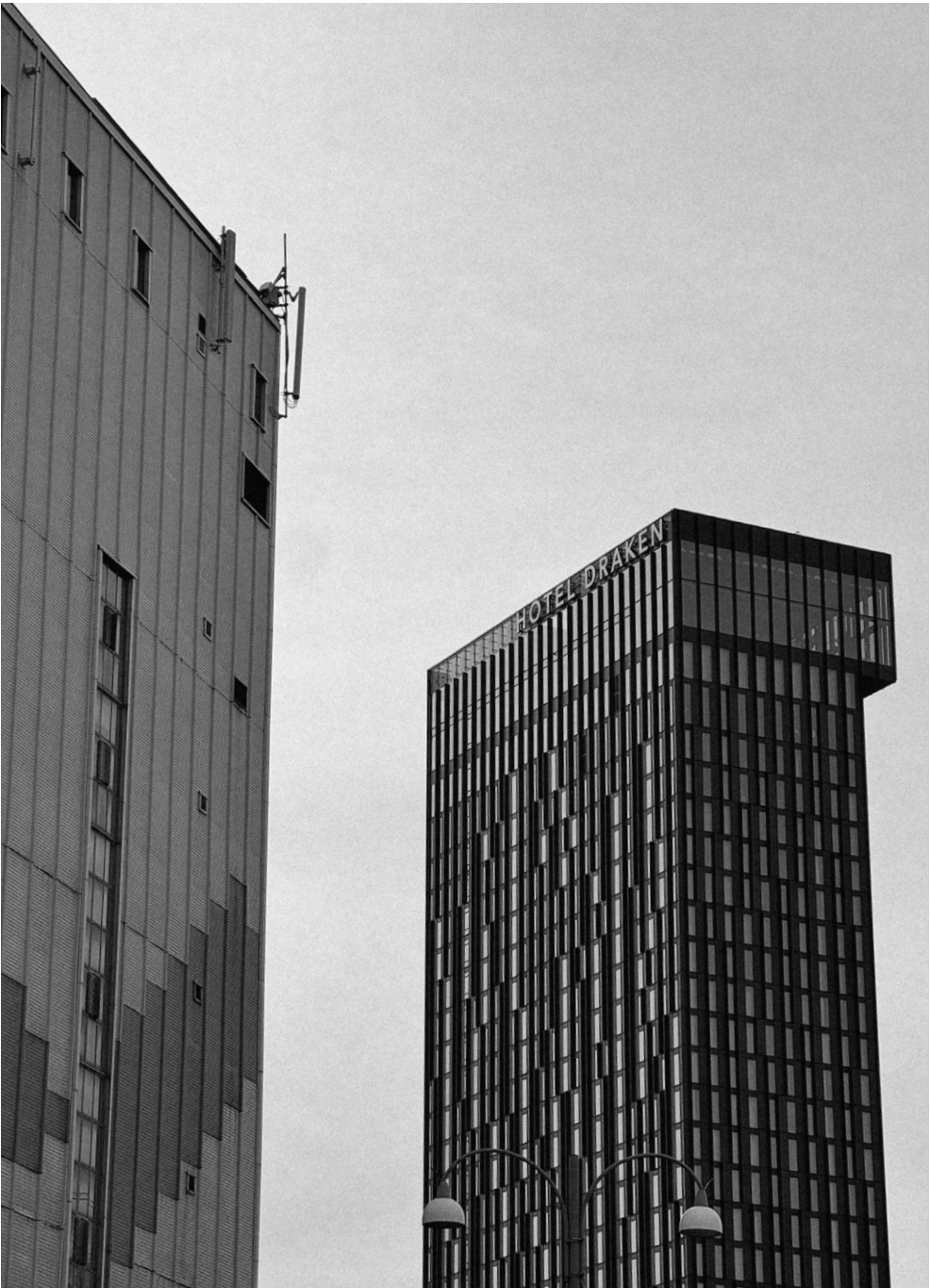
The first phase revolves around gathering data, available historical drawings, references, and putting together the history of the site. Due to the complex nature of the context and multiple temporal layers, which are present simultaneously, it was crucial to develop a deep understanding of Rosenlundsverket.

phase II - investigation

The second phase is focused on conducting spatial and temporal analyses, multiple site visits and building future narratives that can be tested in the next phase. Rosenlundsverket is presented as a machine, consisting of various elements and functions, which is a key to grasping the complexity of the object. Building and landscape are perceived as one and analyzed as such. Dissecting theories and references is happening simultaneously and aids in the process.

phase III - application

In the final phase, design scenarios and narratives are tested in order to determine the most suitable ones. The determined scenario is presented and its possible consequences on the city fabric are investigated and further on reflected on in the discussion.



PHASE I - *EXPLORATION*



Layered personal reasoning

In order to make this process meaningful and strengthen it's purpose, not only to the contemporary discourse but also to the authors themselves, choosing a subject that was dearly valued was vital.

Both authors, coming from industrial regions, were aware of the challenges that cities with artificial landscapes of such extent have to face in contemporary city planning. How easy and financially reasonable it is to wipe down obstacles in the forms of existing structures and start with a tabula rasa.

Observing Gothenburg develop over the past few years and the pace at which it is growing, one starts to wonder whether the city is not sacrificing its identity in the process. Whether everything that is being constructed right now has to be so pristine and bear no or little connection to what was there before, however displeasing or aesthetically dissatisfying it might have been.

With this thesis, the authors had the purpose of showcasing how a site can be revived, brought back, and reconnected with the city and its people. How Rosenlundsverket's shameful past based on exploitation of natural resources can be salvaged and transformed into an object that serves the common good and brings in new nature that is designed to help solve man made problems.

Finally, this proposal will be a counter one, as a response towards the development of an artificial peninsula, right next to the chosen site. It will suggest a way of embracing the water and the riverbanks, instead of continuing the cities expansion into it, against all sustainable reasoning.

This thesis carries a purpose of presenting an approach that differs from the ones currently represented by city planning and aims to spark interest and showcase a way of how adaptive reuse can come hand in hand with landscape design.

Theories



Figure 1: depiction of the sublime by aesthetics of nature in *The North Cape by Moonlight*

aesthetics

What is beautiful or aesthetically pleasing to one is a subjective dilemma. As designers, we often find ourselves drawn or mesmerized by things that might not be visually attractive in its common sense. Turning towards Edmund Burke and his treatise, the search for understanding of the origin of the ideas of Sublime and Beautiful is presented. According to Burke, Beautiful is what is aesthetically pleasing and pleasantly formed, while Sublime is what carries the power over us, is a mystery, and seeks to possibly destroy us. They are their own respective categories, both evoking strong feelings in the observer.

Industrial areas can be assigned to be reflective of the Sublime. They're only accessible to a distinct group, operating in the shadows of everyday life, simultaneously providing for us and our cities. We are not allowed to access them, yet they become an inextricable part of our landscapes and cityscapes.

identity

When referring to or searching for the identity of a place, the term genius loci comes into play. It conveys the idea that a place is more than its character or atmosphere. Genius loci is site specific, encapsulating all the qualities that are present through architectural connections and expressions (Norberg-Schulz, 1979). It intertwines the architecture and the surrounding landscape inherently, making one impossible to exist without the other. It inspires a perception of a hybrid, building, and landscape as one, which then leads to an expanded set of values to experiment with and work on.

It is crucial in a transformation process, when aiming to understand the character, atmosphere, and spirit of a place, and defining a site specific intervention. It acknowledges the site's immaterial and intangible aspects and understands them as equal to the material and visible objects.

adaptive reuse and heritage

By now, adaptive reuse has become a field within the wider context of the architectural discipline. The art of working with existing structures and transforming them in order to fit current societal needs is becoming more and more desired and valued. Adaptive reuse is a way of working with heritage, whether pleasing or displeasing, and providing a direction for sustaining structures that have outlived their former functions.

After the destructions of World War I and II, the perception of what was heritage has switched and was not longer limited to antique and medieval buildings. The context of what needed preserving has expanded and now included other groups, one of them being industrial areas. This called for developing new ways of approaching design and working with existing objects.

The adaptive reuse field applies multiple transformation theories and strategies. The ones that are found to be crucial to this specific process are selected, expanded on further and applied in this thesis.

When approaching the building as a palimpsest or rather breccia, there is a possibility of perceiving the building as a set of layers with various origins, not necessarily in a chronological order but still forming an entity (Plevoets, B., & Van Cleempoel, K., 2019). It opens the doors for classifying the elements of the object in other ways than just by their age.

The adaptive reuse discipline suggests and distinguishes certain strategies that can be applied while working with transformation. Translatio, imitatio, and aemulatio are some of such strategies. Translatio expands the notion of restoration and aims to "translate" the existing building into the future. It places focus on the mentioned concept of genius loci and, with its help, embraces the existing structure and aims to complement it. Imitatio plays with the idea of what is already present on the site and represents a more selective approach towards restoration. It is about picking and choosing elements

that the designer believes will aid in encapsulating the spirit of the place more appealingly. Aemulatio is based on providing a clear distinction between what is new and what is old, catering to the respect and significance of the historic parts of the building. It also focuses on an attempt at the new addition exceeding aesthetically and functionally the old structure.

Staging a ruin is also one of the strategies. It enables a theatrical presentation of a chosen existing structure by selecting and displaying only certain elements. The element does not necessarily need to be in a ruinous state, the key factor is that it opens up to the public, providing a sense of freedom and contributing to the local context in a valuable manner.

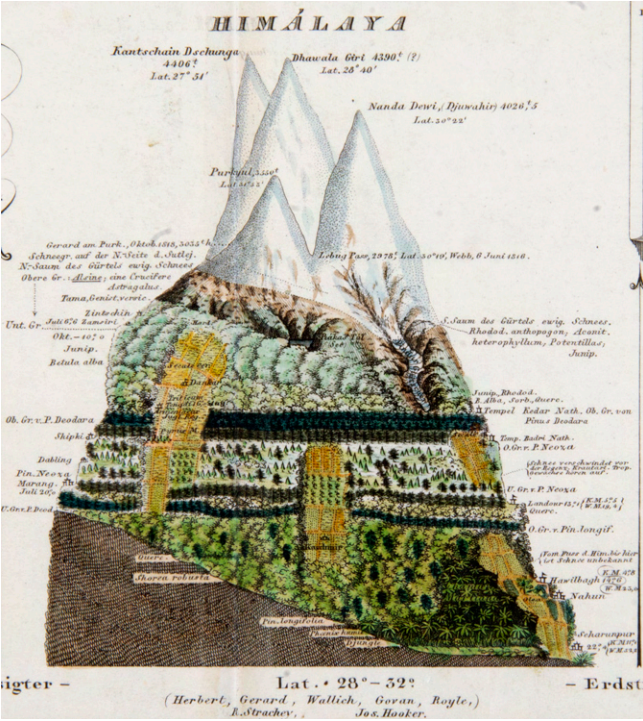


Figure 2: interpretation of breccia in a section of Himalaya by von Humboldt

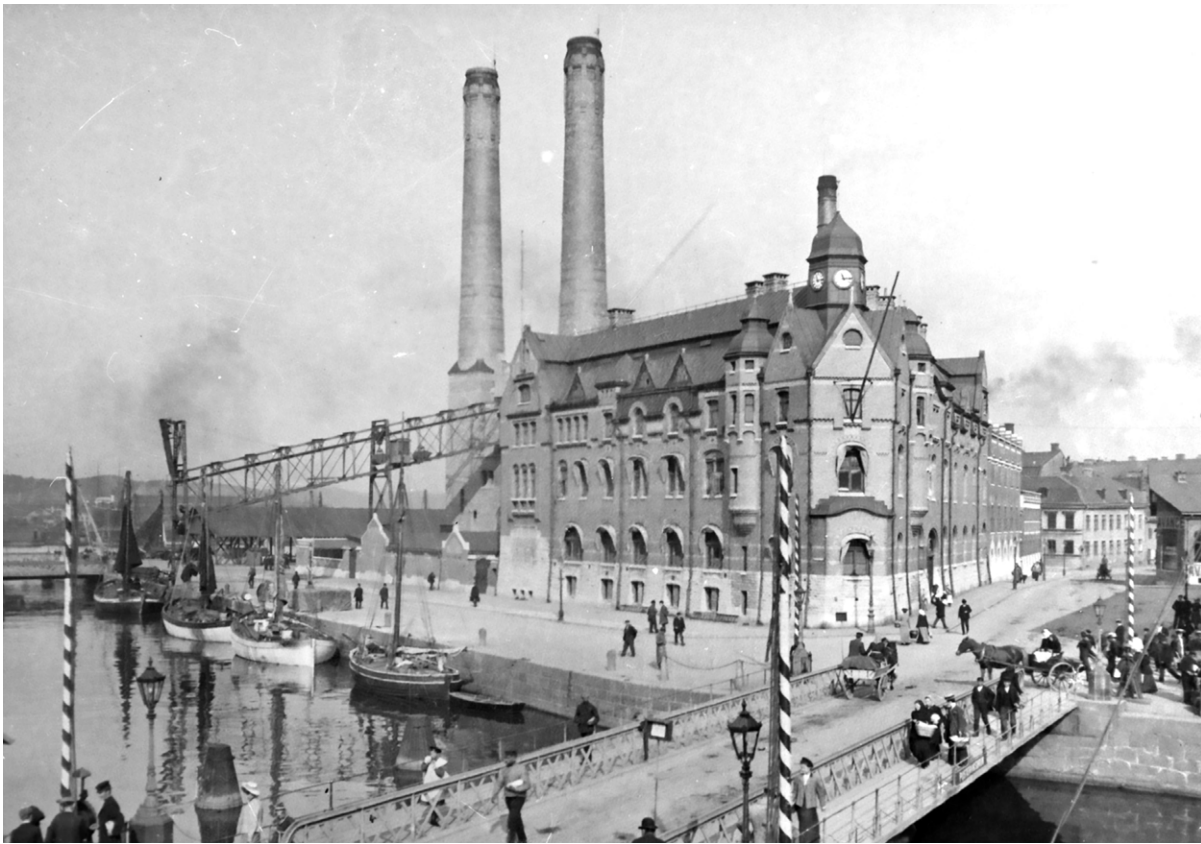


Figure 3 : view of Rosenlundsverket towards NE, circa 1930.

History of Rosenlundsverket

In 1846, Scandinavia’s first gas plant fueled by coal was built on a plot that is now occupied by Rosenlundsverket. With it came electricity, and the first lights went on in Gothenburg. Together with a mechanical cotton spinning mill built on the opposite side of the street in 1847, a first cohesive industrial area was born in the city. This relatively small site (compared to other industrial areas in the city) functions now in the city consciousness as Electricitetsverket, a 150-year-old industrial area placed right on the riverbank, in the city centre.

With a growing demand for gas and in need of bigger facilities, the gas production was moved to Gulbergsvass, leaving the site of Rosenlundsverket redundant and closing down the plant in 1894. Due to its strategic location right on the riverbank, the plot became very attractive when it came to transporting goods (such as coal) down the river and unloading them later on. As a result, the former gas works site was chosen as the place for a new electricity power plant, supplying electricity to trams in the city. Subsequently, with a growing demand for electricity, Rosenlundsverket expanded in size and began

supplying its services to the citizens of Gothenburg.

