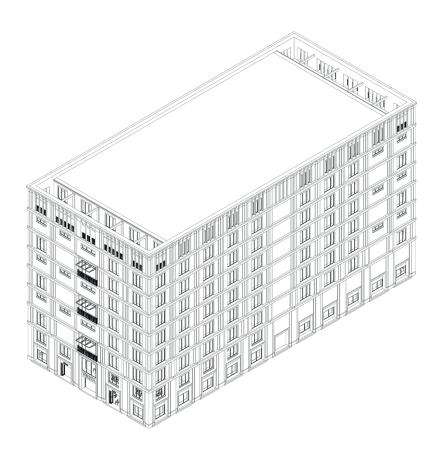
# Project journal

Flemish Museum of Contemporary Art.



Technische Universiteit Delft MSc3/4 '22/23 Interios Buildings Cities | AR3AI100 Frank van Zelderen | 5470226 F.vanZelderen@student.tudelft.nl 28.06.23

### Interiors Buildings Cities

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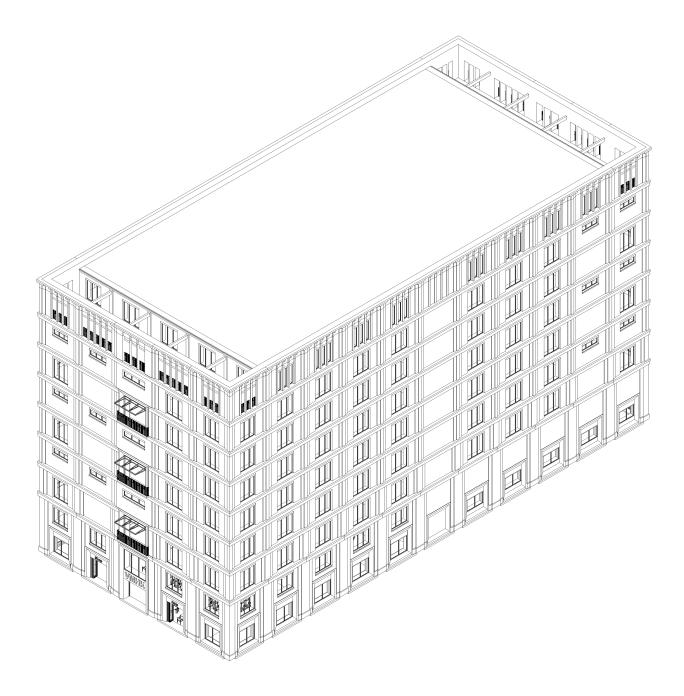
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### Introduction.

This year's graduation project of the Interiors Buildings Cities chair focused on designing a modern and contemporary art museum in Antwerp, currently known as M HKA. Through a series of precedent studies and research on the museum's collection at the outset of the graduation studio, the question arose regarding the significance of a museum in this era, aiming to grasp the intricate nature of a contemporary art museum beyond mere technical resolutions and situating the institution within a wider socio-political and economic framework. It is conceivable that it may even assume some form of an anti-museum. Hence, the research question emerged: *'What does a museum of contemporary art look like in the twentyfirst century?*".

In the pursuit of addressing this question, the process of designing a contemporary museum within the typology of nineteenth and twentieth century warehouse architecture emerged. These buildings have been previously transformed with great success from abandoned structures into contemporary art museums. However, a distinct contemporary architectural language has not yet been formed from this context. Therefore, the industrial, functional, and flexible characteristics inherent to this typology are further explored and translated into a design.

The purpose of this project journal is to succinctly summarize and meticulously document the acquired information and completed tasks, thereby constructing an individualized cognitive map and reflection of my design process. Each chapter, partitioned based on the brief provided by the tutors, will cover a section of both research and design. Combined, these elements fundamentally constitute the symbiotic relationship between research by design and design by research.



# A new museum for Antwerp.

## Studio brief 1 & 2.



Office Baroque: Doors Crossing, 1977, from the Gordon Matta-Clark Ensemble, M HKA

#### PREPARATION

#### Brief 1: Thinking an doing

weeks 1-8

The opening weeks of the Graduation Studio engage in a collective period of design research, as preparation for the main project; establishing the contexts in which it will develop, through a process of thinking and doing, across design studio and research seminar. Themes, questions and your developing positions will oscillate between these two spaces, with each informing the other. These weeks are critical in establishing the terms through which we engage with one another and from which individual projects will emerge. This is emphasised through the shared teaching and in group work. The conclusion will be a set of drawn and modelled outcomes, which are situated in a body of thinking, articulated through collective research documents and individual research plans that, together, begin to establish the concerns and ambitions of your individual project thesis. Previous examples of each will

Interiors Buildings Cities



Office Baroque: #669, 1977, from the Gordon Matta-Clark Ensemble, M HKA

be available for consultation and discussion.

The period up to the P1 will be arranged as two phases of work in both the research seminar and design studio respectively, with the outcomes of the first phase in one crossing over to inform the second phase of the other.

#### PHASE I

#### **Reading Around**

**Research Seminar: weeks 1-5** 

The first weeks of the Research Seminar will encompass a series of lectures, readings, podcasts and films that will explore the varied contexts, through which the contemporary art museum might be addressed. Through reflective and collective discussion and writing, you will develop your own understandings of the social, political, cultural and physical concerns that have defined the history, development and current conditions of such buildings and the institutions they house. The various



inputs will allow these to be reflected upon in response to a diverse range of interests and positions, which can inform and finally be translated into the physicality of the architecture for a new museum in Antwerp. Seen alongside, and in relation to, the positions which begin to emerge from design work and the study of precedent, the concerns raised here will form the basis of your individual research plans.

#### **Looking Carefully**

Design Studio: weeks 1-3

In parallel, the Design Studio will research and document eight reference projects through which those themes are translated into built form and space. These references are intended as a collective resource for the studio as a whole and it is critical that you are able to understand and take ownership of each of them. A reference you did not research might finally be much more important for your project, than the one you did. Working in groups of four, the history and provenance and architecture of each project will be carefully analysed and documented. Each project will also be set within the context of both the oeuvre of their architect and a wider 'family' of museums or other art spaces to which they might relate, or which established the traditions within which they can be understood. Each of the chosen buildings will be redrawn in the same way and at a range of appropriate scales, defined by the studio, both to understand them individually and to allow comparisons to be made between them. Alongside the drawings, groups will each make a spatial model, carefully analysing and recreating a representative image of a space for art, found within each of the precedents. These models will be designed to be photographed, reproducing the image, atmosphere and detail of the original view as closely as possible. The focus on these models will offer different scales of attention, considering for example the way in which artefacts are placed within the space, the manner in which light enters or, in contrast, the presence of the technical installations that are required.

#### **PHASE II**

#### **Analytic Readings**

#### **Research Seminar: weeks 6-7**

In the second period, the research seminars will use the drawings and models already completed in the design studio as the basis of a detailed analysis of the architectural strategies and ideas which underpin each of the given museum reference. These will be considered through the four themes around which the new museum in Antwerp intends to strategically organise itself: Forum, Research, Collection and Exhibition. In groups, you will elaborate upon what each might mean and consider the varying and contrasting ways in which those concerns have been resolved, or not, in the architecture of the reference projects. From this the studio will develop methods of explaining systems and relationships, creating a body of analytical material and diagrams for each building, which can subsequently

Interiors Buildings Cities

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#### **Spatial Ensembles**

Design Studio: weeks 4-8

The second period of the design studio will involve the study of a series of ensembles of work, by various artists held in the collection of M HKA. Having chosen an ensemble, researched it and situated it in relation to the themes and concerns already raised in the Research Seminar and through the reference projects, you will individually design a spatial ensemble - a space or small series of spaces in which the artefacts of each ensemble collection become curated. Through this introductory design project, which will be presented primarily through a detailed model, supported by drawings and photographs, you can begin to consider how works of art, of different scales and types might be presented in response to one another and in dialogue with the viewer. Questions of scale, light and material, view and spatial sequence will be explored, while the technical questions that underpin the success of such a space will also be introduced. This intense, introductory design project will offer you opportunities to consider yourself as, at once: archivist, curator, architect and audience, drawing together reflections and observations and developing understanding through a first act of proposition.

#### **Project Journal**

The research seminar will introduce the Project Journal, a document made by each of you individually. The purpose of this is to record your process of thinking, making, development and reflection over the course of the graduation studio and finally, to form a key body of evidence against which research and process can be marked at the end of the year, in the P5 examination. The Journal should be developed in an ongoing way, within a form and structure chosen individually. It should record and communicate the process of the project, including outcomes and reflections on tutorials and reviews, while also offering a space for you to reflect upon and critique the work being made and the issues that define it.

#### **Research Plan**

The Research Plan course (AR3A010) is integrated within the Research Seminar. However the outcome differs from what is written in the Study Guide and Syllabus for this Department wide course. Within the Interiors Buildings Cities Graduation Studio, the majority of the Research Plan is collectively written in groups and consists primarily of edited versions of the reading responses. Only a concise, individual reflective statement, which you will also present at the P1, is added to this collective work.

Palace

Graduation Project 2022-23



Office Baroque: Doors Crossing, 1977, from the Gordon Matta-Clark Ensemble, M HKA

#### A new art museum for Antwerp

Humankind has always made art. Through its appeal to the human senses, it has helped to shape the ways in which we perceive the world around us and, in its varied forms, offers a means beyond language through which we have become able to articulate our relationships with one another. Art and architecture have, together, constructed the settings through which human society has evolved and, on occasion, transformed itself. From churches and palaces, where authority and power were consolidated through the physical embodiment of systems of belief, to the development in the 19th Century, of palaces of culture: public museums and galleries, where forms and spaces of representation became a mirror through which culture could situate, consolidate or emancipate itself, within or in counterpoint to the prevailing order of things.

As modernity rapidly adapted the world to human needs and subsumed sublime nature within its own image, art became a means of resistance. Expanding out from the studio and the picture gallery it addressed that nature directly, capturing its often-fleeting splendours against a backdrop of relentless industrialisation and the ever-expanding city. In the 20th Century forms of architecture through which art and culture sought to make themselves available to the populations of that industrial metropolis. In time, artists co-opted and adapted the redundant structures left behind by the contemporary city's relentless process of change. Inhabiting abandoned factories and warehouses, as places from which to critique it. New forms of art developed to document, reveal and even reshape the landscapes and infrastructures of the Holocene, or alternatively chose to abstract themselves into expressions of pure colour, form or process. Art came to offer society compelling new ways through which to express ideas. Ones that might be transcendent and revelatory but could equally be disconcerting or disorientating, sometimes even dangerous.

the arts centre developed, offering more permeable, democratic

Simultaneously and perhaps inevitably however, the art world consolidated its age-old relationship with money and power. In the latter half of the last century, the white cube established a controlled, almost sanctified sensory context for its display. Here in an atmosphere of purified light and air, and in near silence, works of art attained a highly specific aura that allowed





them to be contemplated at a distance from the complexities of real life outside; further objectifying them and heightening both their emotional value and their physical one. Although many artists sought to resist it, even the most radical forms of artistic endeavour became commodified and subsumed to the service and control of the market. Meanwhile, in seeking to establish their public purpose, the influential contemporary art institutions that exhibited them adopted and adapted the signifiers and scenographies of the world of commerce, to the extent that they became, at times, hardly distinguishable from one another...and while galleries have become more like shops, shops became galleries, with high value brands establishing their cultural authority through the establishment of collections and the exhibiting of artists, at a scale and ambition often beyond the financial means of the public sphere.