In the 1950s, a decision was made to combine electricity with district heating and produce it in one place. This meant yet another transformation for Rosenlundsverket. However, developing a network of district heating has proven to be difficult in a city center and has advanced slowly. At first, electricity and district heating were not as common and were provided only to scarce units or businesses. The process shifted and accelerated in the 60s and 70s with the construction of housing for Miljonprogrammet (Bergmark, 2018). Afterwards, the oil crisis emerged in 1973, causing a rapid stop in construction and development. However, not long after, things took a turn for the better, and in 1983, Rosenlund’s district heating network expanded to other districts in town (Lavemark et al., 1983), switching the center of production from Rosenlundsverket.



Figure 4: view from Landsvägsgatan towards north and Rosenlundsverket, 1973.

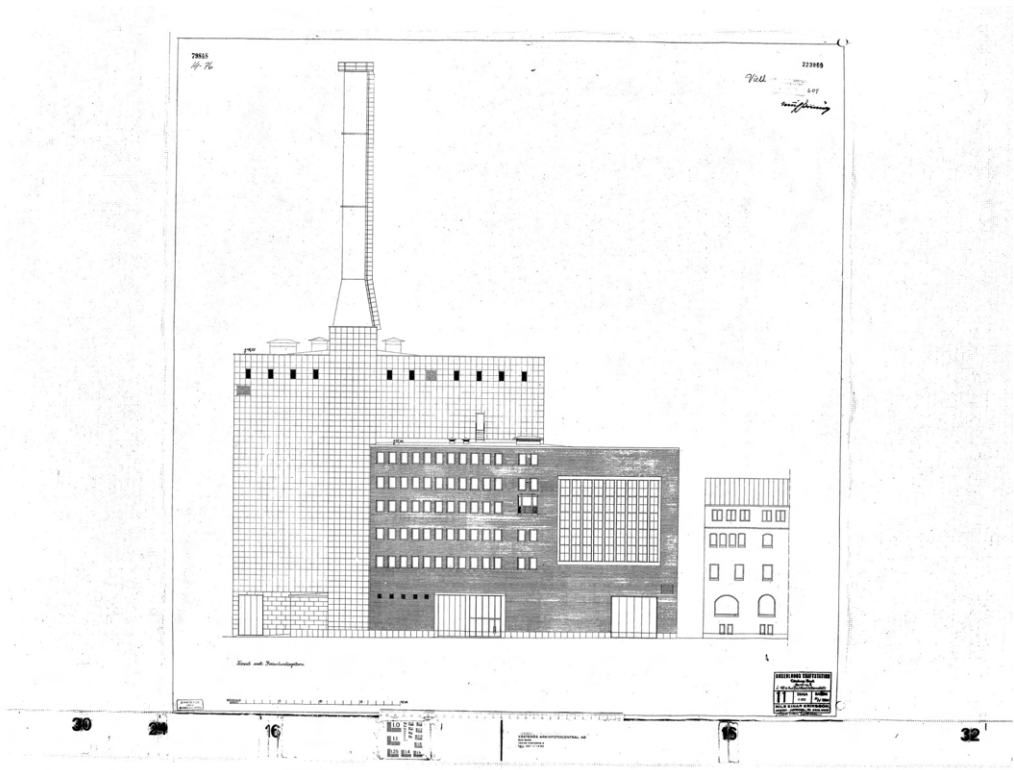


Figure 5: facade of Rosenlundsverket from Rosenlundsgatan, designed by Nils E. Eriksson, 1956

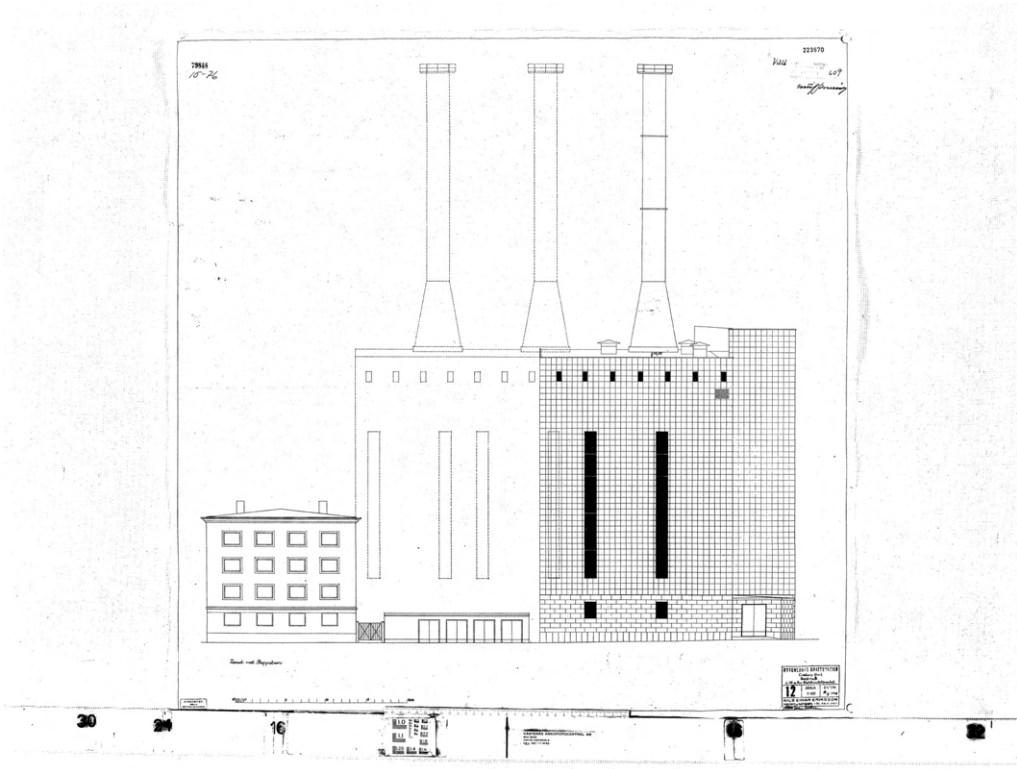


Figure 6: facade of Rosenlundsverket from Skeppsbron, designed by Nils E. Eriksson, 1956



Figure 7: View of Inom Vallgraven, Rosenlundsverket depicted in the top left corner, circa 1970

Rosenlundsverket has been through two more transformations, one in the 80s and the other in 2011-2013. The transformation that took place in the 80s revolved mostly around covering the existing facades with metal cladded sheets. It also involved demolishing two characteristic brick chimneys and the iron coal lift, which was a unique element of the whole complex. The latest transformation has altered Rosenlundsverkets image, especially from Esperantoplatzen, improving its aesthetics, material qualities, and softening the edges of the building.

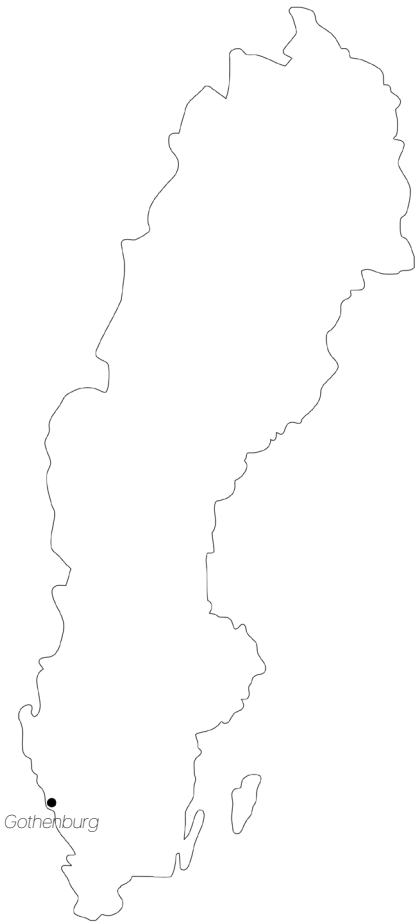
Today, the powerplant serves as an emergency or peak heating supply, which is used only 2-3 times per year, as well as a district cooling unit, providing cold water for facilities like hospitals or schools. The fuel source is mostly natural gas or, in some cases, oil, neither of those being a sustainable energy source. Having that in mind and the fact that the city of Gothenburg aims to be climate neutral by 2030 (Göteborgs Stad, 2019), the future of Rosenludsverket is uncertain.

Current plans suggest that the activity of Rosenlundsverket will be determined by 2040 but there are no further plans suggesting what might happen to the powerplant. Its vague future gives an opportunity to propose a considerate intervention that might guide the city regarding future redevelopments of industrial areas. What is certain is that another transformation of Rosenlundsverket is inevitable, with the artificial peninsula of Masthuggskajen being developed to the east, which will elevate the position of the site in the network of Gothenburg's spaces.

The heated discussion concerning Rosenlundsverket is already ongoing, with proposals from Centerpartiet that suggest turning the powerplant into a nightclub (Louise Jungmalm, 2023) or from White Arkitekter that suggest turning it into a cultural center (Jacob Sahlqvist, 2023). Both of these initiatives advocate for incorporating the powerplant into city life and opening it up to the public, the opposite of what the powerplant has always been.



PHASE II - *INVESTIGATION*



Extensive context

Rosenlundsverket is located in Gothenburg, a city on the southwestern coast of Sweden. It's a city with a rich industrial past and strongly connected to its shipyard and trading history. Gothenburg lies on the coast of the North Sea at the mouth of Göta Älv, which splits the city in half.

Rosenlundsverket is a solitary industrial building, situated in the city center of Gothenburg, within the district of Inom Vallgraven. It is located right on the riverbank of Göta Älv. Rosenlundsverket is unique in its scale, location, and function in comparison with its surrounding context. It's an industrial building that is not situated as part of a larger homogenous complex and is the only energy-producing facility situated so centrally in the city context of Gothenburg. Its function is

unique in its surroundings and it seems as if the powerplant does not fit within the closest context.

The powerplant is situated right on the riverbank, making its placement one of the most attractive and desired plots in the city. Due to the extensive development that the city is going through, including constructing an artificial peninsula right next to Rosenlundsverket, the attention given to the power plant is intensifying.





model from Älvrummet in Gothenburg, depicting cities future development plans

Characters of context

Rosenlundsverket is located along a busy route, connecting Stenpiren and Järntorget through pedestrian paths, vehicle roads, and public transport. When the development of Masthuggskajen is completed around 2030, the plot on which Rosenlundsverket is situated will become even more central and well-connected. This will result in a bigger pressure laid on the issue of transformation or demolition of the powerplant.

The interest in redeveloping the area of Rosenlundsverket has been expressed since 2005, with a plan developed by SWECO (Smederöd, 2020), followed by a detailed plan in 2014. The plan developed by SWECO forces a further expansion of the piers into the river, reflecting the proposal of Masthuggskajen, and does not propose sufficient green spaces that are very much needed in the city center.

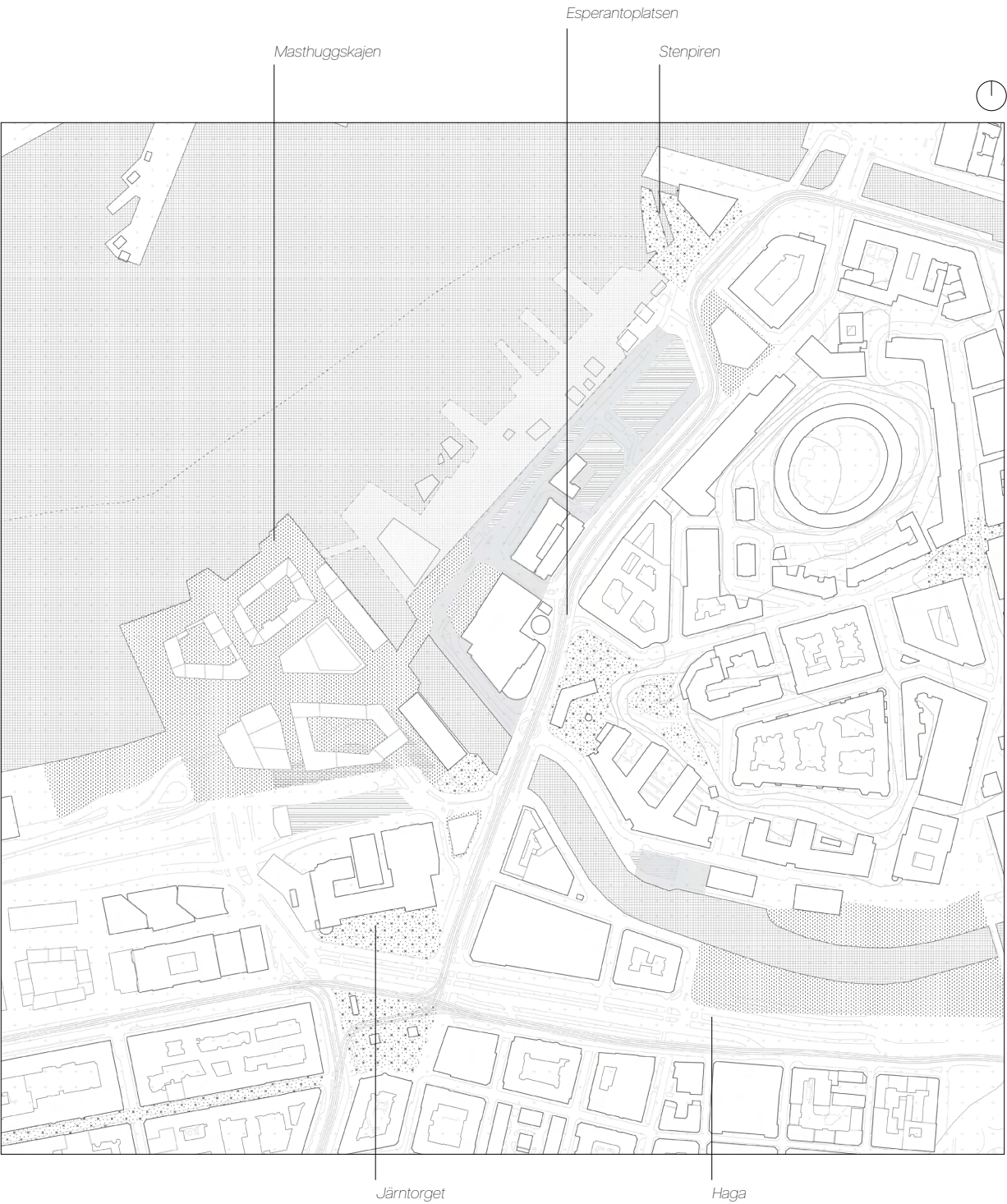
The context around Rosenlundsverket is a dynamic one due to multiple building functions, a variety of spaces of different characters, their stage of development, or the level of care being applied to those spaces on a daily basis. The power plant and spaces adjacent to it can be classified as terrain vague. It's a space that everyday, is traversed by strangers, between home and work, and has become empty, playing no recognizable role in the cityscape, being completely faceless and passed through without being paid much attention to (Mariani & Barron, 2013). This came as a result of rapid transformations that the area of Skeppsbron has been going through, one of them being the construction of the Göta

Tunneln in 2006, which altered the car movement in the area. It left Skeppsbron as it was, with remains of former bus stops, uneven patches of asphalt, and scattered parking spaces.

Rosenlundsverket, along with Merkurhuset and Kinesiska Muren, is located by Skeppsbron, the strip of terrain vague between Stenpiren and Järntorget. The space is currently not undergoing transformation, but it bears the consequences of construction sites located nearby, being framed and limited by them.

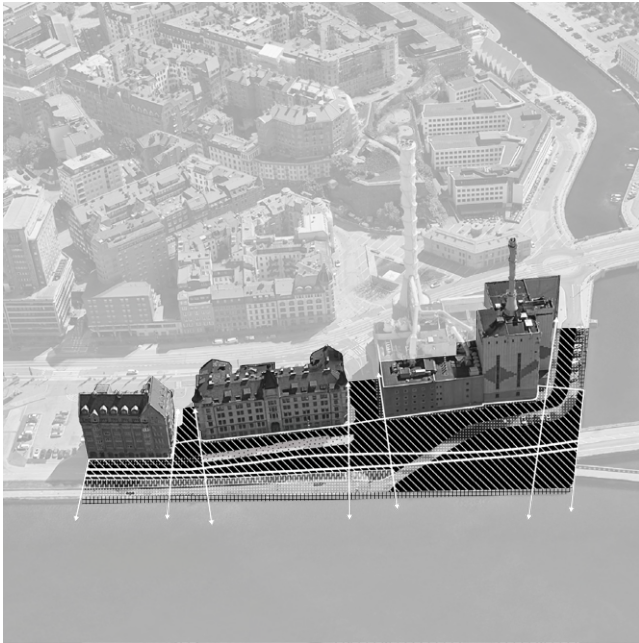
Faceless spaces, which the Rosenlundsverket strip belongs to, are classified as such due to the fact that they consist of parking lots, unorganized street structures, relics of the past infrastructure, a lack of destination zones, and greenery. The absence of places "to be" around Rosenlundsverket is evident, and areas where nature can be found are extremely scarce and limited to patches of grass.

The conducted analysis underlines and exposes the lack of control over the cityscape near the river edges and conveys a backward-looking approach towards sustainability and climate adaptation. The city is trying to fight the river by gradually building further into it and proposing hardscaped and rigid riverbanks, which do not contribute to a climate-resilient future of Gothenburg.



context analysis 1: 2500 (A3)

- | | | | |
|--|---------------------------------|--|---|
| | existing buildings | | busy public spaces |
| | Masthuggskajen development plan | | spaces in transition / under construction |
| | Sweco suggestion plan (2012) | | faceless spaces |
| | parking spaces | | |



- hardscape for vehicles
- hardscape for pedestrians
- pedestrian-vehicle interaction
- softscape

- harsh river edge
- inbetween spaces
- leading surfaces
- barriers

analyses of artificial landscape and its interaction with surroundings

Landscape and building - one entity

While working on expanding the concept of artificial landscape and presenting Rosenlundsverket as such, landscape analysis was developed. Analyses are based on landscape materiality, influence of the building on its surroundings, presence in the common consciousness, and temporal aspects of the landscape.

Rosenlundsverket is framed and limited from all sides by the vehicle used hardscape, which reinforces the image of Rosenlundsverket as a secluded island. The verticality of the building, conditioned by its two chimneys and high walls with no openings, is fiercely enhanced by the vehicle-oriented hardscape. The observer perceives and reads Rosenlundsverket as a solitary entity, fencing itself off from the surroundings.

The facade planes of Rosenlundsverket provide no interaction with the passerby, but they aid in directing the viewer's gaze, leading either towards Järntorget, the oil chimney itself, or framing the urban walls of Esperantoplatzen, representing it as a plaza.

Kinesiska Muren, Merkurhuset, and Rosenlundsverket together form a strip, running in parallel towards the water edge. They create a sequence of views for the passerby while traveling from Stenpiren to Järntorget, and from a distance are even

read as one entity. The spaces in between them each time open up and provide a direct connection to the riverbank and showcase views towards Lindholmen, with Karla Tornet looming over them. These openings carry a lot of potential, however, the observer is met with a disappointment when approaching the riverbank due to the negligence that has happened to it over the years. It seems like the buildings would like to drag their observer towards the river, but the public realm lacks an interesting point or an attractive space around the riverbank.

The emphasis on Esperantoplatzen is laid through these analyses and showcases how important the square is. It's located at the end of Kungsgatan, which leads to the center of Inom Vallgraven, being a significant element of this connection. Esperantoplatzen is perfectly framed by the surrounding buildings and directs all attention towards Rosenlundsverket as its main "wall". It provides the opportunity for an enhancement that Esperantoplatzen is, and positions it as a starting point to the sequence of spaces that lead towards the future enhanced riverbank.

Visual documentation

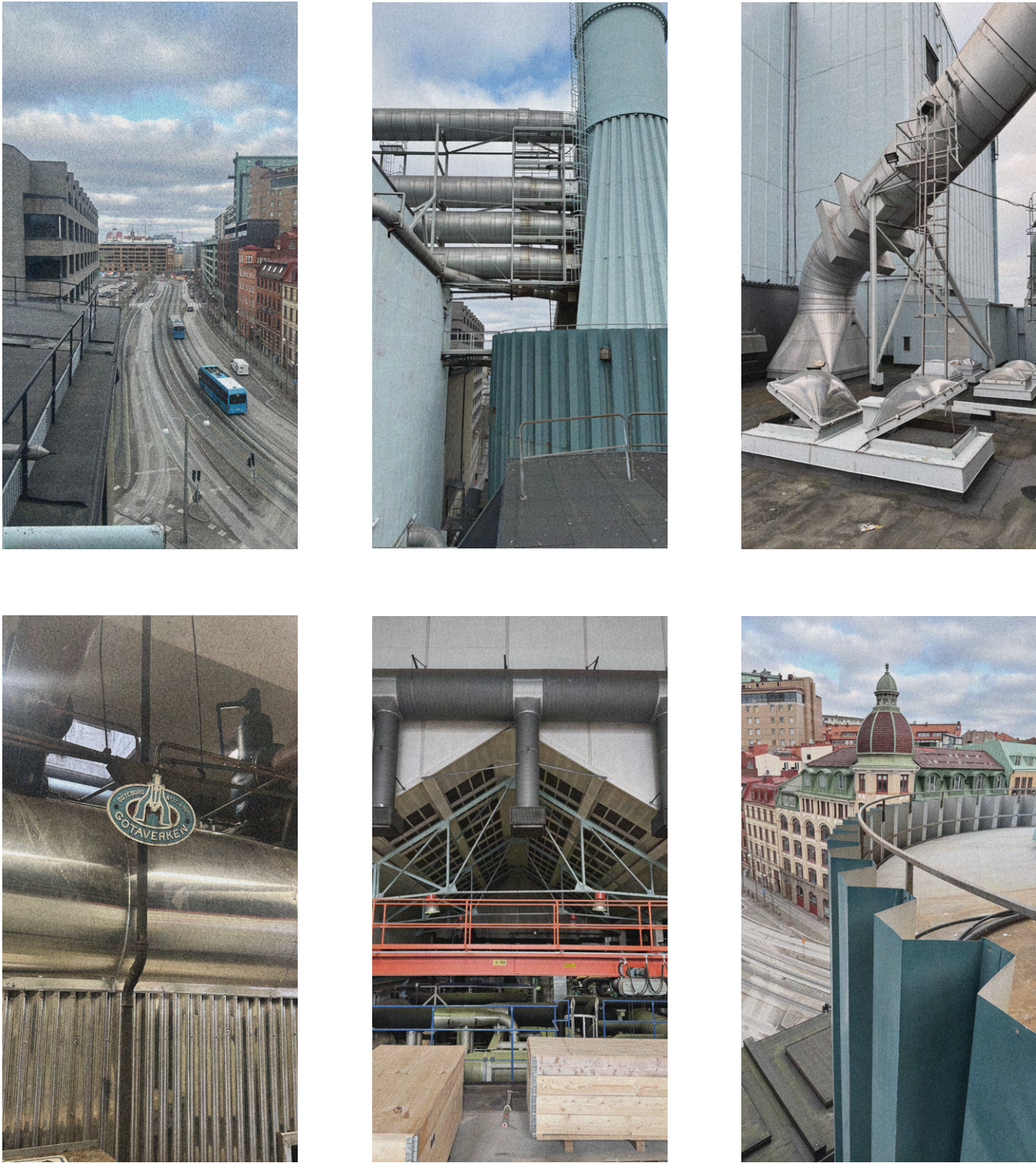
outside impressions



Rosenlundsverket, from the outside, is perceived as a stack of elements that do not necessarily form a coherent entity. It is overwhelming in scale for the pedestrian passerby and carries an impression of a closed-off fortress due to a scarce number of openings in its facades.

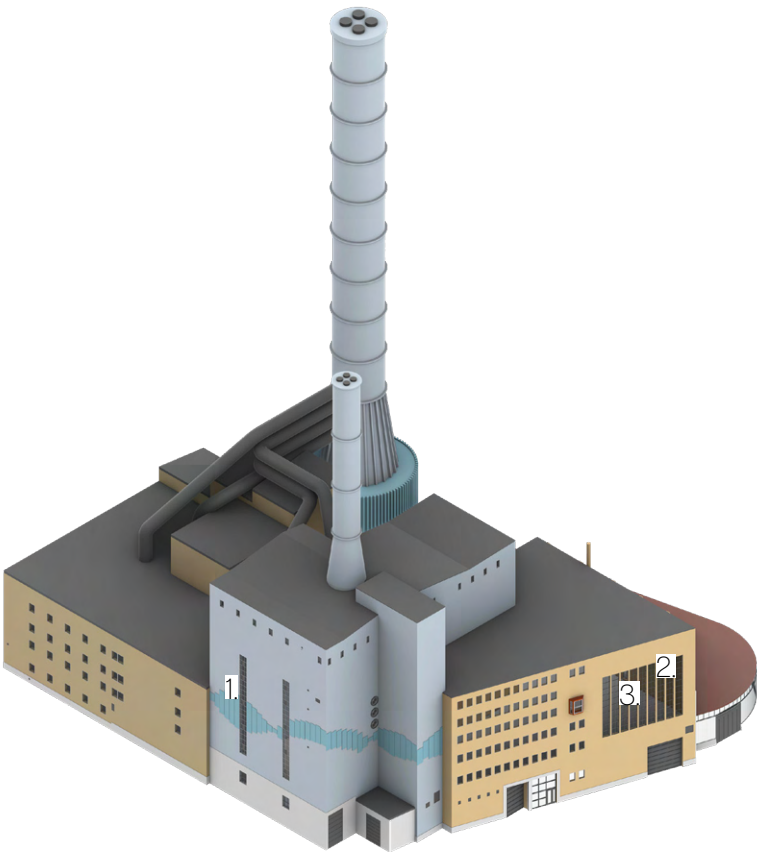
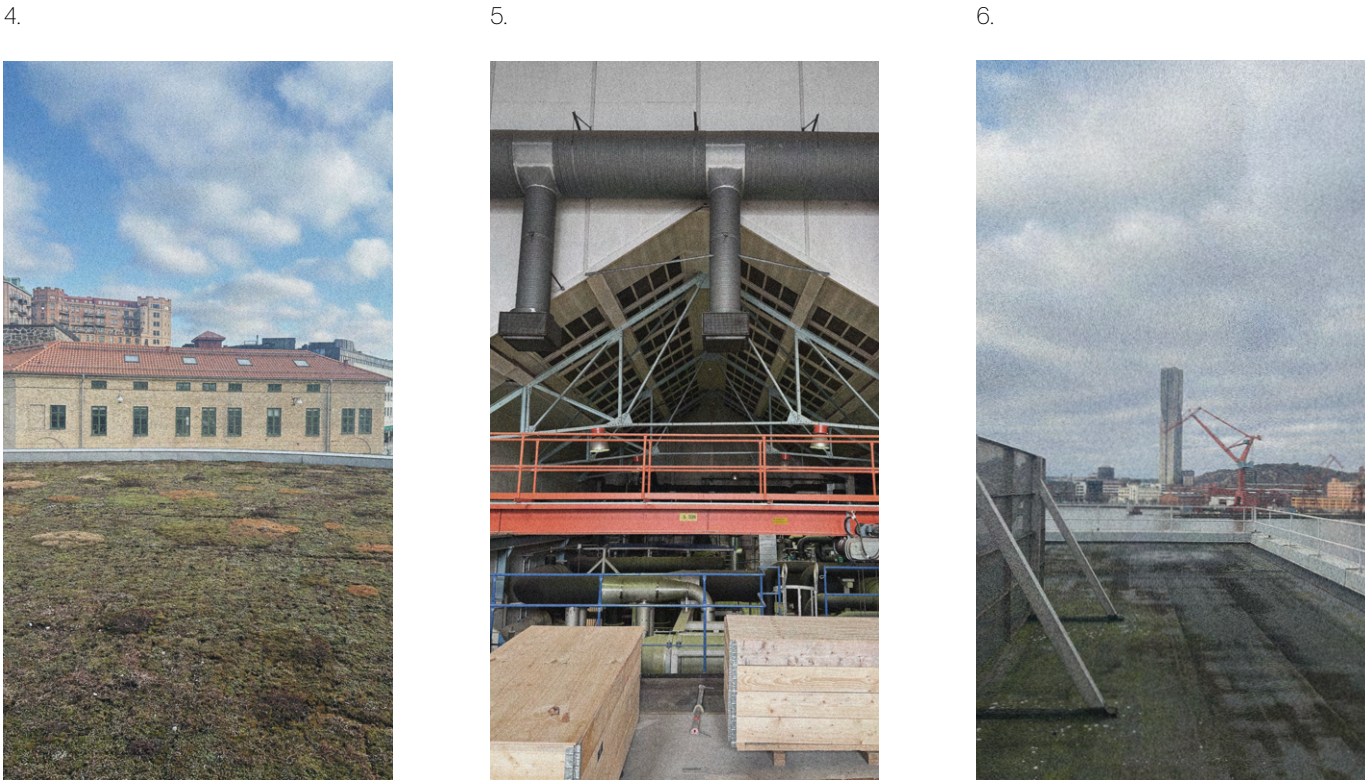
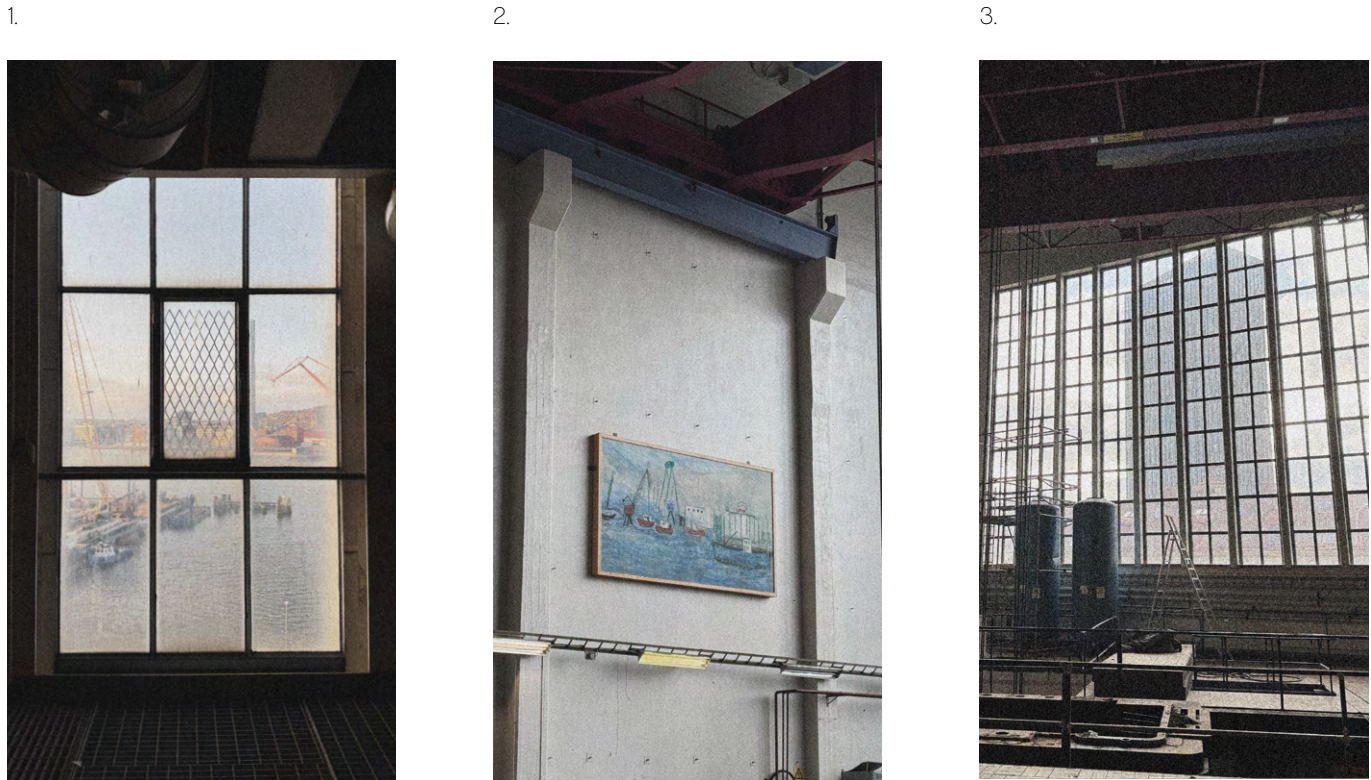
The biggest oil chimney plays a crucial role as an orientation point in the surrounding urban realm and is an iconic, dominant symbol of the power plant.