This year the Graduation Studio of Interiors Buildings Cities will address this contested space of the contemporary art gallery. We will consider its societal role and how its responsibilities to the heterogenous contemporary city and its diverse population might be physically manifested in the image and presence of a new public building. As in previous iterations of the Graduation Studio, our academic project takes an actual project as its starting point, allowing the conditions and concerns of a real brief for a real client to be one key reference point in the development of both individual and collective concerns. This year we will work in relation to a competition brief for the redevelopment of M HKA, the contemporary art museum of Antwerp, on a new site close to its existing one in the South of the Belgian city.

The history, present situation and potential future of this particular museum embodies many of the larger issues and questions referred to in the opening paragraphs of this introduction. It emerged out of the activities of the Internationaal Cultureel Centrum (ICC), which was founded in the revolutionary spirit of the late 1960's, when established institutions were being radically challenged. Originally housed in an actual palace, the disused royal residence on the Meir, it proposed in 1977, the same year the Centre Pompidou opened in Paris, an unrealised plan to relocate itself to a disused office building on a pedestrian shopping street. Here it was envisaged that, alongside its museum function, the building would house a performing-arts venue, multipurpose rooms, a cinema and artists' studios, information centre, cafeteria, bookshop and a babysitting service. Two years later, following the premature death of American artist Gordon Matta-Clark, the ICC proposed to preserve his last remaining physical work, Office Baroque, as the basis for a new museum. The intention was to purchase this monumental intervention into a disused office building on the banks of Antwerp's River Schelde, and to house a new exhibition space in the neighbouring block. However, the plan was unfortunately curtailed by its pre-emptory demolition by the site's owner. Nonetheless, the Matta-Clark Collection, which ICC director Flor Bex had

#### Interiors Buildings Cities

instigated, became the foundation for the collection of M HKA, with the new museum, where he also became the first director, being established by Royal Decree in 1985.

Bex described it as a 'kunsthalle with a collection', with the latter being focused on contemporary art, from the 1960's onwards. Over time however M HKA has emerged as a fully-fledged museum, housed in a redeveloped and extended former grain warehouse and incorporating the archive and library of the Centre for Visual Culture. The rather introverted architecture of the current building is ambivalent, its interiors seek to approximate the monumental white cubes of the contemporary museum, while as a conversion it carries echoes of the Alternative Spaces movement, an anti-museum, avant-garde movement driven by artists, with Gordon Matta-Clark being one of the protagonists. The Belgian academic, Wouter Davidts, has commented that the transformation of the grain silo into a museum has 'resulted in a building that is, paradoxically, both formally indefinable and extremely determined, that looks generic but is very emphatically present.'

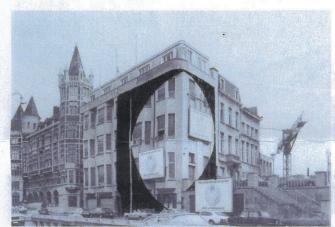
The next phase in this complex process of emergence is intended to be a move into a new, purpose built museum building, located near the current site, as an urban focus for the conversion of a monumental former dock into a new, linear public park. A key intention for this project is to consolidate the urban condition of the rapidly developing area of Antwerp South, with the proposed new museum counterpointing the major transformation of the more historically focused Museum of Fine Arts, about to re-open nearby. It will also, however, look beyond its immediate environment, through its redesignation as the Flemish Museum of Contemporary Art (VMHK). This places new responsibilities on it, to represent not only the artists and artistic culture of Flemish Belgium but also its people; a complex and potentially divisive issue, given both the traditions of cultural exchange and the current, heterogeneous population of this great port city.

The first competition was cancelled and the proposal is that it will be re-run in the course of the current year, offering a compelling sense of currency to our work. The brief for that original competition will form the basis of our exploration, but this will also be open to your individual and collective critique. Its intentions are at some distance from the radical, social, political and artistic positioning of Matta-Clark's 'anarchitecture', a fact the brief acknowledges in its counterpointing of anti-museum fascinations versus technical museum requirements, its desire for an atmosphere of both industrial roughness and domestic intimacy, and its requirement to be, at once, a robust skeleton and a volatile space of experimentation. To this we would add the profound need to address the environmental challenges we face, through the consideration of what, how and when to build. Our year will start with a period of design research, moving between studio and seminar. This will include an analysis of the museum / anti-museum context within which the project situates itself, exploring the idea and form of the modern art

### Palace

museum through a series of key references and a consideration of who its protagonists might be. We will also be examining elements of the collection itself, considering both their nature and the spatial contexts in which they might be displayed, before turning our attention to the brief for the new museum and developing individual projects in relation to it.

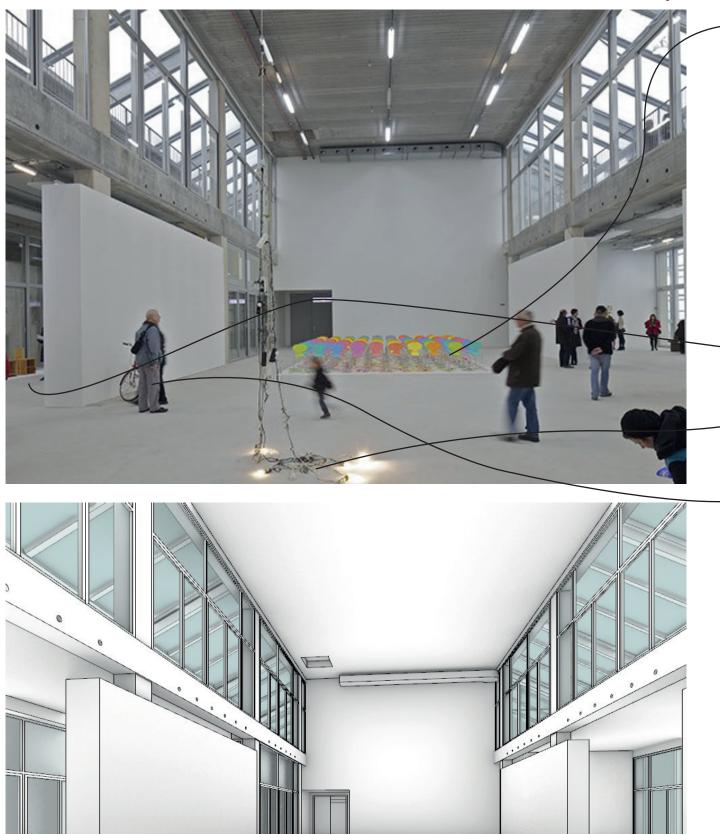
As always we will work at each scale: Interior, Building and City, although not necessarily in that order. While our project is a social, political, cultural, artistic and environmental one, these concerns will be translated directly through the material and spatial concerns of architecture, made manifest through buildings which are capable of addressing past, present and future with both a sense of continuity and an openness to change.



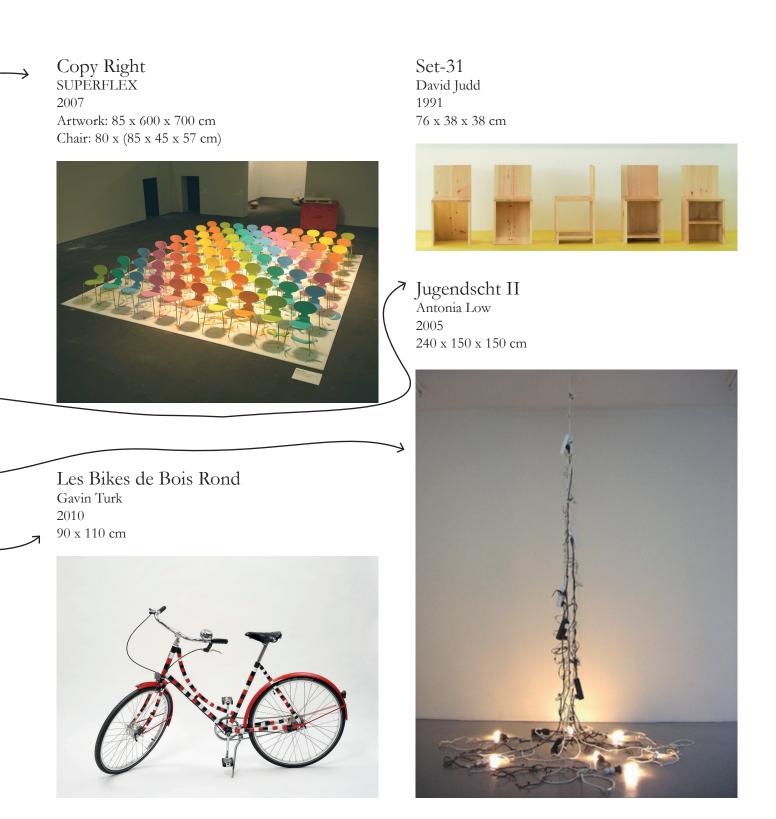
Office Baroque, 1977, from the Gordon Matta-Clark Ensemble, M HKA

Working on the precedent project of the FRAC and reading responses was in collaboration with Julia Korpacka, Misha Nesty, and Nico Bueno Vega. FRAC, Dunkirk, Lacaton & Vassal

## Precedent study.



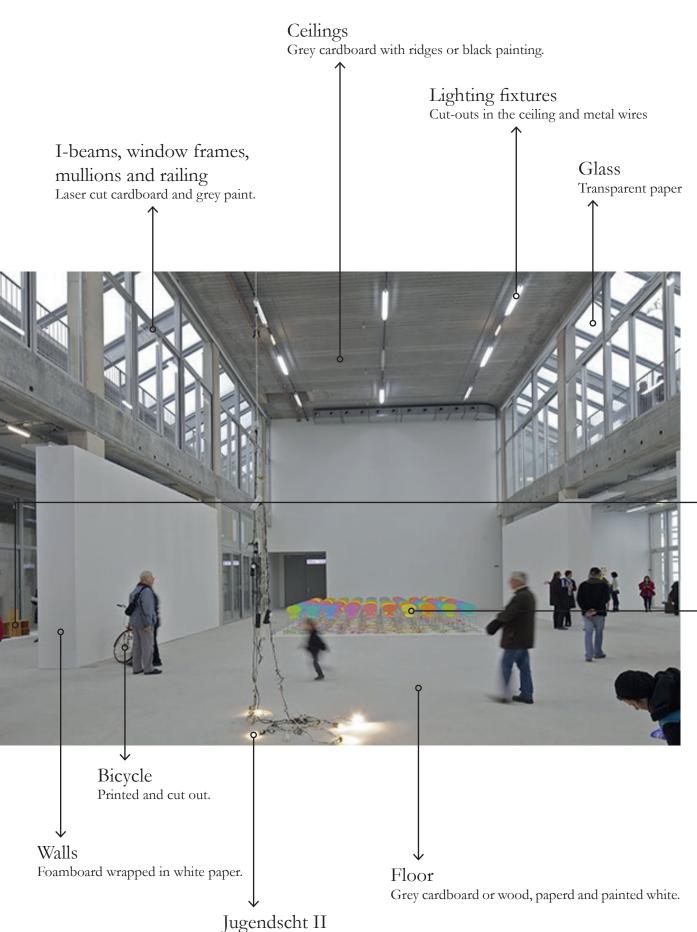
A 3D model was modelled in Rhino to decide the dimensions and scale of the physical model.