inner impressions

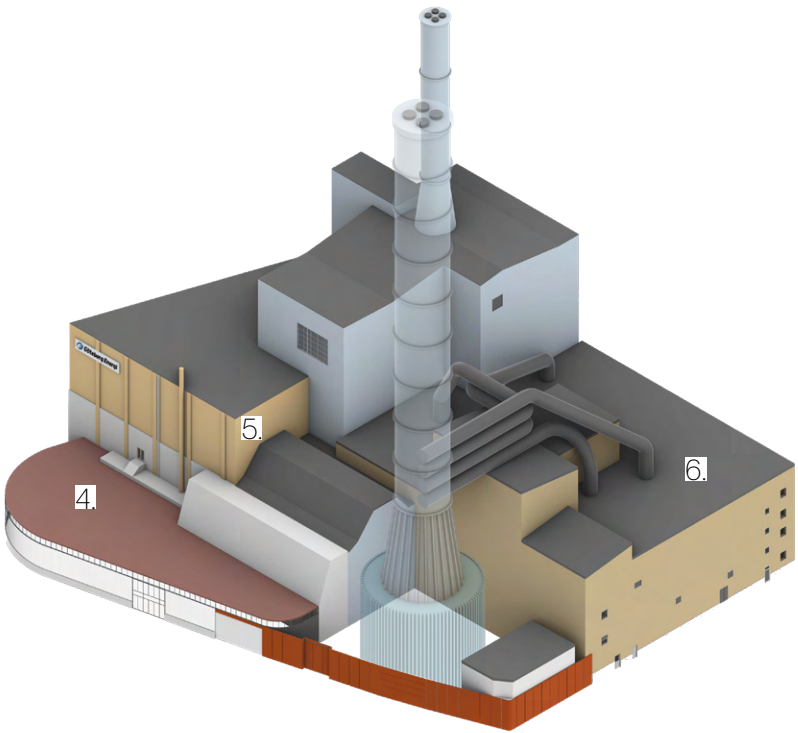


The inside of the powerplant reflects its outer impressions. It is a maze of functions, equipment (a large part of it outdated and not in use anymore), floors, and staircases. Even though Rosenlundsverket has been through so many alterations and parts of it have been wiped away, one can still find traces of history in the form of old heat pumps or boilers that carry

symbols of the industrial past of the city. Many of the relics of old machinery still remain inside the powerplant due to a lack of financial resources that would be required to remove them.



view from North-West



view from South-East

Dissecting the powerplant

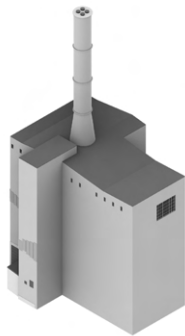
Establishing a timeline that concerns the elements that make up Rosenlundsverket is crucial to understanding the correlations between objects. Even though the powerplant has faced multiple alterations to its structure, it can be disassembled into single elements that make up the whole.

Each object has an assigned place on the timeline and comes with an image of its most characteristic material combination.



Facilities tallest production building, on a distinctive plan shaped like a cross. Pattern and cladding on its facade were added in the 80s, covering a previous brick facade designed by Nils Einar Eriksson. It has two large, vertical openings towards Göta Älv that bring glimpses of light into the building.

1952-1954



steam boiler / production building



With modest architectural expression, the turbine hall is the only building that has an original facade designed by Nils Einar Eriksson. It has a large facade opening, facing the canal. Inside, there is a large crane lift, currently out of use. The inside space dissolves directly into the church.

1952-1954

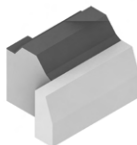


turbine hall / office building



Element almost unnoticeable from the outside, shapes the spaces inside in an important way. Its shape and structure resemble the construction of a church.

1952-1954

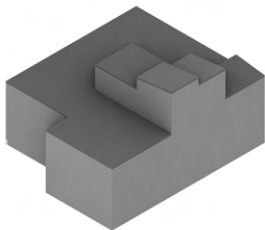


"church"



One of the two elements of Rosenlundsverket that faces the water. It's an addition from the late 60s/70s, badly maintained and designed without much care. Its facades are closed off, contributing to the image of inaccessibility.

1967 - 1976

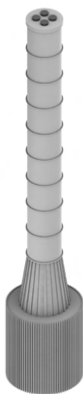


production building / hot water boiler



The most dominant element that functions as an orientation point in the cityscape. It's a free-standing element, connected to the rest only by pipes. Its materiality aspires to soften it by blending it in with the sky.

~ 1970

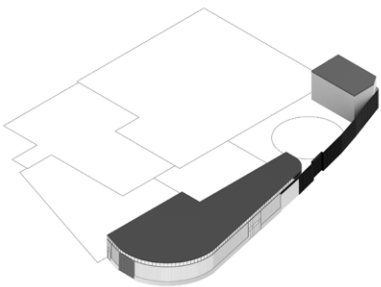


oil chimney

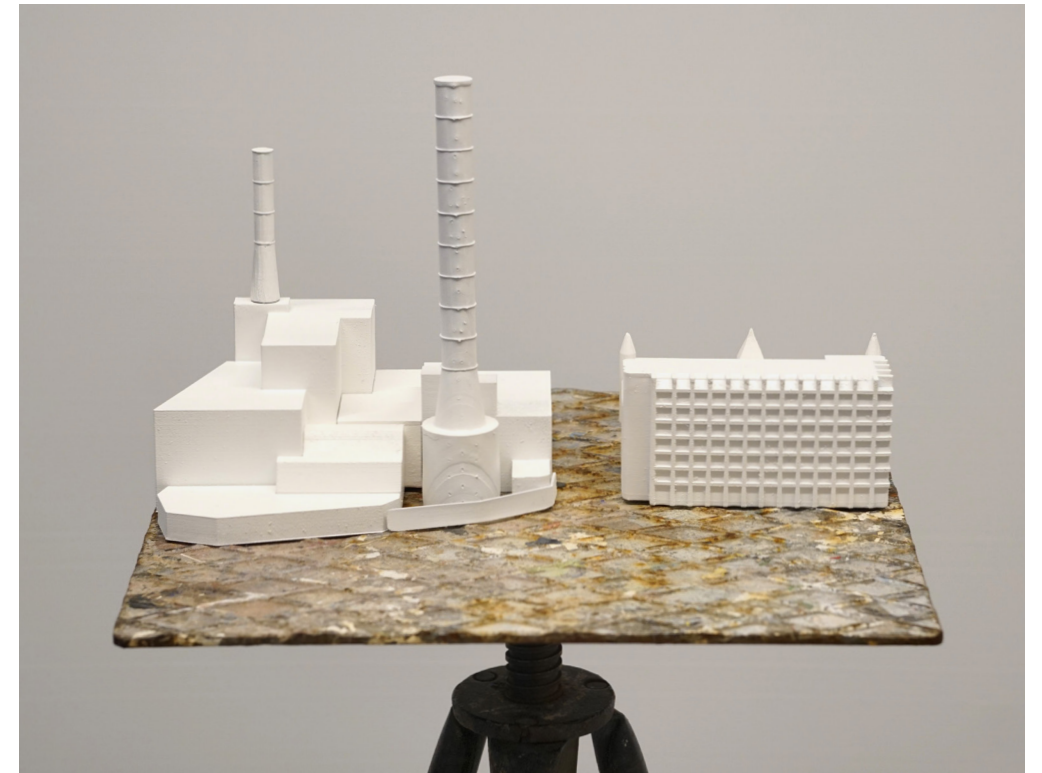


Built in 2014 as the last of many transformations that Rosenlundsverket has undergone. Its shape helps in softening the street edge, and its materiality is the only one being partly see-through, which allows a peek inside the building.

2014



parking

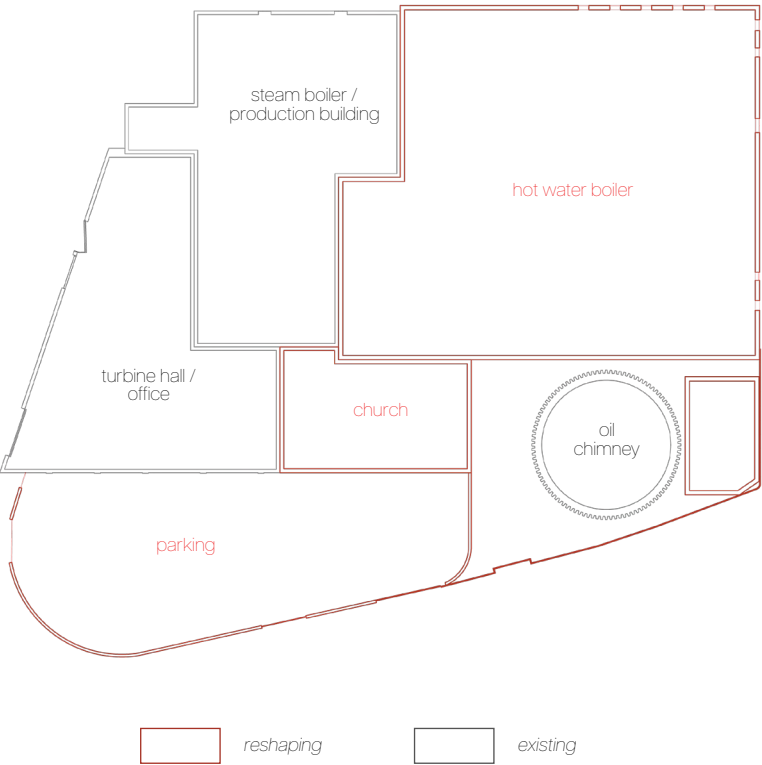
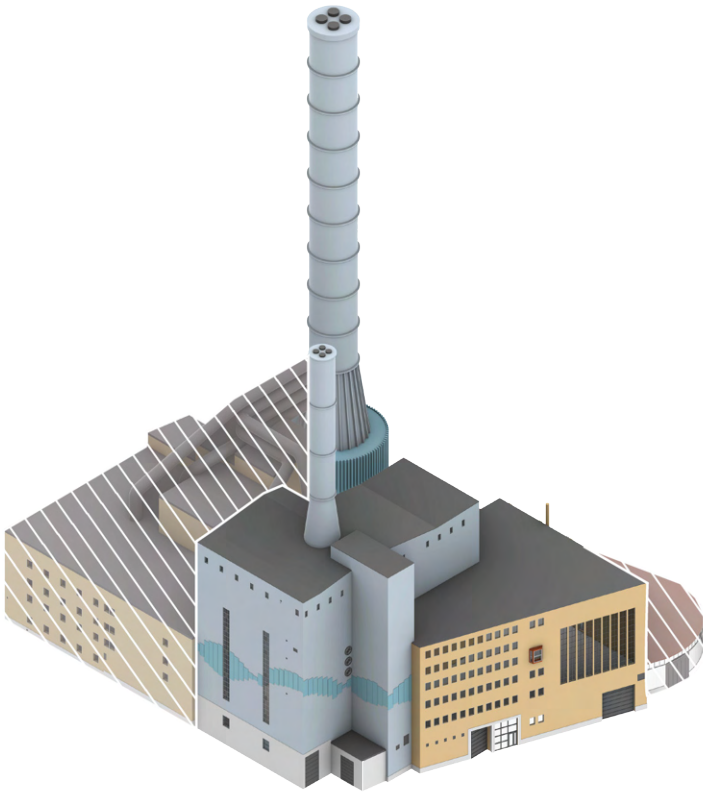


A set of elements

After analyzing the architectural and urban aspects of the Rosenlundsverket power plant in the digital dimension, it was time to shift focus to a material-based analysis. This next step aimed to explore the complexity of each component of the power plant - how they function both individually and collectively—and how neighboring buildings influence Rosenlundsverket. To do this, the authors used a technique of 3D printing.

Perceiving Rosenlundsverket as a set of elements was crucial to understand the functions and complexity of the structure. Viewing them as independent objects helped in the decision making process regarding which elements to maintain and which to transform.





Evaluation

With its prominent location and sublime character, Roselundsverket deserves a new interpretation that will carry its character into the future, open it up, and showcase it to the people of Gothenburg.

Rosenlundsverket is a machine, consisting of a variety of components that together form a collage of materials, shapes, and spaces. It is a chaotic entity, inside and out. The image of the powerplant becomes clearer after analyzing each component individually and understanding where it belongs in the puzzle.

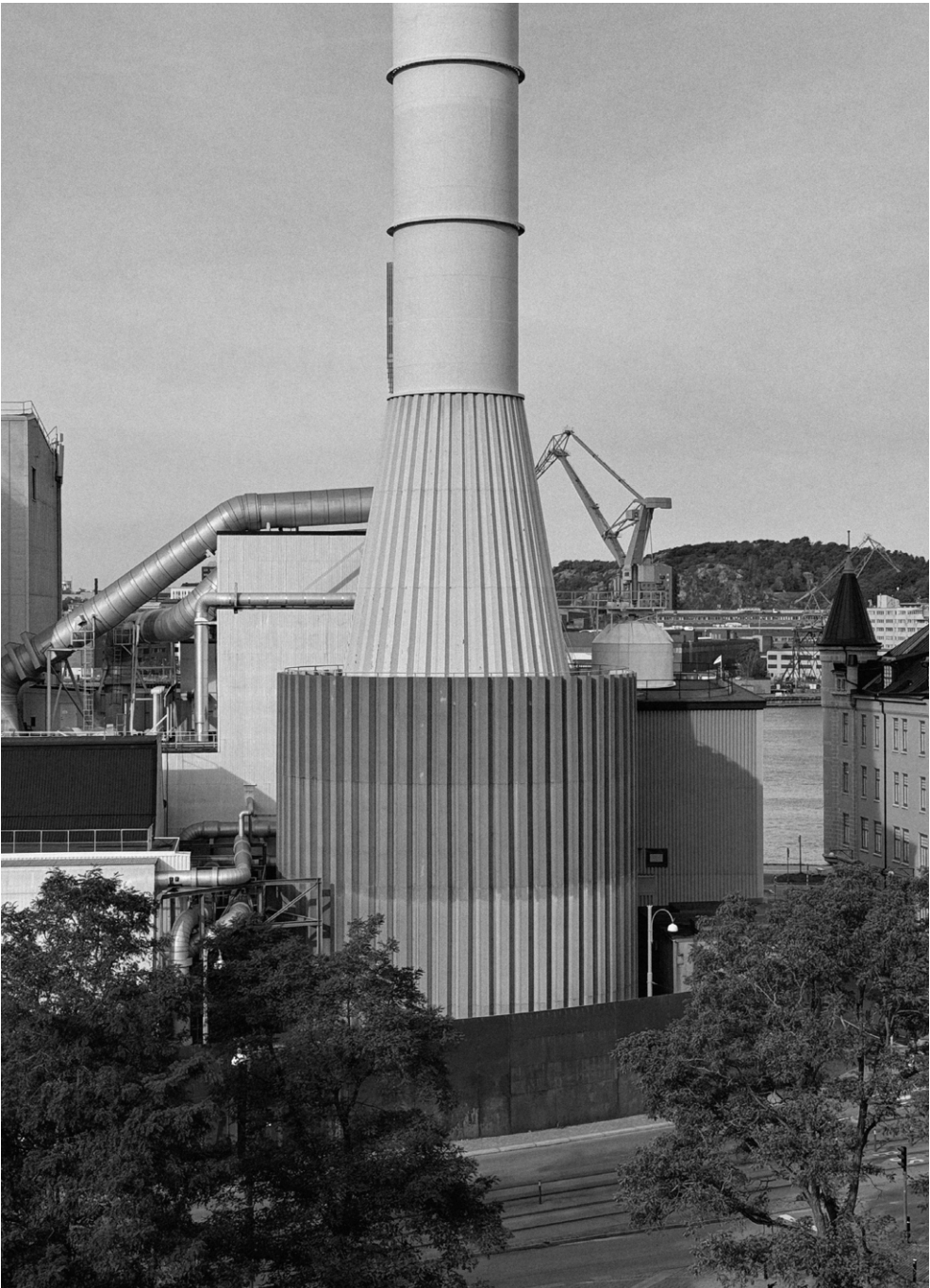
Subsequently, after conducting the context and landscape analysis, it became clear that in order to showcase Rosenlundsverket's full potential, it would be most fruitful to create a cut in the power plant. The cut would open up the building towards the river, and as well, quite literally, to the public.

While moving on and conducting the building studies, taking it apart and assigning values to its elements, the turbine hall, the steam boiler building, and the oil chimney were selected

as the most valuable ones. The turbine hall and steam boiler buildings, being designed by Nils Einar Eriksson, contain elements that express great care and understanding towards the details. They acknowledge the river and want to open up to it through small gestures.

The oil chimney is an iconic part of the cityscape, and maintaining it is a self-explanatory choice. Its colour blends seamlessly with the sky and, by that minimizes the overwhelming impression the chimney might have on a passerby.

The newest addition in the form of the parking lot helps in softening the street edge and is the only human-friendly scaled element of the powerplant. However, when bringing possibly new functions into Rosenlundsverket, this significant edge zone should be more apparent and inviting to the passerby. Additionally, its extension reaching basically the oil chimney makes the cut impossible and produces an unreasonable volume that does not fit anymore with the rest of the structure.



PHASE III - TESTING & APPLICATION

Space for testing

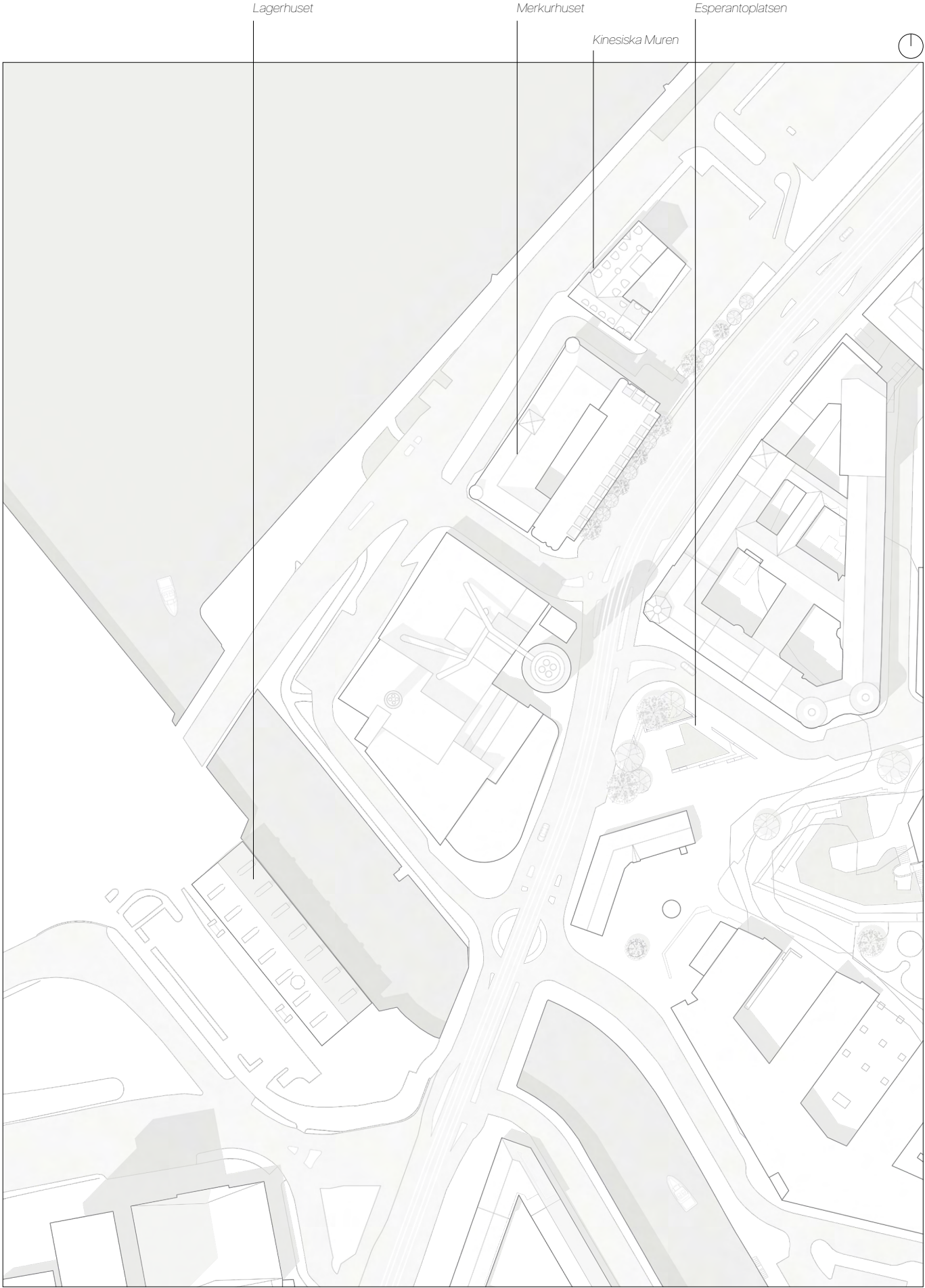
Rosenlundsverket is located right on the riverbank, neighbouring Merkurhuset and its newest addition - an office building from 2022 designed by Olsson Lyckefors. From the north and south-west sides, it has a possibility of direct contact with the river Göta Älv or the canal of Inom Vallgraven. From the east side, there's a rather poor public space in the form of Esperantoplatsen, which is often popular in the summer with skateboard users.

From all sides, Rosenlundsverket is surrounded by asphalt roads, pedestrian paths that at times run parallel to the high walls of the powerplant or disappear at all. The hardscape dominance is evident, and the lack of greenery is very much noticeable.

The riverbank is a harsh and rigid one, there is a steep drop from the edge towards the water surface. It's mostly concrete or asphalt surfaces with greenery peeking out if there's a crack in the harsh surface due to neglect.

The traces of what was present before on the site are still very much evident in the leftover spaces in the shape of a former bus stop, high high-traffic road that used to run along the riverbank (Skeepsbron to Masthamnsbron), or patches of grass that once functioned as a buffer between pedestrians and vehicles.

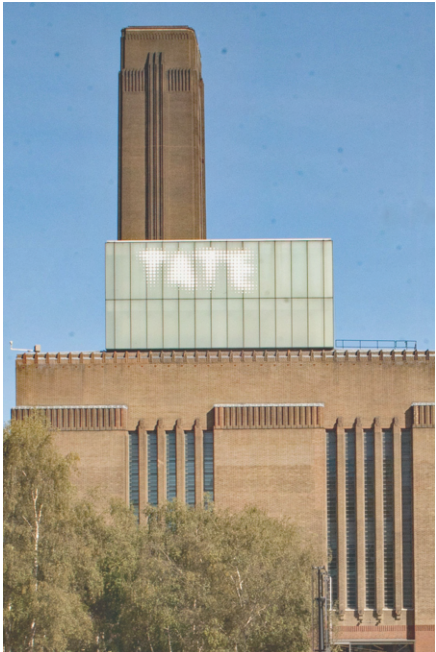
The artificial landscape of Rosenlundsverket is one that is being pushed forward due to extensive changes happening in the area, while at the same time being stuck in time and entangled in mental and physical constraints.



site plan, existing condition 1: 500 (A2)

References

Tate Modern
Herzog & de Meuron



The Tate Modern is a transformation project of a former power station into a contemporary art museum. The proposal succeeds in preserving the industrial soul from the inside while working on a contemporary look and additions from the outside. The building's massive brick form, with its iconic chimney, grounds it in history, while new additions like the twisted high-rise volume and white boxy addition on top bring a dynamic, sculptural presence. To add another dimension to Tate's perception, architects decided to play with light and shadow through the perforated brick facade. The interplay between the old and the new and the ways of distinguishing these two were taken into consideration while conducting volume studies for this thesis.

Fig. 8: Tate Modern by Herzog de Meuron by Jim Osley, retrieved from Wikipedia commons

Szczecin Philharmony Hall
Barozzi Veiga



The Philharmonic Hall in Szczecin is a monumental volume, yet light in its appearance, occupying the footprint of its predecessor. At first impression, the building appears massive, yet weightless at the same time, because of the luminous facade material and its distinctive rooflines. Its aluminium and glass façade, sometimes translucent, sometimes opaque, allows one's imagination to run wild. The building is contextualized in a way that it stands as both a distinctive architectural entity and part of the bigger whole. It conveys the feeling of a fortress while allowing a glimpse of what is to come. The materiality and relationship between inside and outside were a key element in the design process of our design.

Opera Parken
COBE



The Opera Park is a new green public space in the center of Copenhagen, by the inner harbour. It's situated by the Royal Danish Opera and Paper Island, allowing the citizens to take a breather from the busy and hardscaped city. It acts as a counterpoint to the densely built areas surrounding it, offering a sequence of paths with different user experiences. It has a wide range of planting species, offering different qualities of perception throughout the seasons. This variety of planting and its colour range is what was taken further into the design process.

Jubileumsparken
Mareld



Jubileumsparken in Gothenburg is a public park in a former industrial neighbourhood. Apart from delivering high-quality meeting spaces for people from the northern districts of Gothenburg, it also focuses on nature regeneration. It proposes bringing nature into rigid, man-made riverbanks as a way of improving biodiversity in the area, but also for flood protection. It is an inspiring and forward-thinking proposal considering the way that the city of Gothenburg usually approaches its riverbanks. Jubileumsparken, with its focus on providing both nature and meeting places for people, became a destination point for many. The approach towards the riverbank is what is reflected in the design proposal for Rosenlundsverket.

Fig. 9: Jubileumsparken by MARELD, courtesy of Mareld

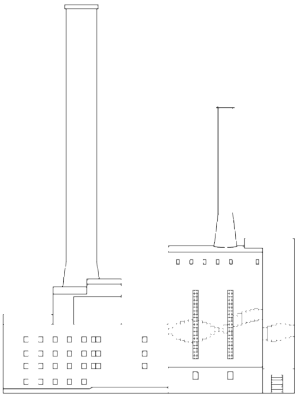
Transformation paradigms

In order to advocate for a complete proposal that would be sensitive and supportive of the existing artificial landscape of Rosenlundsverket, different transformation paradigms were taken into consideration. They do not focus solely on architecture but also on the landscape surrounding the building, perceiving it as one entity that can be extended into the future.

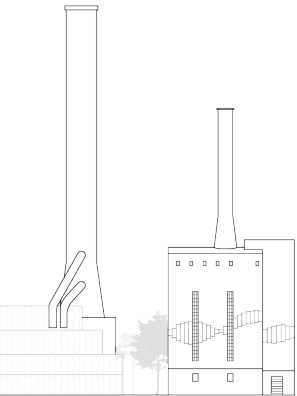
Awareness must be brought to the fact that, in the same way as the authors argue in this thesis that buildings and landscape cannot be seen as separate entities, these transformation paradigms never function as a solitary solution. They are used as design strategies in this thesis and are applied to different parts of the design process.

By evaluating Rosenlundsverket, elements that will focus on continuity transformation were selected. These are the

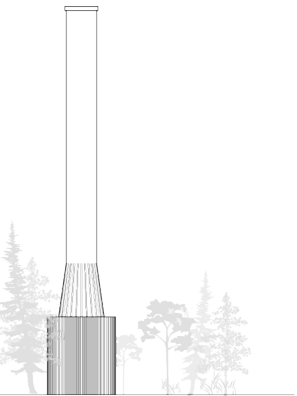
elements, such as the steam boiler or turbine hall, which will be extended into the future and adapted to fulfill future functions while still carrying the heritage of the powerplant. Contemporary additions to the building will represent the difference transformation by clearly stating which parts are added, and a contrast between the new and the old will be established. The same logic should be applied to the landscape design as well as approaching it with the logic of the cultivation transformation that will support the natural processes by bringing new nature to the site.