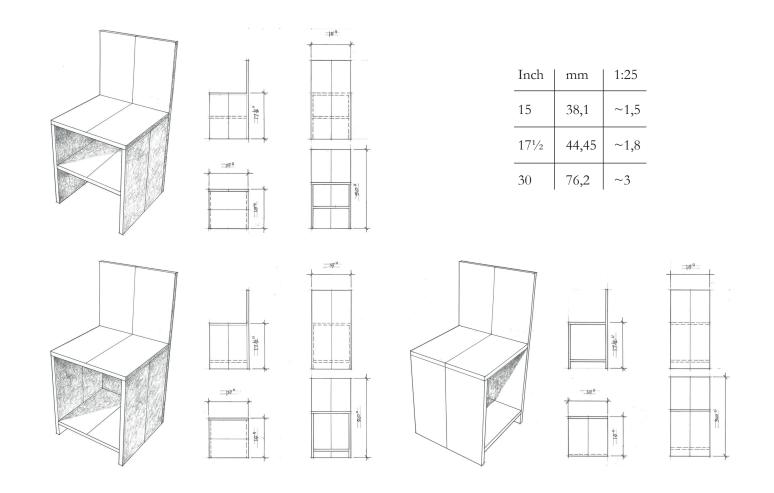
'If you pay attention to the ceiling, you will notice a specificity of the building that is particularly visible on the fourth floor but present throughout the building, the prominence of the electrical installations and other ventilation ducts necessary for the operation of the Frac. Previously mentioned in the presentation of the administration, these series of metal wires and installations naturally and visibly integrate the space and accentuate the industrial aesthetics of the building desired by the architects.'

'Sunlight and works of art do not always go well together. Works on paper and photographs are photosensitive to this type of exposure and can be seriously damaged in the long term. To avoid this, you can see on the bay windows, sea side, anti-UV filters that absorb most of the harmful rays for the works. An original way to combine natural lighting and security.'

Lacaton & Vassal



Wire and/or christmas lights.

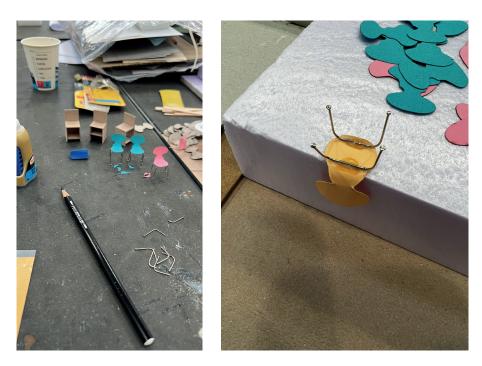


→ David Judd chairs Paper or cardboard and paint.

Ant chairs Coloured paper (cut) for the seating and nails for the legs.

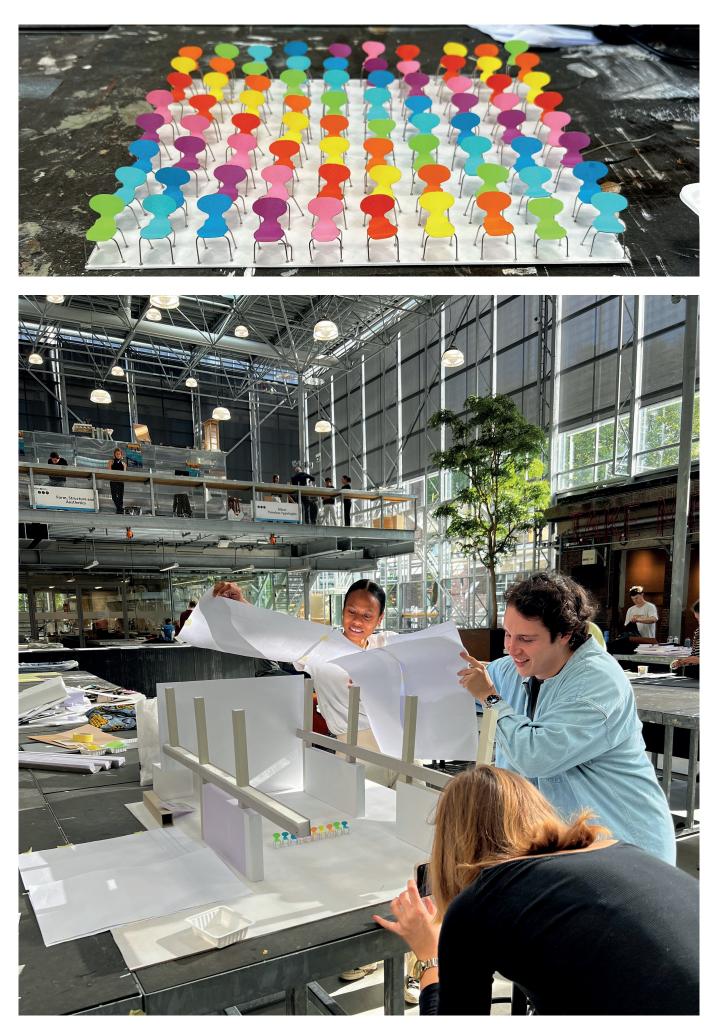


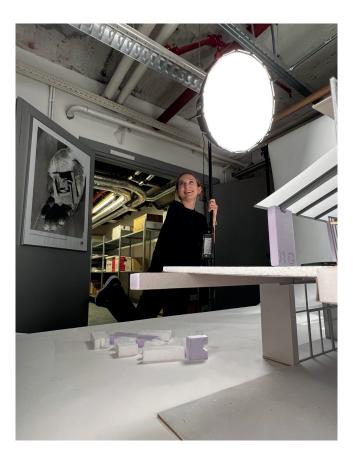




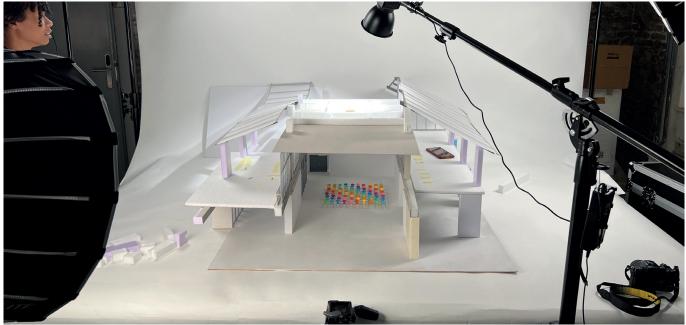
Building the walls, window frames and chairs, alongside a first photoshoot in the model hall to see if our model and camera matched the composition and colours of the original image. Besides that, we also prepared the first set of drawings.







Taking the first couple of images in the photography studio. Some of the issues we encountered were getting the correct angle, lighting and lens size.





The result from our first trial.

We finalized the model by creating some of the minor detailed objects and having a final photoshoot. We were not completely able to recreate the exact effect of the daylight and colour saturation, which needed some postediting. Nonetheless, we were quite happy with the overall end result of the image. And without a doubt, the results of the other groups were impressive!

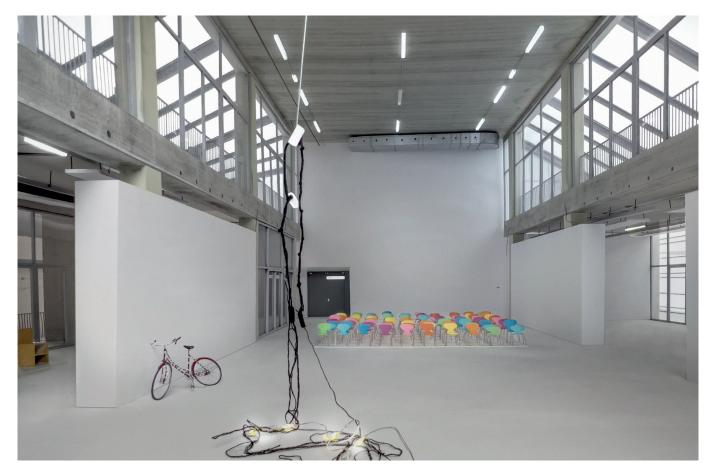
Interesting to see during the project was the modest approach of Lacaton & Vassal. How the industrial characteristic comes to its rights, by miniamilistically designing the space. The columns are partially shown, yet covered by a wall. The flexibility, thus sustainability, of the warehouse typology is granted by doing the minimum. Allowing for a future adaptability of the space.



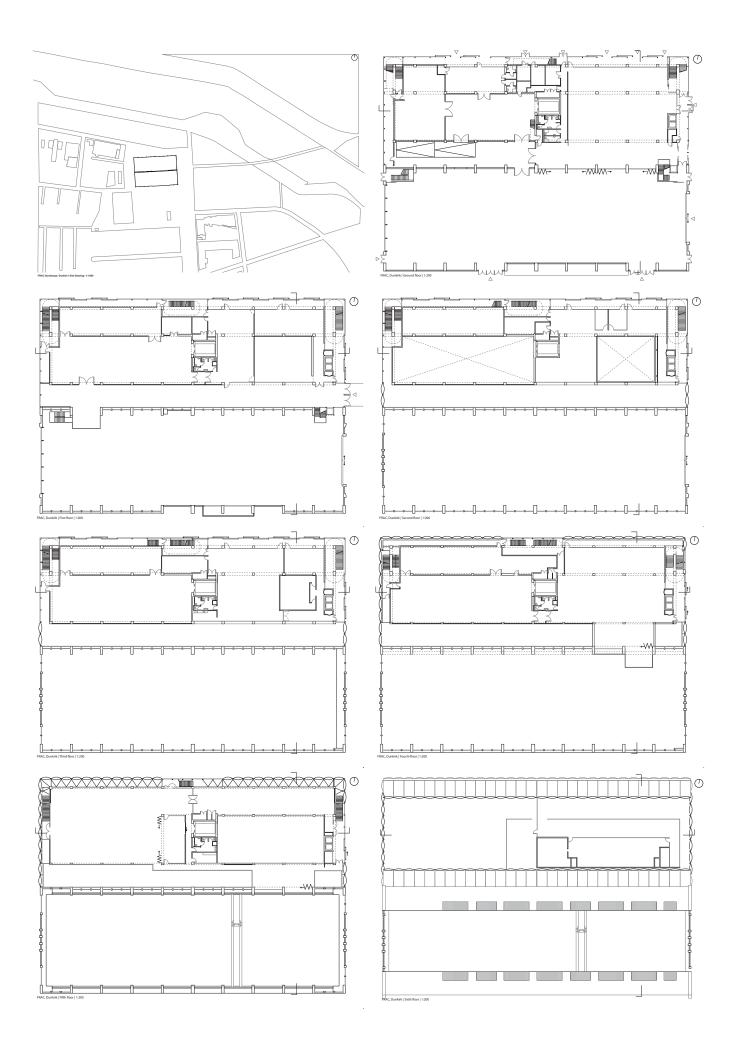
Overview of all the images from each precedent (own image).