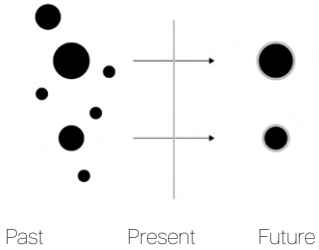
continuity transformation



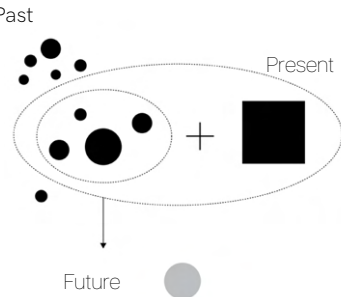
difference transformation



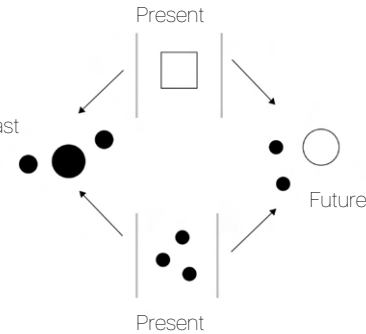
cultivation transformation



extending the PAST into the FUTURE



founded on contrast between NEW and OLD



letting time take control, enhancing natural processes

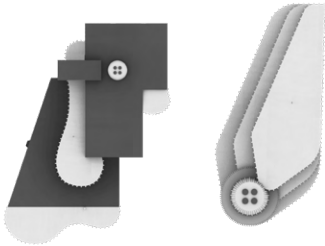
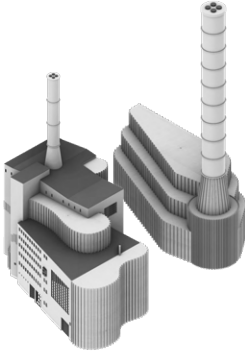
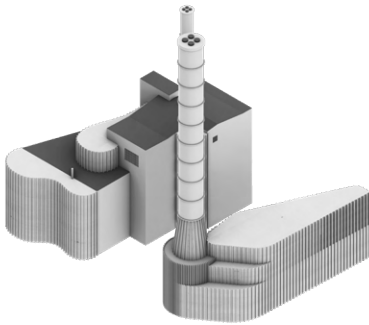
axonometric view SW

axonometric view SE

top view

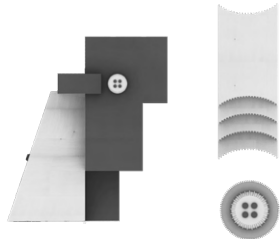
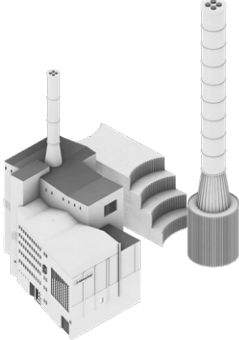
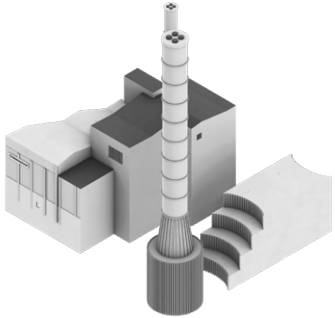
Test 1

Initial volume test suggested the oil chimney being incorporated in the new addition. The forms of addition to the remaining structures are organically shaped.



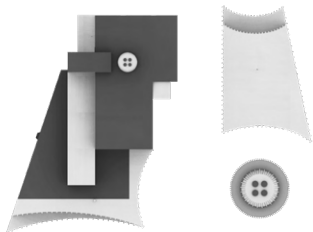
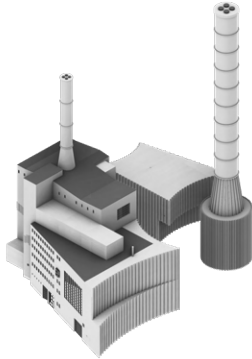
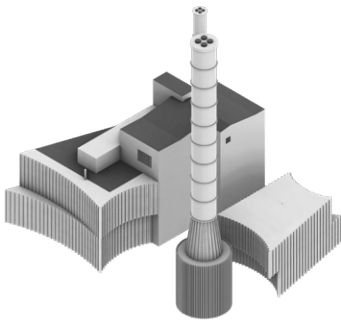
Test 2

Other tests focused around mimicking the roof shapes of turbine halls and reflecting them in the additions. Regarding the oil chimney, an echo concept was explored to expose the structure. This version was not found as suitable due to additions and new building speaking a different design language that didn't correlate to one another.



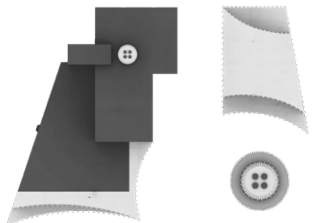
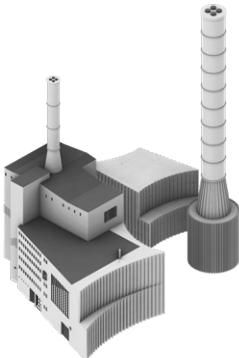
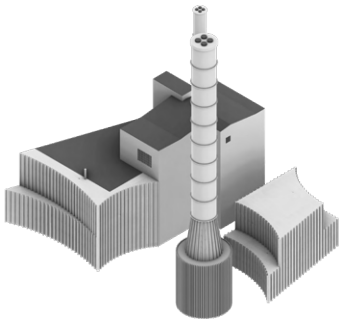
Test 3

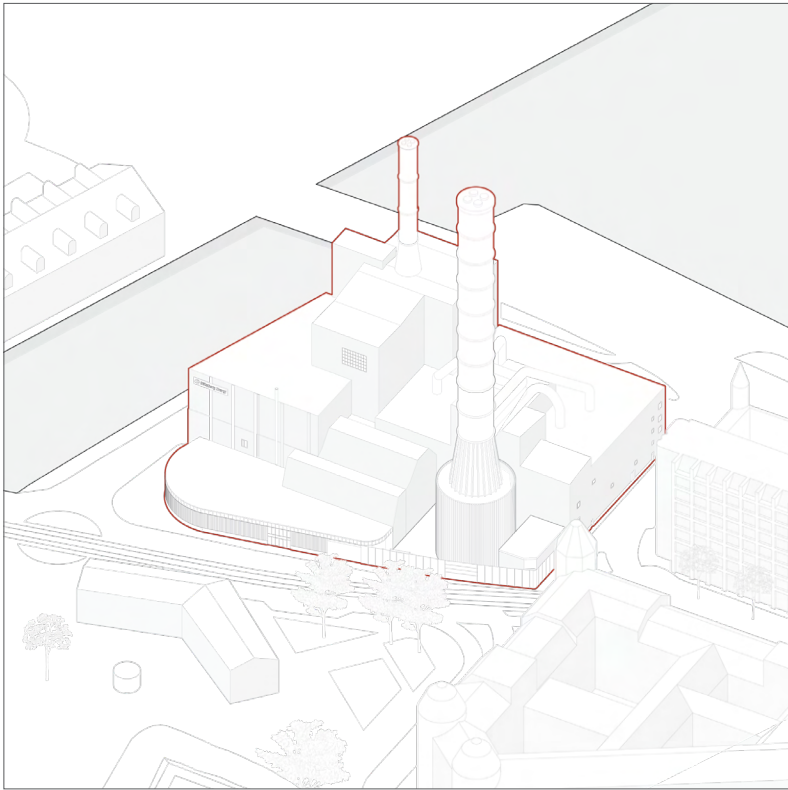
This variation explored additions to the existing building which were speaking different design languages. The shifting of the new volume embracing the oil chimney introduces a variation in rhythm.



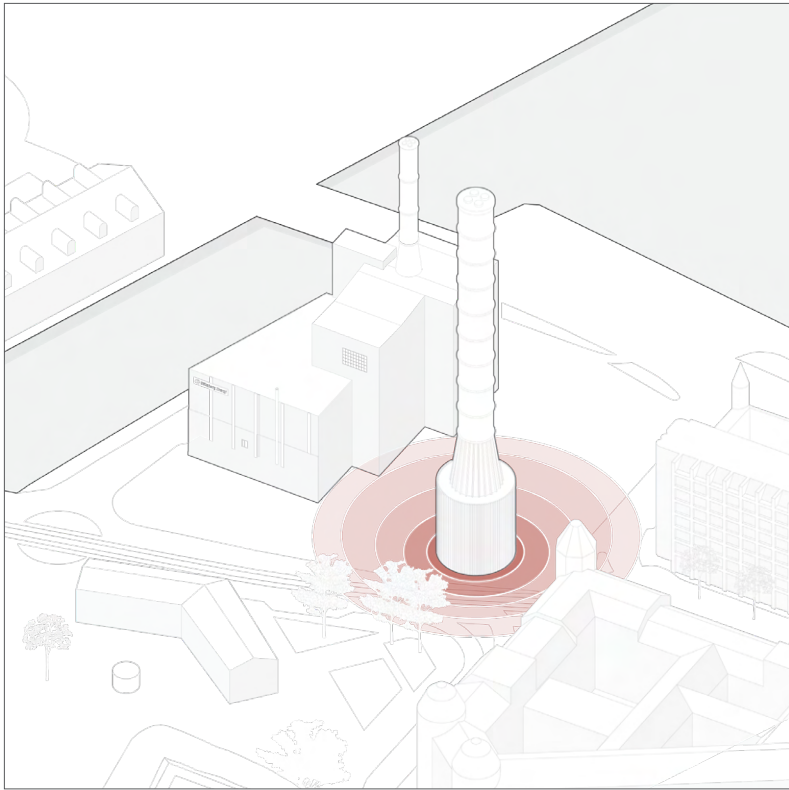
Test 4

The option that keeps a balance between organic and rectangular shapes was chosen as the most suitable one. It echoes the oil chimney with respect, giving the possibility of exploring it from every angle. The addition to the existing structures underlines and exposes the street corners and provides an inviting shape to the new addition. This design option was further developed.

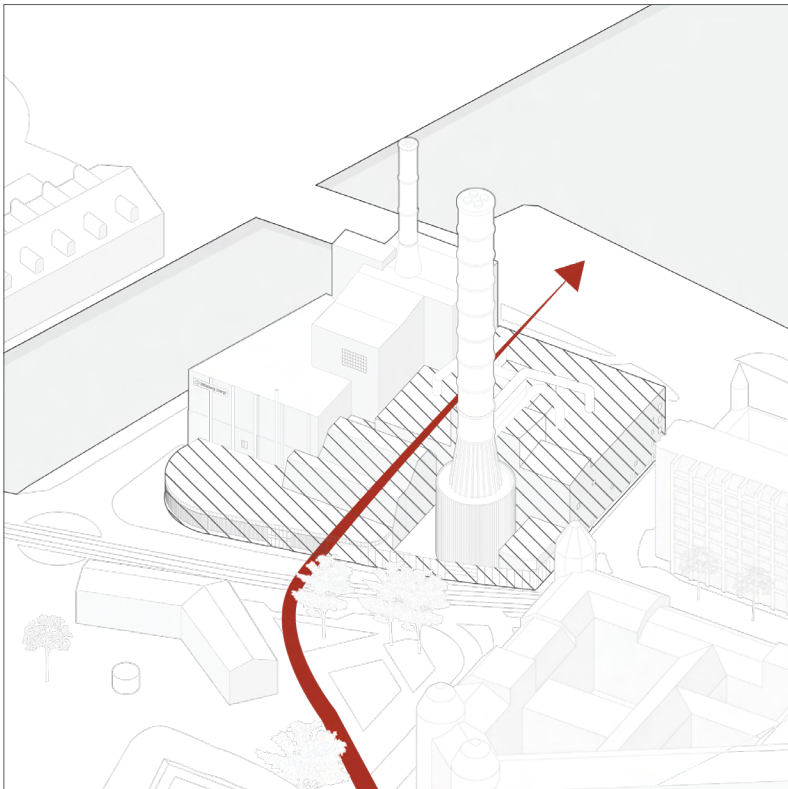




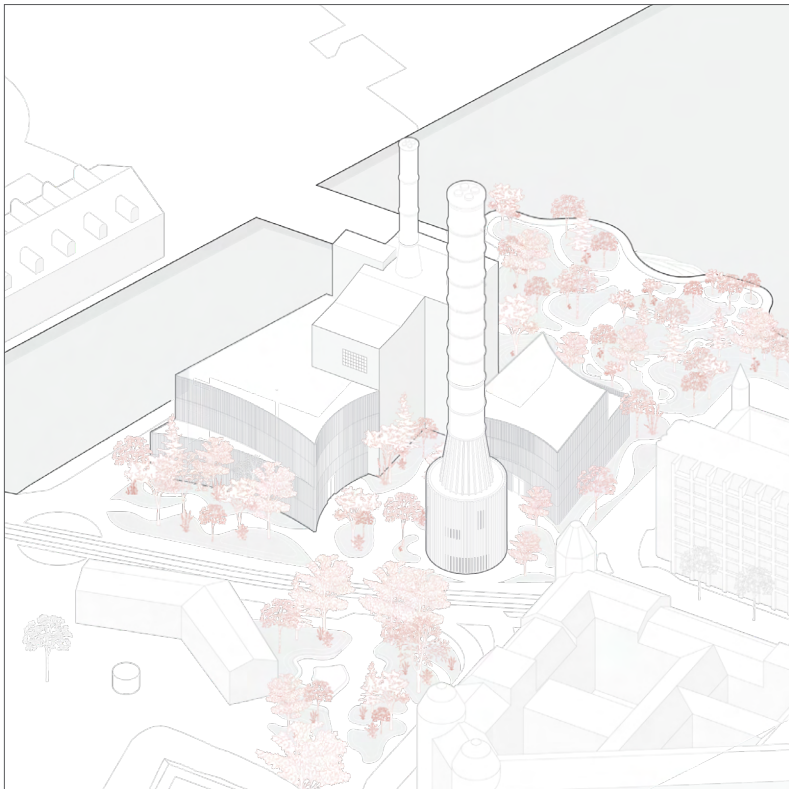
existing state
As of today, Rosenlundsverket functions as a solitary island, not allowing any direct interaction with its surroundings.



echoing the monument
In order to place the oil chimney even more in the center and elevate its importance an echo concept is adapted on site.



enabling passage
By initiating a firm cut in the structure of Rosenlundsverket a connection between the riverbank and city is established.



complete landscape
Rosenlundsverket, together with a new nature design, proposes a new, interactive artificial landscape.



Unifying landscape

The proposal breaks up Rosenlundsverket into pieces and opens it up to the public. It enables a direct connection between Esperantoplatzen and the river edge, creating one penetrable space that ends with an accessible public park on the riverbank.

The new additions are subtle, echoing the most iconic part of Rosenlundsverket - the oil chimney. The new building that will host a lecture hall and art studios is modest in its scale, not trying to compete with the existing urban tissue, but complementing it.

The landscape design language is organic, placing itself in contrast with the industry and Rosenlundsverket itself, but together creating something greater than just the building itself. New nature is being introduced on the site, nature that is able to respond to the man-made problem that we have

created in the form of an artificial landscape.

The design includes an adjustment of Esperantoplatzen, incorporating it into the transformation. Now, the public spaces are not separated, and one is allowed to pass seamlessly through all the parts of the design. The park includes different zones such as a forest playscape, quiet niches in the planting, lawns facing the riverbank, and at the same time providing a nature-immersive experience for the passerby and users of the space.

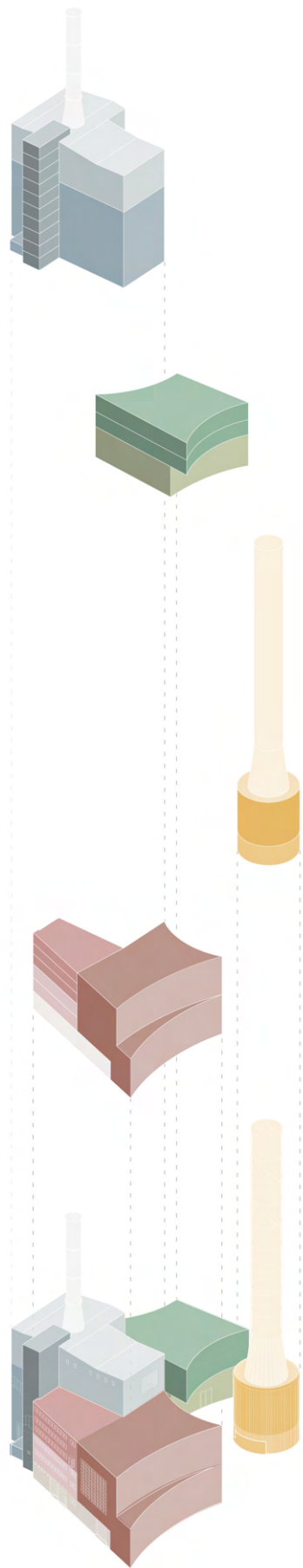
A new walkway is implemented along the riverbank that aims to connect Rosenlundsverket with Stenpiren. From the ferry port, it builds momentum when one can see the new Rosenlundsverket in the distance and approach it with excitement.



site plan, proposed design 1: 500 (A2)



view from Esperantoplatsen



Programming Rosenlundsverket

Rosenlundsverket now consists of 4 different elements, which functions complement each other. Together with the landscape design, they form a space that can be used around the clock and create an integral part of the urban realm around Skeppsbron.