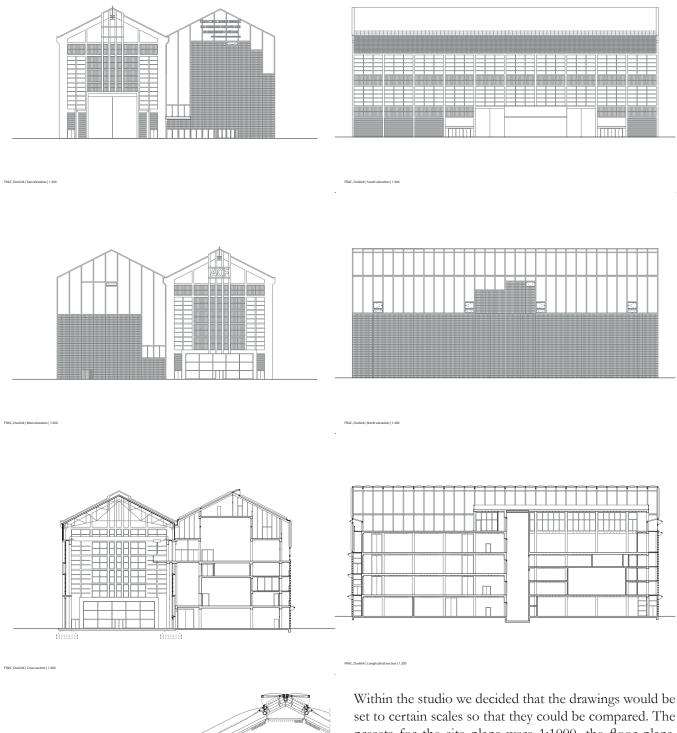


Original image (photo taken by Philippe Ruault).



Recreated image.





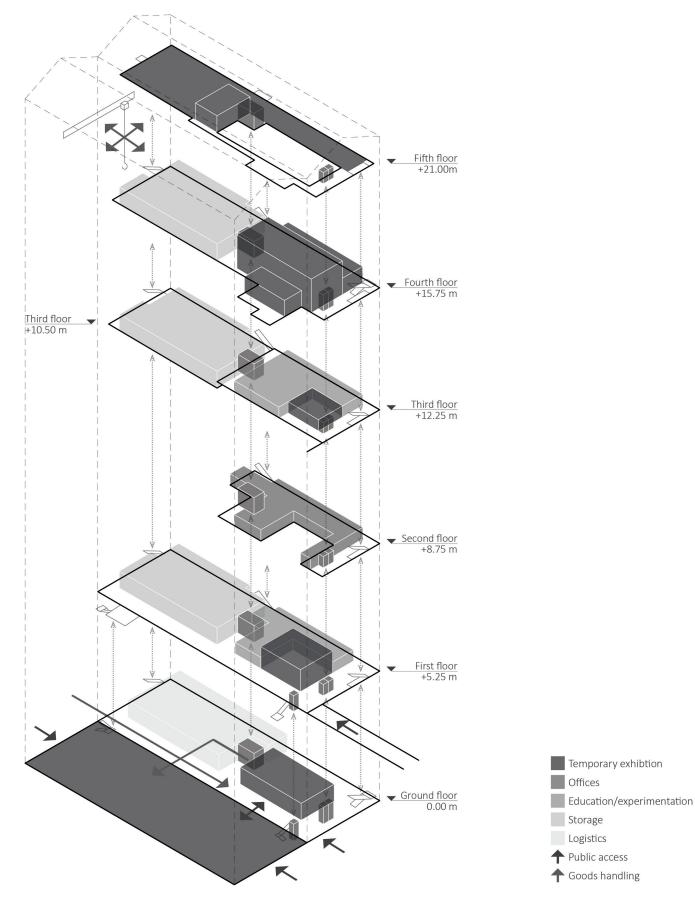
set to certain scales so that they could be compared. The presets for the site plans were 1:1000, the floor plans, sections and elevations 1:200 and for the detail section 1:50. After revising the first try outs, as a studio, we had to make some decisions on the standardization of the drawings. Namely, the way the doors, stairs, dashed lines, and lineweights would be drawn. After these adjustments, the drawings were ready for the upcoming analysis part.

Within the studio we decided that the drawings would be set to certain scales so that they could be compared. The presets for the site plans were 1:1000, the floor plans, sections and elevations 1:200 and for the detail section 1:50. After revising the first try outs, as a studio, we had to make some decisions on the standardization of the drawings. Namely, the way the doors, stairs, dashed lines, and lineweights would be drawn. After these adjustments, the drawings were ready for the upcoming analysis part.

What particularly came to my attention, was how the building operates. Aside the main forum space in the former warehouse, which allows for a variety of events. Each floor in the extension is divided into a depot/ storage space on one side and either an office, exhibition or event space on the other side. Each connected through a core in the middle and staircases on the sides.



Class discussion and work on drawing style and analysis of the precedents (own image).



Exploded axonometric of the different functions of the FRAC

**Reading** Pimlott, M. (2022). 'Visibility, spectacle, theatricality'. In OASE 111: Staging the museum.

**Podcast** Perry, G. (2013). *Beating the Bounds*. BBC Reith Lecture Series Podcast.

**Other readings** Mouffe, C. (2001). Every Form of Art Has a Political Dimension in *Grey Room 02*, pp. 98–125. Grey Room Inc. and Massachussetts Institute of Technology.

## Reading responses.

#### The Boundaries of a Museum

In his BBC Reith Lecture, Grayson Perry proposes where, in his view, the boundaries of what art is (and is not) lie. Treating the lecture as a piece of performance (art?) - one of whip, wit, and costume - he highlights some key moments that expanded or questioned the limits of art, from Duchamp's Fountain, through Piero Manzoni's Merde d'Artiste to photography and web art. By proposing a set of filters through which one can look at objects to define whether they constitute art or not, he takes the listeners around the perimeter of contemporary examples, testing his arguments. The respective boundary markers concern (1) whether an object is found within an art gallery or art context, (2) whether it is a boring version of something else, (3) whether it is made by an artist, and (4) photography, as well as a series of tests: (5) the limited edition test, (6) the handbag and hipster test, (7) the rubbish dump test and (8) the computer art test.

The first 'boundary marker' concerns the situation of the object *within an art context*, the default one being a gallery or a museum, which is something that was explored in more detail in Mark's text on the physical (and institutional) staging of art spaces. What remains undefined in this case, however, is the question of the art context *beyond* that of the establishment. Public space, nature, industrial sites, or found spaces have already been used as a context to exhibit art, and also as a response to being rejected from the confines of the institutions, the *Salon des Refusés* being just one of the historical examples.

Another boundary marker calls for the involvement of an artist. 'There is no such thing as art, only artists' by quoting Ernst Gombrich, Perry releases art from its dependence on institutional validation, leaving space for the possibility of a critique of the politics of art through art itself. It is something we have indeed been discovering through examples and references brought up within the studio through texts or recounted by tutors - Joseph Beus' 'Organization for Direct Democracy through Referendum' at Documenta 5, Tom Sachs' 'Swiss Passport Office' or Michael Asher's 1974 exhibition at Claire S. Copley gallery. These examples constitute what political philosopher Chantal Mouffe calls critical art. To her, politics (also those of art) is 'the ensemble of discourses and practices, institutional or even artistic practices, that contribute to and reproduce a certain order' (Mouffe, 2001, 99). While the performance or the installation itself may be a simple hoax or mystification, by being instrumented by an artist it becomes an act of artistic activism.

Considering Grayson Perry's context, Charles Saatchi being his patron, himself being part of the Royal Academy – he is very much within the accepted canon and in the centre of the contemporary British art scene. He is not much of another pioneer but rather an 'established controversy'. However, not many artists in his status also position themselves as observers of the conditions of the art world. Could we call Perry a 'reflective artist' then, building on the image of a reflective practitioner in architecture?

While Grayson Perry deals with the boundaries and the mere definition of what art can be, Mark Pimlott takes a look at the institutional motivation of a museum from a historical perspective and questions the organization of the entity and its role in defining the context of what art is simultaneously. Conceived 'very much like the palace (...) as a scaffolding for the projection of ideas, ideologies, and values' to articulate 'the authority of its possessor (Pimlott, 2022), the museum has always affirmed its role(s), according to the author, through the relations it curated between its content and its public. In other words, while the definition of what is considered art is related to the viewer's perspective and the object, the museum serves as an articulation, or even facilitator, for this relationship. Over the years, especially throughout the 20th century, it has been stripped of its perceived neutrality and positioned as a judge implicated in socio political and economic biases. Through Pimlott's narrative, different layers emerge within the role of a museum.

The role of the filter. One must consider the institutional capacity of a museum to define what is considered art. We should acknowledge its role as an arbiter in which voices and stories are given a platform through the pieces displayed in gallery spaces, and, at the same time, which stories or narratives are being silenced. Contemporary museums have agency in dictating what later on becomes relevant (art) history.

*The role as a public entity.* While art is at the front stage of the institution, the backstage is embodied in a multiplicity of disciplines. The gallery spaces are reliant, to various degrees, on education programs, events, gift shops, and cafes. This might suggest that in recent years, regardless of the nature of the museum's funding, the role it holds within a city is not only about art but also about leisure. In some ways, the boundaries of what the museum can be have been blurred just as much as the boundaries of what art can be.

The role of the stage. The concept of the modernist white box creates an illusion of simplicity and neutrality. It portrays a profession of clean walls and muted tones with a façade that almost makes you think the politics of art are as simple as walking in and hanging something on the wall. As we have seen in the De Pont museum (*figure 1*), this can even be evidenced in the floor plan of museums where you can see offices completely separated from galleries and a clear contrast in scale, these little spaces shoved to the back end. In the context of our studio, it would be especially interesting to see the backstage production of the art display. Sometimes it requires only a slightly heightened sensitivity to the surroundings, noticing the cleaning of toilets happening in the back of a group of mesmerized art enthusiasts (*figure 2*).

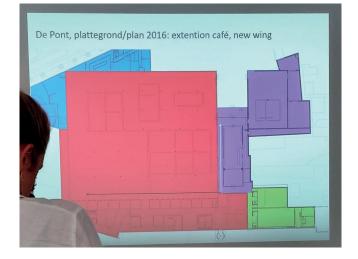


Figure 1. Schematic plan of De Pont museum in Tilburg. The gallery spaces are highlighted in red and the offices in blue (photo taken by Misha Nesty).



Figure 2. Sometimes taking a step back allows catching a glimpse of the backstage of the museum, here during our trip to De Pont (photo taken by Misha Nesty).

**Reading** Klonk, C. (2009). Spaces of Experience: Art Gallery Interiors from 1800 to 2000. Yale University Press.

**Podcast** fDi (2021). The Bilbao Effect #1: Bilbao, Spain Guggenheim Bilbao's director general discusses the city's world renowned transformation.

**Other readings** MacLeod, S. et al. (ed.) (2018). *The Future* of Museum and Gallery Design. Routledge.

Obrist, H. U. (2014). Ways of Curating. Farrar, Straus and Giroux.

#### Curating the Experience

In 'The Dilemma of a Modern Art Museum' Charlotte Klonk reflects on the changes and challenges in the display of modern art in the post-war period. Through the case of Documenta in Kassel, she explores how curatorship and spaces of the display of art can also reflect larger changes in culture and society. The Documenta has functioned almost as a festival in its 'temporary permanence' in terms of not only the contemporary art it shows but also in the ever-changing curatorship and the display spaces themselves. As Klonk writes, it was able to "achieve an institutional quality by taking place at regular intervals in the same location" (Klonk, 2009, 173). Conceived as a *once-in-a-lifetime* experience for its visitors, it is comparable to the Venice Biennale in its format but curated independently of national issues as a political statement and an institution of art simultaneously.

Bringing curatorship to the foreground, the Documenta played an important role in the curator as hero approach to displaying art. The text outlines how, in the post-war context of West Germany, Documenta has established a name for itself as the reflection of the Zeitgeist. The politics of (Western) European reintegration embodied in the ambitions of the exhibition had a direct influence not only on the content of the exhibition but also on the spatial design of the display spaces, as well as the spirit in which Documenta was sold to its public. The perception of consumerism as democratic encouraged the adoption of Americanised trends and techniques in both art production and display, and reinforced the cultural and aesthetic separation from the Soviet Bloc. Through immersive installations designed by its curator and 'founding spirit' (Klonk, 2009, 176) Arnold Bode, often competing with the art exhibited within, the Documenta succeeded in both attracting a wide public and acting as a propaganda tool in conceiving a modern, Western, commodified future. Often compared to his retail projects, the spaces of the Documenta softened the borders between art and the ideas of modern living, creating this sense of familiarity and focus on user experience. In some ways, the evolution of the Documenta has preceded the trends of curating everything, which Hans Ulrich Obrist lists in Ways of Curating': from music festivals, clothing brands, and retail experience, influencers curating their lifestyle content, to interior designers curating hospitality decor.

Is the white box the culmination of the act of total (lifestyle) curation, where we, the public, are also on display? Following an unwritten code of conduct, or dressing in a particular way as per an Instagram trend to match one of the artworks in the museum? Richard Sennett reminds us that human feelings of exclusion

and indifference are not only tied to the march of capitalism and its processes but to the *physical built* forms capitalism produces (Sennett, R. as cited in MacLeod et al., 2018, 2). The white cube, through the processes of commodification of contemporary art, its physical characteristics and the semiotics it embodies, is the ultimate exclusive experience. Dressing in a particular way, you could either stand out within that space or even become a part of it, all while looking at art.

Picture-perfect art and its display, as well as 'curated' visitor experience, are now powerful marketing tools that further blur the boundary between art and retail. Given that the traditional boundaries of the shopping experience are shifting as well, and our aesthetic taste is intrinsically linked to our material desires, the design of art and retail displays feed off each other like never before. We have already discussed the similarities between museums' efforts to keep the visitors in (and spending) for as long as possible by inserting cafés, gift shops (or now rather concept stores), and rooftop restaurants between its gallery spaces, and those of a shopping mall. Suppose an art gallery is not much different from a luxury retail boutique which everyone can enter and experience but only a selected few can actually own what is sold there. What is a museum's equivalent in retail terms?

A white box seems to be marketed as a type of space closest to those of art production, and therefore closest to the artists' intentions. While meaningful curatorship only appears to make sense in close collaboration between a curator and an artist, there is tension between the pure white box, the curator, and the artist. What began in the wake of all-encompassing installation art as a power struggle between curators and artists wanting to fill and transform museum spaces, now the focus has shifted towards the architecture of the museum (the shell) and the inside of the museum (the display and its content), as illustrated by the podcast on the Guggenheim Bilbao. If the architecture of a museum is flashy (especially compared to its urban setting), just like a 'celebrity artwork' it can attract multiple people. This experience, however, remains only superficial if the main attraction of a museum is its landmark statute; people only need a picture with it from the outside without experiencing what is on the inside.

Within Documenta, there was a feeling of un-rootedness when it came to the artworks. When the first Documenta was held the museum was not fully renovated yet. The brick walls were whitewashed and the windows were covered with milky white plastic curtains, making it seem like the paintings were floating in the space. The whitewashing of the brick walls combined the old museum with new interior decoration materials, signalling a new birth of not only the museum but Germany as well. The Documenta was an escape from the outside world and entering a dreamlike experience, helping people forget about the Nazi past. Both Documenta and Guggenheim Bilbao represent efforts of revitalization after major processes negatively impacting the cities; Kassel was bombed during WWII and Bilbao lost its industry and thus its economical power. This meant that the design of the museums had to bear symbolic power, however in different ways, like the alienated shape of the Guggenheim and the recurring events of the Documenta. Neither Tate nor MoMA did have such a decline but instead shared the cultural and economical influence from the metropolitan status of their city; London and New York. Thus, unlike Documenta and the Guggenheim, they did not need to become iconic but rather had to fit into the status of the hosting city. Following these examples, contemporary museums can either be very iconic, trying to mark and boost their city, or they can be part of the larger picture of an existing (already popular) city as per a larger political agenda. In the context of our design research, it is interesting to question what are the alternatives in contemporary museum production.

**Podcast** fDi (2021). The Bilbao Effect #1: Bilbao, Spain Guggenheim Bilbao's director general discusses the city's world renowned transformation.

#### Curating the urban development

The Bilbao effect is commonly used as an example of how a piece of *iconic* architecture can turn a forgotten city into a popular metropolis. However, this narrative can easily be misunderstood as if the sole insertion of the museum reshaped the urban condition of the city, when in fact, it serves as an example of how a city's urban conditions reframed the way a museum can be conceived. Juan Ignacio Vidarte, the current deputy director of the Guggenheim Museum Bilbao, summarizes the political agenda behind the introduction of the building in the 90s as an agent of economic development within a plan of urban renewal (2021). In other words, the museum was just one element, essential nonetheless, of a wide set of interventions to bring Bilbao back to life. As such, the undeniable success of the project goes beyond the intervention by Gehry and can be analyzed as the result of different layered socio-economic dynamics.

A symbiotic improvement. By the 1990s the absence of previous industrial production in the area had turned the city into a place of steelwork, shipyards, and violence. The revamping of the urban environment was then developed as a plan that involved, among others, elements like cleaning the river, a new metro line, and the introduction of the museum. As such, without the necessary improvements to the city, the museum would not have been able to catalyse such change as a standalone project. In the same way, it is doubtful that the urban improvements alone would have put Bilbao on the map. The Guggenheim was thought of as an investment that was not a big monetary influx, according to Vidarte, when compared to the rest of the project. The economic origin of the museum is reflected simultaneously in the choice of Vidarte, who has a graduate degree in education in economics and business studies, as the managing director for the project.

The franchising of culture. The objective of catering to a global audience was reflected in the business model of establishing the museum as part of the Guggenheim foundation. Consequently, the decision reduced the difficulties that the government would otherwise have to tackle if they would have tried to set up a collection from scratch. The established name of the foundation serves as an unofficial seal of quality on the exhibitions in the museum and entices people to visit, while the governmental subsidy for its annual operations puts the American foundation in charge of organizing temporary exhibitions to rotate its permanent collection. The success of the strategy shows in the 85 per cent of visitors that walk through the building being foreign. As a result, beyond international recognition, the museum has become one of the biggest influxes of cash for the city.

The identity paradox. Due in great measure to the nature of its design, but arguably also due to the use of the permanent art collection of the foundation, the project has been criticized as not Basque or Spanish enough. However, when looking at the founding intentions and the urban revamping project as a whole, it's easy to understand the building was never meant to blend in, it was always intended to ruffle some feathers. The debated design by Gehry can also be understood as an appropriate response to the role this particular museum had in this particular city. While it fails to evoke or reference directly the vernacular architecture of Bilbao, it becomes a representative element of the previous decay of the city and the effort invested in the urban intervention. It's representative of the identity of the area towards the future by responding to the problems of the recent past.

This particular case raises an interesting dynamic in the architecture of museums. The built object functions as a work of art in itself that almost positions the museum as an art installation when understood from an urban scale. Simultaneously it opens up the debate of how entangled is the collection of a museum to the architectural identity of its building. Is there a division between the exhibition spaces and the outer skin of the contemporary art museum? Should it be treated as a white box with *iconic* skin?

**Reading** Barat, C., English, D. (2019). *Among Others: Blackness at MoMA*. MoMA.

**Podcast** BBC. (2021). *Thinking Allowed: Culture and Privilege.* 

**Other readings** MacLeod, S. et al. (ed.). (2018). *The Future of Museum and Gallery Design*. Routledge.

#### A Culture of Privilege and the Rest

Orian Brook and Laurie Taylor discuss in a brief and synthesized manner the systematic inequalities embedded in the "culture" we produce and the disadvantages women, people of colour and working-class citizens face when attempting to join these institutions. Put simply, upper-middle-class men have four times the odds of having a cultural job compared to the working class. When someone from these groups makes it into the industry, the argument of positive discrimination and tokenism minimises their achievements and questions their success. The unspoken expectation of what someone working in a cultural job must look like turns a system of alleged inclusion into passive segregation. Inevitably, if cultural institutions are conformed by a selected few, the role of telling and recording stories through his narrow idiosyncrasy conceives an equally narrow narrative that seeps into the collective consciousness. As a result, the feeling of exclusion can even reflect on who feels adequate to consume culture in the first place, leading to a restrictive idea that is only meant for the upper class. The question then arises of what is the actual value of this "culture" that reflects social and spatial inequalities and could potentially result in the materialization of hostile spaces.

In Britain alone, the people who work in art or culture jobs are predominantly white, with 95% working in television and another 91% in publishing. The statistics of people not absorbing or visiting cultural institutions are even worse, with only a fifth of the population going to an art gallery and a twelfth going to a classical music concert. Only seventeen per cent make art, sixteen per cent in crafts, and twelve per cent in musical instruments. From a social perspective, museums could take on a more diverse curatorial approach when taking on artists or addressing the communities they're surrounded with. The bourgeois notion that art is exclusive to the higher class prevents communities from relating to the content of exhibition halls and subsequently from having an easier time being interested in attending such spaces. If people can identify themselves, and their culture or relate to the artists' background, they could be enticed to feel welcome and visit these institutions more regularly, thus fostering spaces of inclusion rather than segregation.

'Among Others' deals with the issue of exclusion and misrepresentation by outlining the black history of the MoMA and situating it through a historical critique of the institution's approach to curating art. Written by Darby English who was an Adjunct Curator at MoMA between 2014 and 2020 and Charlotte Barat, MoMA's curatorial assistant, the volume puts forward a dense synthesis of meticulous analysis of newspaper articles, internal communications, and oral history, in large parts compiled for the first time. The position of the authors as part of the MoMA arises from the possible conflict of bias juxtaposed with inside access to information. However, Amy's comment about Darby English quitting MoMA as their curator because of this text, or rather the institution's (lack of) reaction to it speaks volumes. Moreover, the authors admitted that despite their 'insider' position they were unable to access many of the institution's records. The text seemed more like a tickin-a-box for MoMA, not showing interest in systematic changes or how to improve. It is, in fact, a consistent reaction with the track record outlined in English and Barat's research.