The former oil chimney on the ground floor level is being transformed into a wine bar that, during summer, can spill out into the landscape niches that surround it. The chimney base is now a view terrace where one can observe the surroundings and peek at the neighbouring Esperantoplatzen. The structure is maintained in its iconic form, still functioning as an orientation point in the city.

The element, which used to serve as a steam boiler due to its shape and vertical windows opening to the riverbank, is transformed into a club that will attract nightlife to the structure. It introduces a diverse space which is currently lacking in the area.

Turbine hall together with its extension form a contemporary art museum, in this thesis called Moderna 3.0, that exposes the possibility of introducing this institution along with ones that already exist in Stockholm and Malmö. It contains spaces for temporary and permanent exhibitions as well as offices for workers, and storage space for art pieces.

Lastly, the new building, formed as an echo of the oil chimney, contains an auditorium and rental spaces for artists, which extend the cultural value of the Moderna 3.0 proposal. It aims to attract local and rising talents in Gothenburg while still being an affordable rental space. The artist's works can be exhibited directly in the new museum. It also provides a terrace with a view opening towards Göta Älv.

The various functions form a culturally oriented entity that aims to attract different age groups, where one can feel like a part of a greater, livable urban realm.

TURBINE HALL / ART MUSEUM	OIL CHIMNEY	ADDITION	STEAM BOILER
office for workers	wine bar	rental space for artists	club venue
main exhibition	communication for terrace	entrance and auditorium	communication
temporary exhibition	maintained chimney		top floor bar
storage space			maintained chimney

The design proposal offers a continuous facade towards Stora Badhusgatan and Esperantoplatzen, not competing with the height and proportions of the existing buildings. It builds on the concept of openings that are already happening along the street and provides visual connections towards the riverbank and Hisingen.

The fins placed on the facades of the additions reflect the pattern of the largest oil chimney while allowing the passerby to look inside the buildings. Due to their transparency, the line between inside and outside is blurred, granting a direct connection with the proposed landscape design.

Rosenlundsverket is perceived as embraced by new nature and sitting softly in the riverbank park, surrounded by softscape.

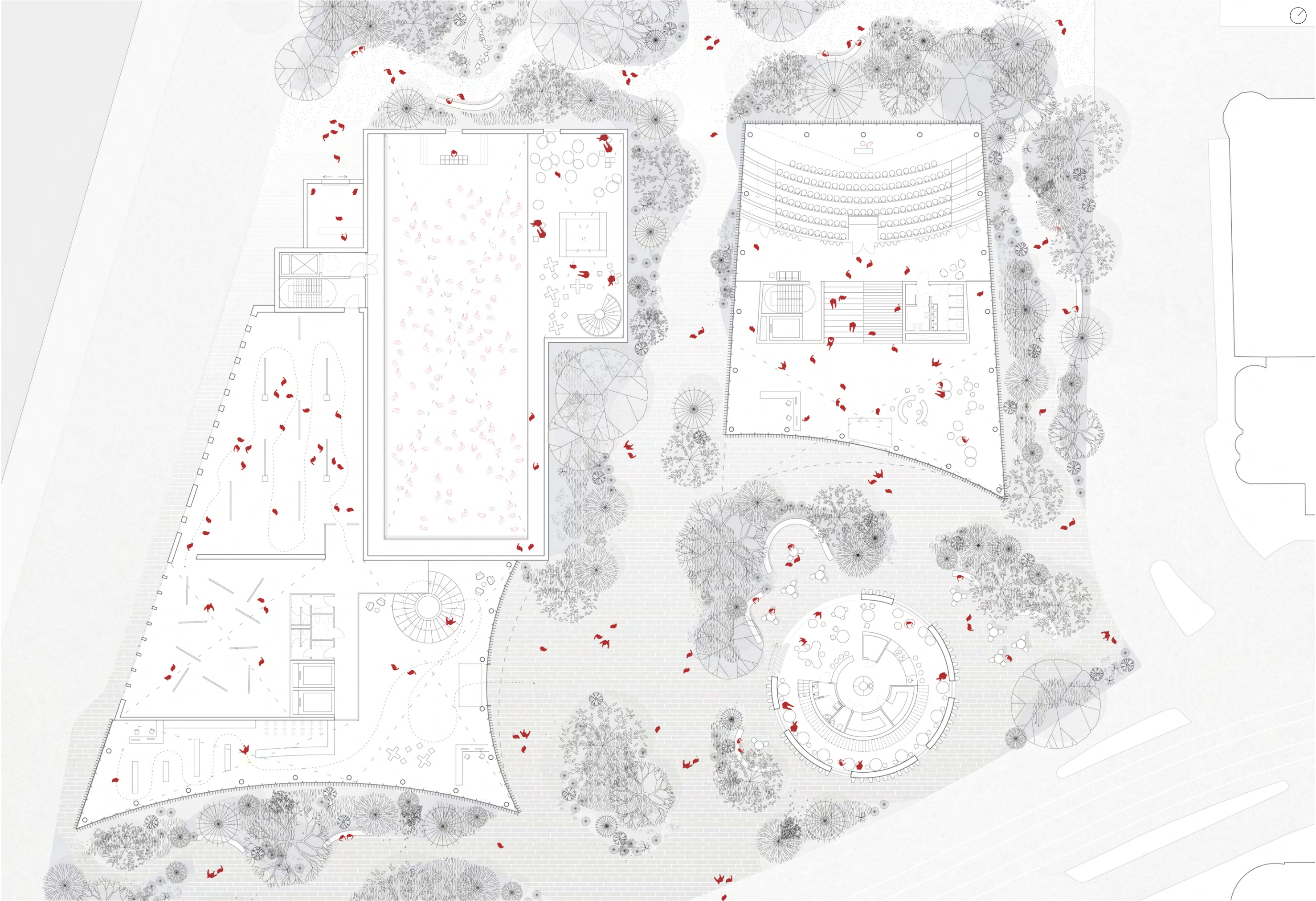


South East facade, proposed design 1:300 (A1)

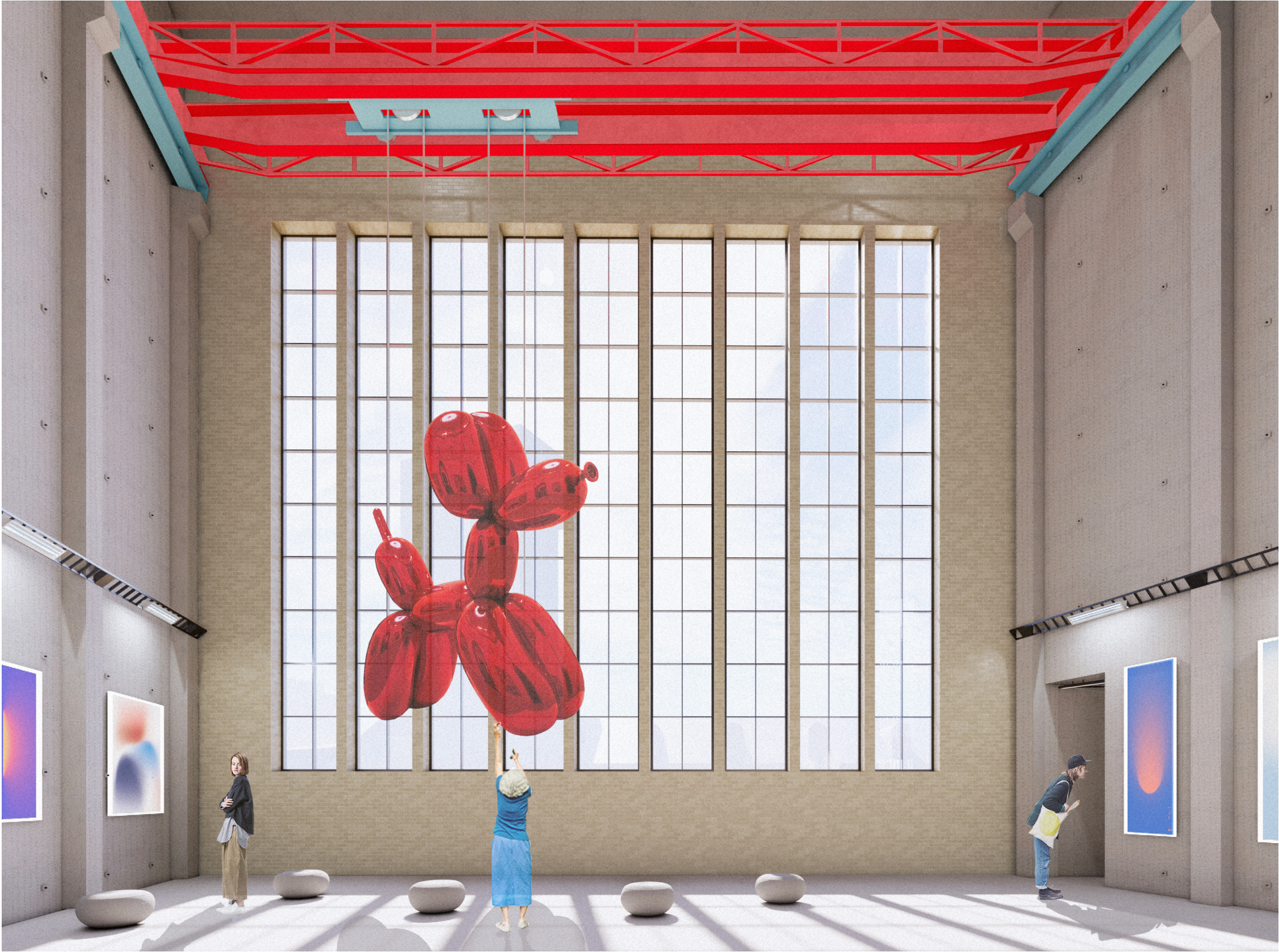
Entrance space

The main entrance to Moderna 3.0 is at the intersection of old and new. The former turbine hall is wrapped in a semi-transparent shell that lets the light in and connects the inside with the outside of the building. The existing bridge is maintained and inspires the materiality of the added staircase, which is now a visual attractor and marks the entrance to the galleries.





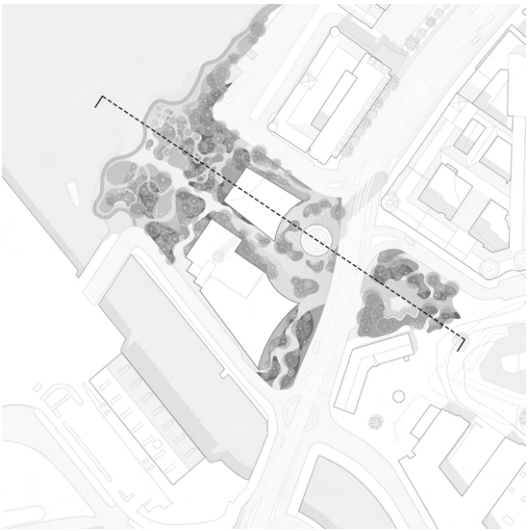
ground floor plan, proposed design 1:300 (A1)



Main exhibition space

The former turbine hall maintains its shape and windows towards Lagerhuset and Hotel Draken. Currently, it's the main part of the permanent exhibition space with large amounts of natural light coming in through the window and creating a shadow play on the floor. What was once the space with only an art piece in the powerplant is now extended to the form of a proper art gallery. The original materials are kept in place, along with a crane lift that is attached to the ceiling and now functions as a hanger for art pieces.

The connection between Esperantoplatzen and the riverbank is an uninterrupted one. The pedestrians are able to travel softly through the landscape, being embraced either by building or planting. Along the way, from Esperantoplatzen towards the riverbank the passerby is met with a variety of functions that users can choose from, depending on their desires.



section location



Revived Esperantoplatzen

Museum path

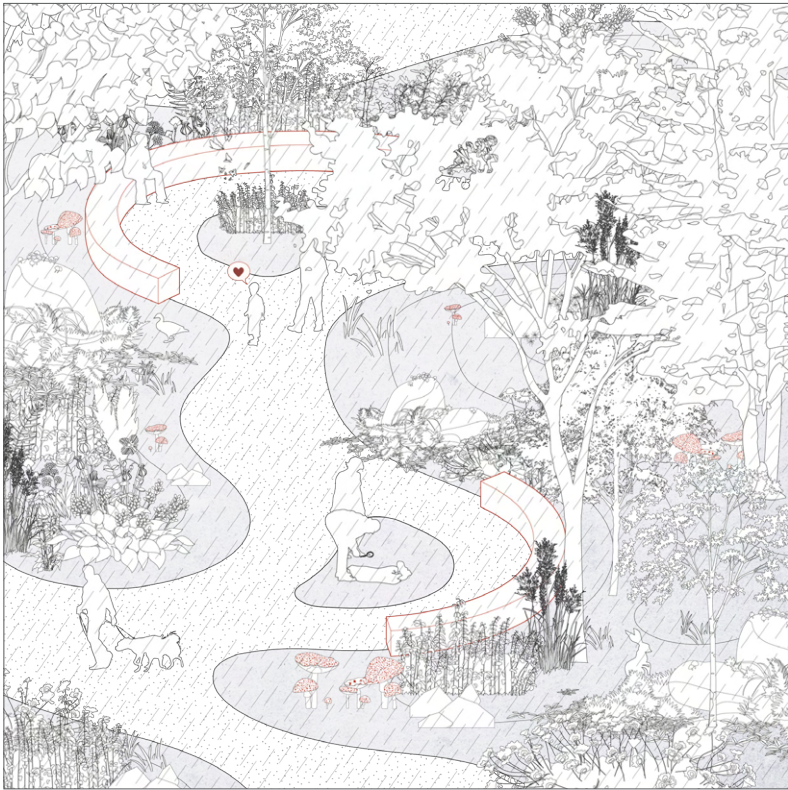
Wine bar spill out

Playscape

Quiet pockets in the park

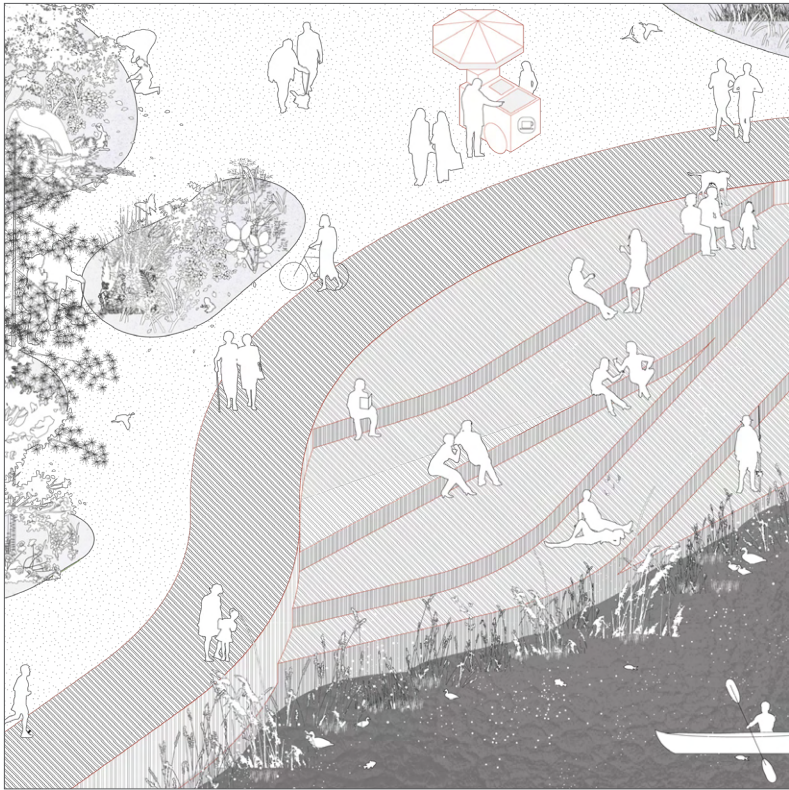
Riverbank pathway

section A-A, proposed design 1:300 (A1)



rainy day in the forest

The nature is in bloom on a regular, rainy day by Rosenlundsverket. People are in direct contact with nature and can experience it first hand.