The influence of modernist thought we know from architecture was also present in art and art institutions, such as MoMA. The belief in the neutrality and inclusion through the universality of a museum (and its 'international style' architecture) concealed, for a long time, that 'at the end of the day, regardless of the power and influence they claim or acquire, art museums are human systems: unstable, grounded in bias, habitual, and difficult to modify' (Barat & English, 2014, 15). The text points to a reactive approach of the museum to black art, fluctuating between total neglect and pioneering ideas, and a disjunction between the message being told and the actions being taken. A dynamic of two steps forward and then three steps back. Every showcase of black art was characterized by an apparent lack of drive toward a comprehensive and truthful interest in the artist's cultural background. For instance, the exhibition commemorating the assassination of Martin Luther King was approached initially with a disproportionate amount of white artists in comparison to coloured artists. Additionally, as the number of back artists grew the discussion of separating their art from the other white artists was raised which in principle does not align with the goal of inclusion and equality that MLK stood for. Such a tokenistic approach to social responsibility kept reappearing whenever race and inequality were a 'hot topic' and was reinforced by the lack of meaningful relationships with black artists in the co-curation of MoMA.

One of the questions the text raises in the context of our research is why it is important to write institutional history. Museums are the archetypal malleable institution; they have come to speak of civilization, modernity, democracy, and economic prosperity (regardless of the realities), and any self-respecting international city must now be home to museums and galleries of international quality, ideally on a waterfront site (MacLeod et al., 2018, 2). **Museums are history writers; not only of art history but rather art as a reflection, commentary**  and interpretation of the social, political, economic, and cultural reality. As their task is to collect and preserve it, ultimately, the museum collections become a record of history for generations to come, embodied in art. Therefore, permanent collections have particular importance. The questions of buying and collecting vs loaning and displaying challenge the institutional responsibility to balance the diversity of art and artists held in museums' collections. When only portraying a fraction of art and art history constantly, there is little attention paid to other works that have been on display temporarily. Permanent collections have more of a hold in a museum, it is something that will always be present. By displaying the art made by people of colour predominantly temporarily, there is neglect in the whole part of that history and culture. Furthermore, besides their role as history makers, the increasingly social role of museums through outreach programs was exemplified in MoMA with programs like the children's art carnival and the physical art centre established by the museum. The success could be attributed to the collaboration of the institution with community leaders and the leading figure Blayton-Taylor. But despite the good efforts and the positive impact on the Harlem community, the principles of collaborative curation and racial inclusion stayed in Harlem and were not embedded in the museum's systems.

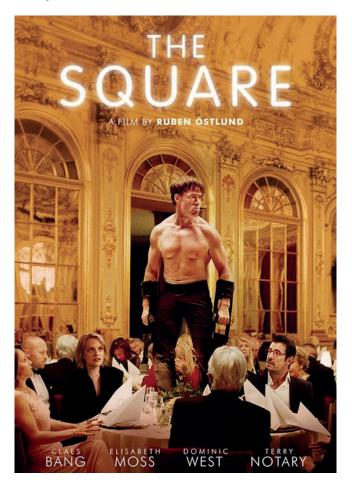
MoMA's response to race and intersectionality by claiming to be colourblind is not the solution. Recognizing bias must be embedded in cultural institutions as an effort to confront it and avoid the possibility of perpetuating a narrow and segregative narrative. If not, how can consumers demand space and a platform in a sphere in which they are supposedly included but do not even feel a part of? Finalizing the reading responses and writing an introduction to meet the research plan's deadline of this week.

#### Introduction

The objective of this research is to understand the complexities of a contemporary museum beyond the practicalities of technical solutions, positioning the institution in a broader social, political, and economic context. In the process of ripping apart the layers of the organization, a set of dynamics arise, such as the politics of art curation, the power and influence of the director and the role of a museum both as a private and public institution. Consequently, in the process of understanding how these notions reflect and influence the creation of physical spaces, it is necessary to dwell on the specificities of the role of architecture within this context. Inevitably, we encounter ourselves debating the boundaries not only between what constitutes art and what does not but also in the matter of what constitutes architecture and what constitutes curation as a means to understand how an architect could take a position within that spectrum.

Within the realm of Interiors Building Cities graduation studio, we commence developing our own collective and individual positioning which this document is a record of. Through discussing the references introduced in the Research Seminar, we establish lines of inquiry that bind together the texts and podcasts included in the syllabus, other sources we have encountered or revisited in the process, and the first-hand experiences of visiting different museums. A shared method of looking at the background conditions characterising the authors and the institutions from a historical perspective enables us to interrogate their position(s) within the context of our (design) inquiry.

From the collective, a parallel individual inquiry emerges as a practice of defining one's own position, not only towards art but also towards performing the architecture surrounding it. As each of us embarks on a personal investigation into the context of architecture for art (or Architecture for Art?), one might also reflect on their professional position at the end of an educational journey. How to make sense of the conditions, power relations and subjectivities embodied in the notions of the white cube, the institutional and curatorial responsibilities? What parallels are there between the circumstances in which art and architecture are being produced? **Movie** Östlund, R. (Director). (2017). *The Square* [Prime video]. Plattform Produktion.



PUBLIC ENGAGEMENT OUTREACH PROGRAMS SCHOLARSHIPS SOCIAL DISCOURSE PUBLIC ENGAGEMENT CAN INFLUENCE THE REPUTATION OF THE MUSEUM CONS · JUMPING ON TRENDS · LESS EXCLUSIVE · ISSUISUM / TOKENISM · SHOUS THE SOCIAL · PROTECTING RIAS SIDE OF ART THE ROLE OF A MUSEUM NOT A CHARITY . SOCIAL RESPONSIBLE ONG TERM ENGAGEMENT POSITE IS DIFFICULT TO DISCOVERIN SUSTAIN DISCOVERIN ·DISCOVERING · INFLUENCE

One of the debate topics (photo taken by Rafael Fernandes Trindade).

## Movie reflection.

Frankly, the movie was quite boring. The character development was poor, as the majority of characters appeared but never developed or played an important role in the story telling. Nonetheless, there were some parts that gave an interesting message. Especially the scene with the chimpanzee in the jungle performance (by a human/artist), as shown on the cover of the movie, was the best part. This, but also the management of the museum, the way they use marketing, and some of the artworks, show how contemporary art can turn into something absurd and ridiculous. As each of these specific scenes manifest how they try to barely cross or try to elevate the boundary of what is acceptable and what is not. And although it is often said that contemporary art has no boundaries or limits, the movie shows that they certainly exist.

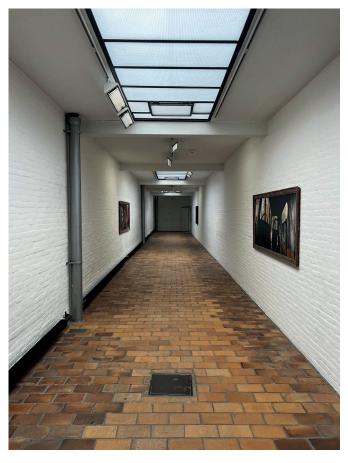
## Debate reflection.

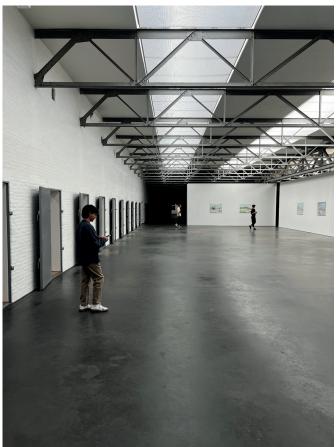
During this week's research seminar class we had a debate. The topic assigned to me was about politics today. Two subgroups were created, pleating either for a museum focused in the city centre or dispersed across neighbourhoods.

Some of the presented arguments in favour of the city centre were that MHKA was designed as a central museum for modern arts, that the city centre has more tourism and a larger audience, that it is easier control the museum if it is centralized, and that it is more accessible for an international audience. On the other hand, the presented argument that countered these arguments were that a dispersed museum can focus more on different identities of the city, that it is easier to expand and grow on demand (as it is not stuck onto one specific site or set location), that it can boost tourism throughout the city and prolong city visits, thus the local economy, and that it can lead to a better connection with the local audience.

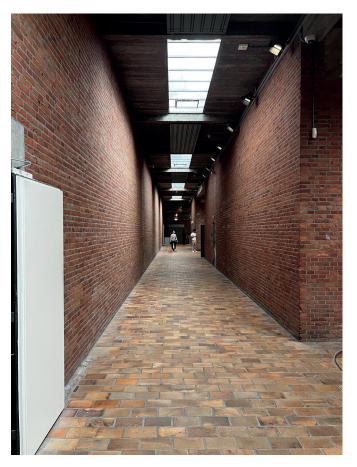
To summarize the debate, perhaps due to our lack of knowledge on the city and museum (as of yet), it was kept on a basic level of discussion. Nonetheless, it was interesting to think about topics like this, which might help with our own design for the M KHA.

# Excursion, Tilburg & Eindhoven.







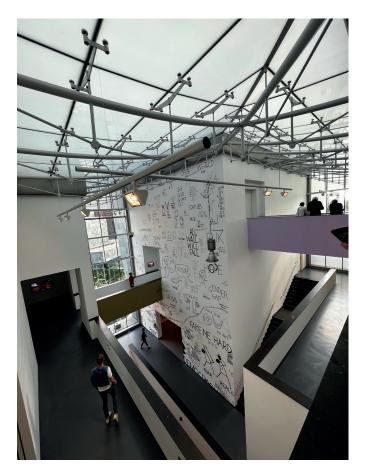


Museum de Pont (own images).

### With the class.

The reconstruction of the former wool factory into Museum De Pont was quite impressive. Especially turning the storage rooms into art rooms or exhibition spaces was nicely designed. The curating of the museum was not a typical white cube museum, although all of the walls used for art or paintings were (painted) white, yet revealed the construction. Nonetheless, this gave a calm balance between art and the rough industrial architecture.

Compared to Museum De Pont, I disliked the Van Abbemuseum. The curation of the museum was quite frankly, very confronting and childish. Art was touchable, lowered to view from a certain angle, confronted by other installations, had holes connected to other exhibition rooms, some exhibition rooms were extremely colourful, and so on. Also, the routing of the museum, as seen from the atrium, was very confusing. Unlike Museum De Pont, which had a clear floor plan and structure. The top floor was only reachable through an elevator, which gradually played higher notes as you went up. These things were funny to hear and see, and perhaps it is a good thing to be confronted by, as it teaches a certain lesson. But it is not what I would like to experience in a museum. Unfortunately the old part was closed due to renovations, so perhaps the overall experience and impression could have been better.



Van Abbemuseum (own image).



Van Abbemuseum (photo taken by Joep Jacobs).



Sergey Maslov (Vorobyev Archives).

# Spatial ensemble.

Sergey Maslov, known as the 'mythe-maker', is one of the pioneers of contemporary art in Kazakhstan. He was born in 1952 in Samara, Soviet Union, lived and worked in Almaty. In his artistic practice, Maslov worked with a variety of media, including painting, performance, installation, video and text. He began his artistic career in the late 1980s and headed the Night Tram art group, which developed variations on Oriental mysticism and stylistic eclecticism. He later joined the circle of Voyager Gallery and became its unofficial ideologist. Mythmaking became his main creative strategy.

In his projects, Maslov presented himself as an alien, a vampire or a magician. In his art, he managed to capture the small details of Post-Soviet reality, which he then transformed into universal manifestations of the absurdity of life, as, for example, in his installation, Survival Instructions for the Citizens of the Former USSR. In his paintings Maslov explored the themes of sexuality and corporeality, which became important subjects in his critique of the official patriarchal discourse of the new nation building.

He died in 2002, leaving behind numerous paintings, drawings, films, manuscripts, and various unfinished projects. According to one of his myths, Maslov killed himself in order to prolong the life of his idol, the singer Whitney Houston, with whom he, according to other myths, maintained a romantic correspondence and affair. One of the unfinished projects during his lifetime - the installation Baikonur-2, was created according to the artist's sketches, part of this work is a futuristic story about Khazakstani space nomads and digital photo collages.

For me personally it seems like this guy used way too much acid, alcohol, or whatsoever to influence and disrupt his state of mind. In general, the artworks are quite despressing to look at, as this man his fantasy seems to be filled with torture, missery, pornography, and sex. Often completely disconnected from the real world, or a pessimistic world view.

### M HKA's collection of Maslov.





Baikonur 2 2001, unfinished. Installation with yurt, music, and slideshow on a computer.

The Dream Series 1982-2000 11 x (100 x 80 cm), 1 x (102 x 122 cm) Oil, and canvas.



Survival Instructions for Citizens of the Former USSR 1998 Installation consisting of a set of flyers.

Notebook 18.8 x 13 cm A notebook with sketches of Maslov.

### Other works



A Walk through the City 1981 92 x 116 cm Oil, and canvas.



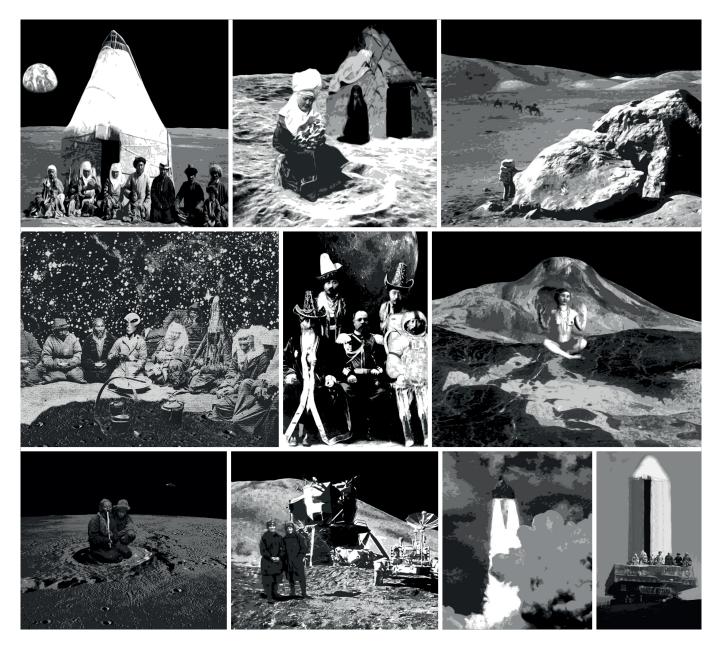
Evening on the Raids 1984 92 x 81 cm Oil, and canvas.



The End of War 1986 60 x 80 cm Oil, and canvas.



Untitled (Kamasutra) 2000 80 x 60 cm Oil, and canvas.



#### Baikonur-2

Baikonur-2 is one of Maslov's, although never completed by himself, emblematic projects. Consisting of an installation; a yurt (a type of tent, mainly used by nomads from Central Asia) in which traditional music is played and a slideshow consisting of 17 images of traditional Kazakh nomads visiting the moon and being visited by aliens is shown, alongside with a text describing a mythical story adjecent to the images shown.



### Survival Instructions for Citizens of the Former USSR

Survival Instructions for Citizens of the Former USSR is a reconstruction by Elena Vorobyeva and Viktor Vorobyev of an action Maslov originally did in Almaty in 1998. For this action, Maslov had an aria singer randomly distribute a stack of flyers at a luxurious event. These flyers contained absurd, funny advices for life in a post-Soviet world. The banality of everyday life addressed by the flyers was in stark contrast to the circumstances in which they were distributed, yet Maslov's words were taken seriously by the public and the subject began to be discussed. For this reconstruction, Vorobyeva and Vorobyev translated the instructions into the fifteen languages of the former Soviet Union. Vorobyeva: "Now any Soviet person can come to the exhibition and read these instructions in his or her native language, come across something valuable and put this advice into practice."



### **Dream Series**

12 of the paintings from the Dream Series by Maslov, donated by his heirs after his death and brought to the M HKA by Elena Vorobyeva & Viktor Vorobyev. In each painting we see the face of a smiling sleeping figure, and we catch a glimpse of his dreams and nightmares. Some are idyllic, some terrifying, and many are erotical. The series, which took place over a period of almost 20 years, is an imaginative and colorful account of Maslov's inner desires and fears. In the latest painting, from 2000, we see a white man and dark woman in intimate contact - a reference to Maslov's mythical 'affair' with singer Whitney Houston?

Decleration of Love Dream-2 Dream-3 Dream-4 Dream-5 Dream-6 Dream-11 Dream-14 Dream-15 Dream-19 Dream-20 Dream-29

1+2+3+4 Mro.10/1 25 **2**b ÷. 100 KOHTPOJIE PASHOE

### Notebook

A notebook containing sketches by Maslov. It was donated to the

M HKA by the artist couple Yelena Vorobyeva & Viktor Vorobyev.

### Concept

Since the artist's paintings, in general, are quite disturbing, I choose to curate Maslov's Baikonur-2. The Baikonur-2 is an installation with a tent (yurt), kazakh traditional music, slideshow on a computer consisting of a video collage (17 slides), and text. No examples of the original installation is available.

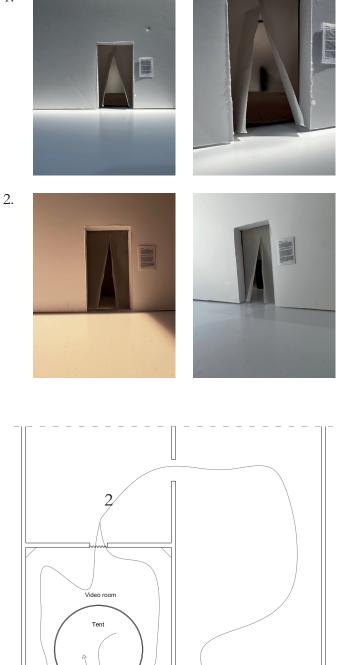
Some things noticed in the slides are: rocket and barrack shaped tents, contact with aliens, experience of outer space on the moon, traditional kazakh nomads, clothing, yurts, music, food, seatings. All-in-all quite a mythical experience.

The first concept for the spatial ensemble was to create a yurt-like space, something similar to the yurt which can be seen in the video collage. Another concept would be to create something along the idea of a tent-room, likewise to Schinkel's and Percier and Fontaine's examples.

As discussed during class, with Daniel and Sam, the approach for the exhibition space will not be a traditional yurt. Instead it focusses on the story of Plato's allegory of the cave. Whereas inside of the tent, you experience what is around you (like the prisoners) a surrealistic world. Whilst outside of the tent, you get confronted with the reality. Everything you've had experienced inside becomes clear; what the projections and silhouettes behind the curtains were. Through this confrontation between surrealism and realism, a mythical experience is created, suiting the artist's reputation as the mythe maker.



First model of the exhibition space.

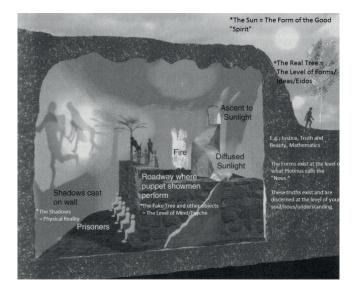


Floor plan and approach of the room.

1.



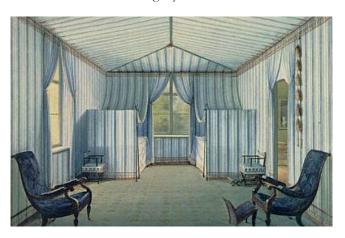
A slide from Maslov's Baikonur-2 video collage.



Plato's allegory of the cave.

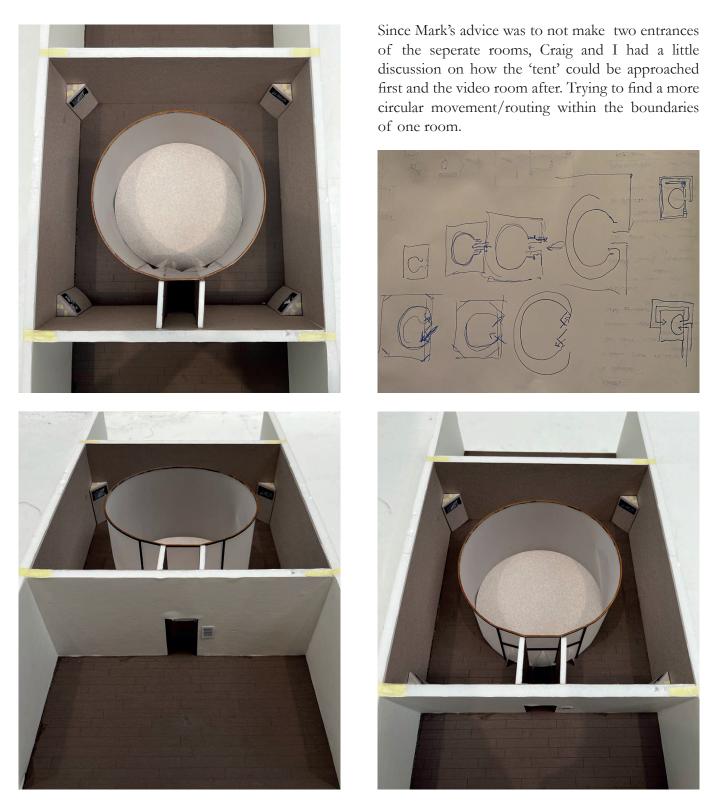
- 17 images digital slideshow.
- Traditional Kazakh music played.
- Text describing a mythical story.
- Tent (yurt).

- Perception of shadows; false reality.
- Perception of the real world; reality.

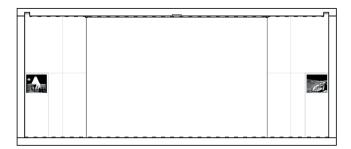


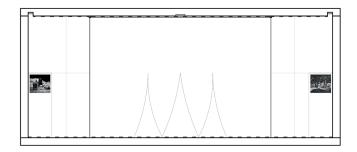
Schinkel's tent room design for the Charlottenhof Palace.

- Abstract idea of a tent.
- Can be made out of a variety of materials; fabrics, leather, cloth, felt, wood, rope.