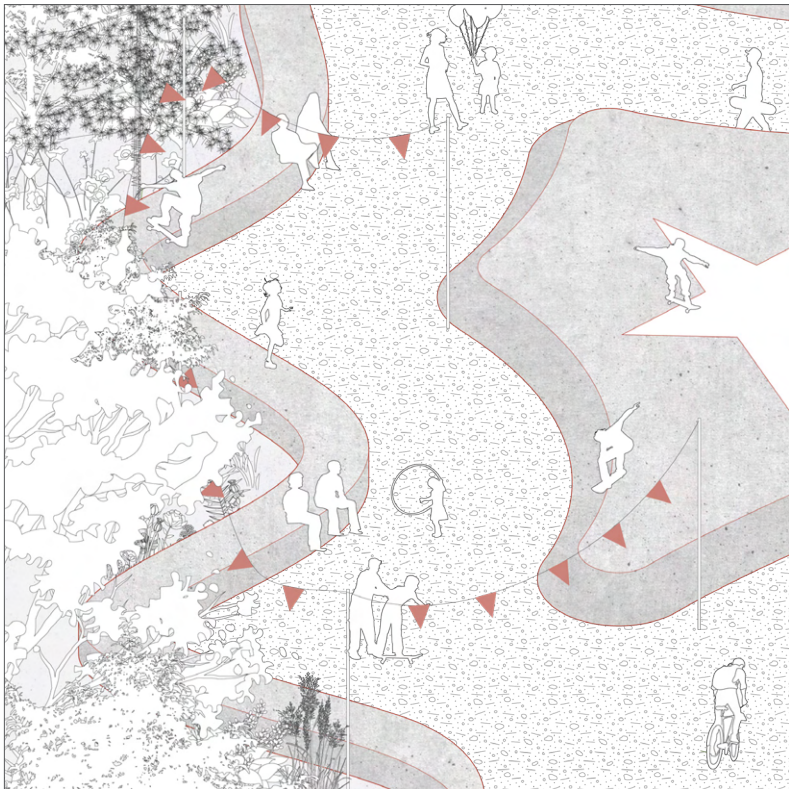
direct contact with water

The promenade and stairs enable being in contact with the river and make use of its benefits. The platforms descend towards the water and are framed by vegetation on the edges which provides a softer feel and contributes to local biodiversity.



summer evening at the wine bar

The public realm around Rosenlundsverket is lively, the inside and outside are interlaced with each other. Nightlife is in bloom around the transformed chimney.



active day at Esperantoplatsen

The revived Esperantoplatsen maintains its role as the skatepark and now is surrounded by new nature that spreads from Rosenlundsverket.



view from the river

Following a site visit, the authors learned more about the spaces they had to utilise and give new meaning to. It became clear that each of the Roselundsverket components has different features and qualities to work with. The initial belief was also confirmed: that the parts worth working with and preserving are the two volumes designed by Nils Eriksen—the Turbine Hall from 1954 and the Steam Boiler building, also from 1954 (the tallest volume).

The flooring system of the first one was easy to understand due to its current office program. On the other hand, the Steam Boiler volume was completely incomprehensible because of its complex function. This contrast led to the first idea the authors carried throughout the entire process: that the art gallery function suits the first volume (Turbine Hall), while the club function fits the Steam Boiler building.

An additional argument for this move was the presence of enormous vertical windows designed by Nils Eriksen, facing the river, which the authors felt were worth giving new value. The club program allowed

greater freedom to work with the floor plan and to utilise this massive, colourful, yet messy space.

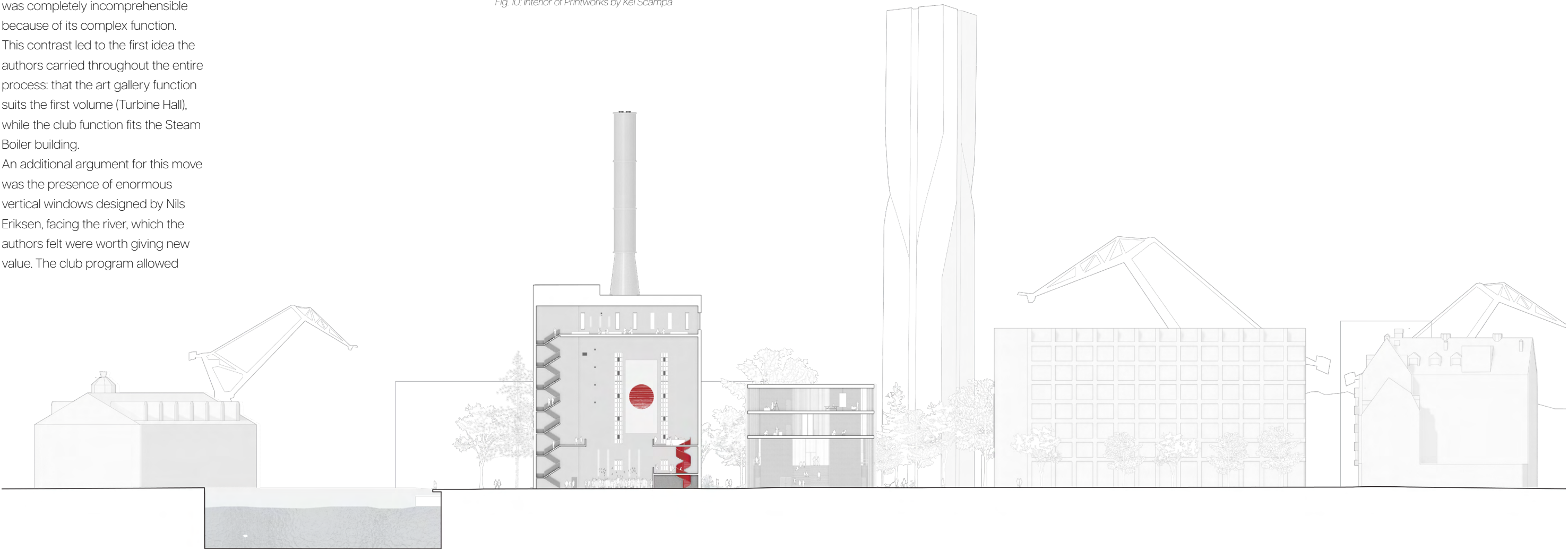
Here, their interest and knowledge of the electronic music scene became helpful. One of the most iconic clubs in the world is located in the industrial neighbourhood of South London by the name of Printworks. It is also a transformation of old industrial halls, and with its long and narrow floor plan, it resembles the Roselundsverket power plant. It served as a strong reference for how to use not only the ground floor for a club, but also the upper levels through the use of balconies and layered spaces.



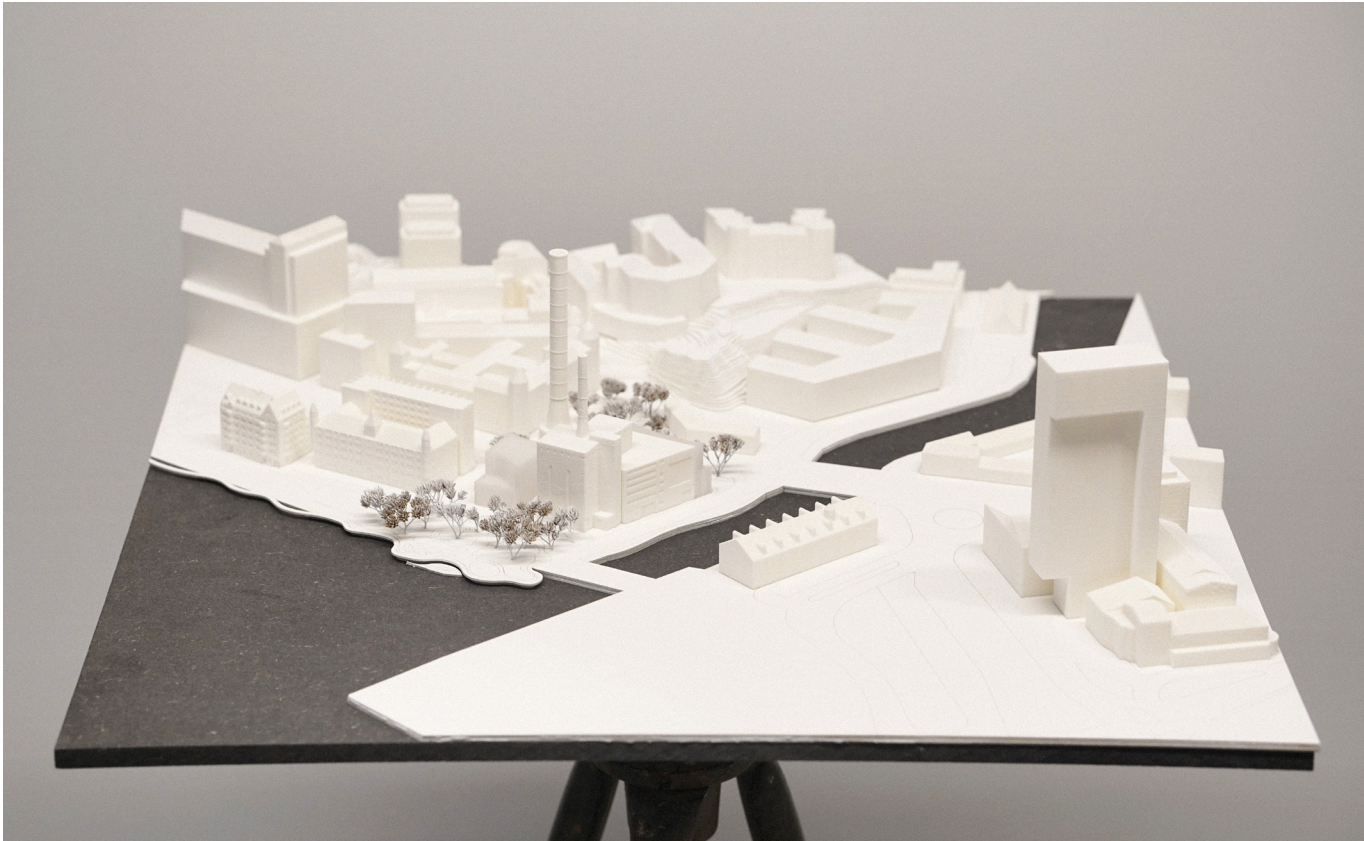
Fig. 10: Interior of Printworks by Kei Scampa



section location



section B-B, proposed design 1:300 (A1)



Physical model

A model was produced to be able to see the transformed Rosenlundsverket in its neighbouring context. The powerplant stands out now as a green island, working as an anchor point on the river's edge.

It expands its influence onto Esperantoplatsen and incorporates it into the new park. The design is to be seen as a starting point and hopefully sparking a discussion concerning the treatment of river edge and public spaces in the city of Gothenburg.

With Rosenlundsverket now seen as a part of public realm, and being incorporated into the city's tissues, it becomes a part of the common good. It's heritage is reachable and accessible to all, giving citizens the chance to become familiar with the former powerplant. The proximity to the structure and opportunity for a direct interaction aim to shift its perception and transform its image of a closed off, industrial entity.



PHASE IV - CONCLUSION

Reflections & discussion

This thesis, aims to reinterpret the definition of what we find aesthetically pleasing and proposes a new perception of that. It strongly believes that the new definition of aesthetics is represented by what we perceive as common and accessible. When heritage of Rosenlundsverket is open to the public and its identity is placed on the front of the design, this thesis argues that by becoming familiar with the powerplant in the process, the approach towards it shifts. Additionally, by placing Rosenlundsverket in a new city park, its rough and firm forms are softened, the powerplant becomes part of the cities tissue and can be seen as such.

Moreover, this thesis revolved around investigating Rosenlundsverket and approaching it not only as a solitary building but perceiving it as a part of a greater whole, in the case of this thesis, called the artificial landscape. The authors believe that the field of landscape design has been underappreciated and should be equally important to architectural and urban design. No building is a solitary entity, they always interact with the context they are placed in, and a relevant landscape design is a part of such. That is why, in this thesis, architectural and landscape design have been developed simultaneously, as they interacted with each other and influenced decision making. This thesis aimed to propose a parallel way of working and approaching the design, avoiding to place landscape as a secondary entity.

The site was a challenging one on behalf of scarce archival materials regarding the building for security reasons. Even though a site visit inside the powerplant was conducted, the complexity and irregularity of the construction made it demanding to propose a design and required speculation. If the technical drawings were to be available, the design could be altered and customized to fit the specific needs of the structure.

During the design process, it became clear that Rosenlundsverket is unique and expresses its own genius loci. Conducting spatial and context analysis made it evident how complex the site actually is. This thesis expresses the approach that every adaptive reuse project is an individual and extraordinary case, and they cannot be treated in the same manner. The possibilities of what can be developed within those sites are almost limitless, but they all shall have the same approach at its core - making the heritage accessible and, by those means, incorporating the building into the identity of the city.

Lastly, the decision was made that the proposal should be developed in contradiction to Masthuggskajen and plan for Skeppsbron being developed by Sweco since 2005. Both of them enforce the idea of building into Göta Älv, without consideration for the river and its ecosystem. The design of Rosenlundsverket and its landscape should be seen as an alternative way of approaching the riverbank and the river itself. The authors believe that Gothenburg should be proud of its river and meet it with an embracing and caring manner rather than fighting it. This comes along with the concept of redemption for the nature exploitation that came with the site of Rosenludsverket. The proposed new nature, at first glance, is wild and untamed, might not be aesthetic in a commonly accepted sense of the word. However, it brings in biodiversity and contributes equally to improving the quality of all life. This shall be the new definition of aesthetics - something that promotes the common good and is accessible to all.



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Figure 2: Von Humboldt, A. (1851) Himalaya from H. Berghaus, Physikalischer Atlas, vol.V, plate No.1

Figure 3: Elverket C1 cirka 1910. [photo] Göteborg Energis arkiv. Retrieved from <https://www.goteborgenergi.se/om-oss/vilka-vi-ar/historiska-bilder>

Figure 4: Garellick, R. (1997, p. 187). Göteborg före grävskoporna: ett bildverk [drawing]. Chalmers University of Technology Library

Figure 5: Nils Einar Eriksson (1956). *Facade of Rosenlundsverket from Rosenlundsgatan* [drawing].

Figure 6: Nils Einar Eriksson (1956). *Facade of Rosenlundsverket from Skeppsbron* [drawing].

Figure 7: Garellick, R. (circa 1970) *Staden Inom Vallgraven*. Göteborg före grävskoporna: ett bildverk [drawing]. Chalmers University of Technology Library

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