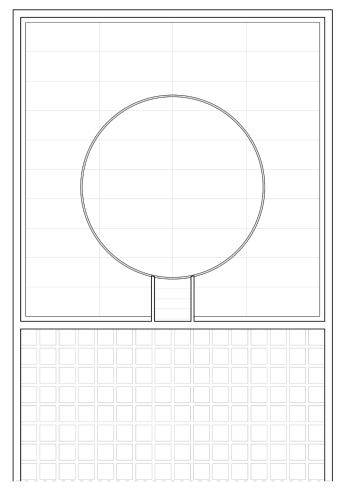
The model after some adjustments and adding more material.



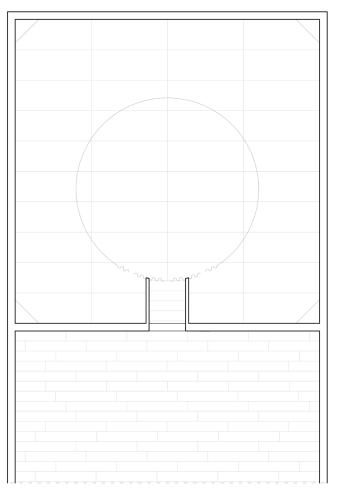


Section.

Section.



Ceiling plan.



Floor plan.



The images at the top were created with an additional lamp, whilst the bottom ones were just the lighting of the model hall.

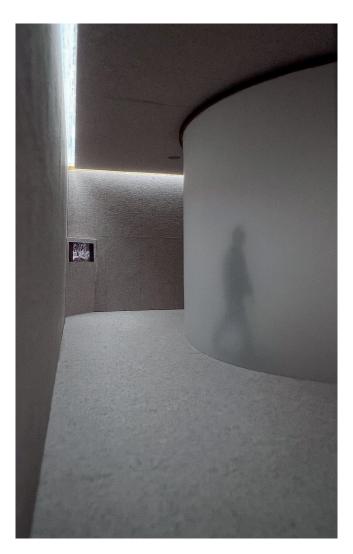


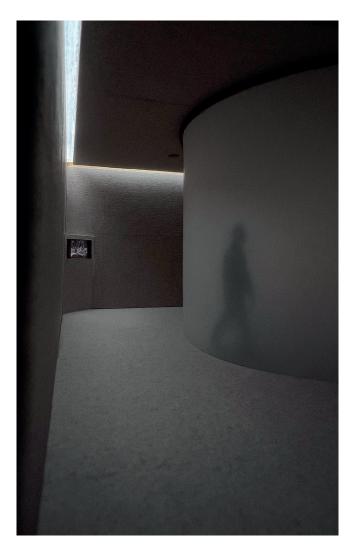


This seems to be the better option, although working around with less exposure might seem to be the perfect result.

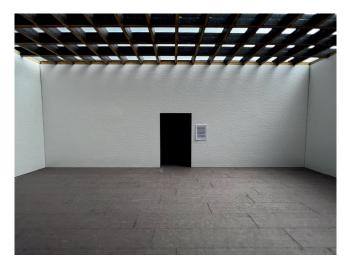


The way in which the tent, combined with a portal, is used to approach the exhibition space and encounter a mythical experience, as perceived by the allegory of the cave, seems interesting. Also how the light strikes the wall and how it makes the tent appear as it is curved looks fascinating.





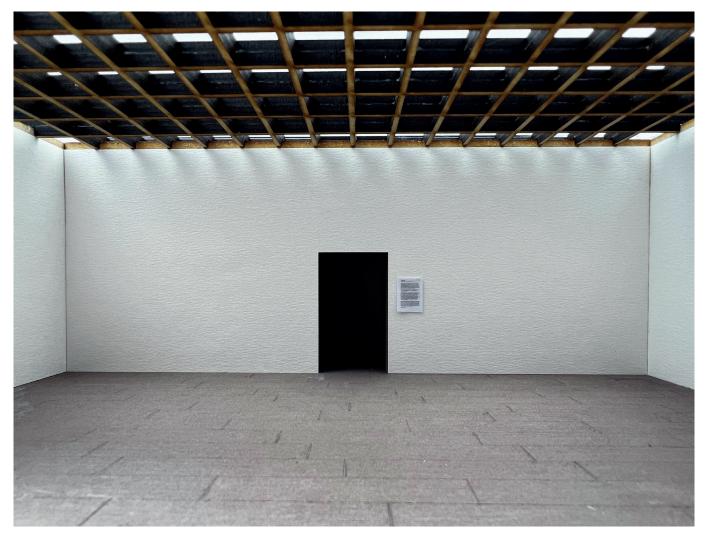
The tent room.



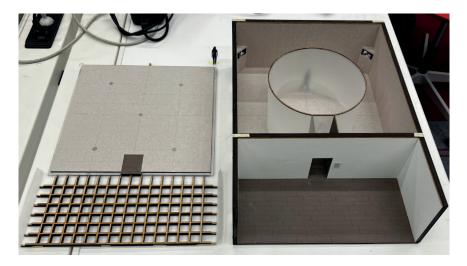
Room in front of the tent room.



Entrance of the tent room.



Room in front of the tent room.



Images of the final model.



# P1 presentation.



P1 classroom exhibition.



P1 presentation setup.

## Research plan.

### Personal statement

Over the course of time, the concept of the museum changed. From housing and displaying objects of arts, cultural, historical and scientific importance as cabinets of curiosities, or Kunstkammer, (either private, through an institution, or places of worship) into an institution of preserving, collecting and sharing; exhibiting, art. Thus shifting from something exclusive or private into something more accessible and public. The oldest public museum as we still know today, built in 1683, is the Ashmolean Museum, as part of an extension of the University of Oxford. But it is since the late eighteenth and early nineteenth century that private collectors began to exhibit their personal collections to the public en masse. Some in the public spaces of palaces and mansions, others in purposefully built museums according to the Enlightenment ideal. Examples of this are the Musée du Louvre in Paris, which started hosting its collection in the Palais du Louvre. The Rijksmuseum, which started exhibiting in Huis ten Bosch in The Hague and Paleis op de Dam in Amsterdam before Cuyper's design was built. Noticeably, a parallel to the change of the museum is the transformation of the palace. It used to be a symbol of administrative power; royal, governmental, and clerical. But the term became informal, changing into a rather public symbol, often represented as a museum or part of it. This can best be seen by the earlier mentioned examples, the Great Exhibition of 1851 in the now no longer existing Crystal Palace in London, and the Bozar (Palais des Beaux-Arts) in Brussels.

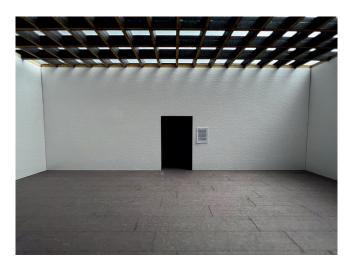
Post-World War II the progression of the museum, in an architectural sense, gave way to Modernism, which turned museum spaces into 'white cubes'. But why does one need this boring emptiness and universality but at the same time exclusivity? Something which cannot be found in ordinary life. As found in nature, colour and details are part of life. It is as if we are putting art in white padded rooms. So, I would like to explore a rather traditionalist and (Semperian) tectonic logic approach to the museum, or to include nature in the curation (which suits Antwerp's case of a lack of greenery in the city and its goals of increasing this). Thus producing a design that is aware of its context, culture and the physical order of the existing place. Opening up M HKA's current introverted character, while encountering the city, nature, and rich details. It also seems like the majority of the contemporary art of the M HKA is just merely Modern art. This feels somewhat awkward, as contemporary art has a rise in mechanical and visual art. Such as the works of Studio Drift; Shylight in the Rijksmuseum Amsterdam, or Christaan Zwanikken; Nose Patrol in the Rijksmuseum Twenthe. These art works often respond to a more

detailed environment. Or as Aslı Çiçek interestingly said about the Bozar during our excursion: "How the art and exposition responds to the rich details of the Bozar".

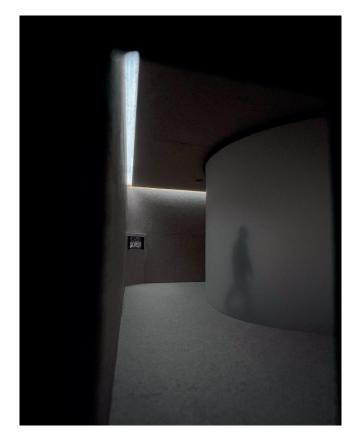
Simultaneously, I found interest in the often discussed theme on how the museum gradually changed. How art and other objects were musealized, then later the museum commercialized. Why should it in that sense, as an institution, not become more publicly institutionalized (again). Likewise to the Mouseion of Alexandria, which functioned as a research institute. Thus reintroducing something like a cultural or educational centre, or something along those lines. Like a combination of a library, museum, cafe, theatre, cinema, university, and so on. Thus creating a museum that is social inclusive. A public building suitable for a widespread audience.

#### Ensemble of spaces and artworks design

As there are no traces on the internet of Sergey Maslov's installation the Baikonur-2, the design is an interpretation of the given description by the M HKA. They mention that the installation consists of a tent (yurt), computer collage (17 images), sound projection (traditional Kazakh music), and a text describing a mythical story about Kazakhs on the moon (originally in Russian). The design commemorates Maslov's legacy as the myth maker through the concept of Plato's allegory of the cave; the experience between a false reality inside of the tent and reality outside of the tent, and Schinkel's tent room by using a fabric curtain, felt and wood to reinterpret the idea of a yurt. From a distance, the first approach of the space makes it seem to be a dark gap. But while getting closer more detail is revealed; the opening of a tent and some moving silhouettes, whilst the wooden materialization continues into the room up until the fabric of the tent. Before entering the room, the story of the installation can be read through a frame displaying the text. Entering the room, the visitor is confronted by an allegorical experience, but as the visitor leaves the tent and enters the room itself it becomes clear that what was behind the curtain were moving people and the projections of the video collages from the television screens. With a circular movement, displayed on four television screens, the visitors can watch each slide of the collage and leave the room through the other side of the tent. All while hearing traditional Kazakh music being played in the background.







Images of the spatial ensembles model.

# Excursion, Antwerp.



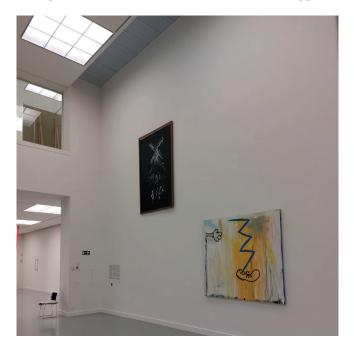
Lobby and library of the M HKA.



The project site, with in the back the Court of Appeal.

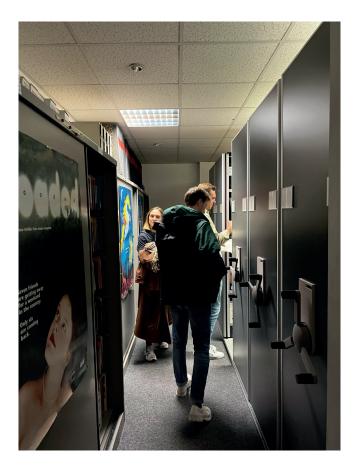


The project site, with in the back the M HKA.





Exhibition spaces of the M HKA





Documentation centre and archive of M HKA.



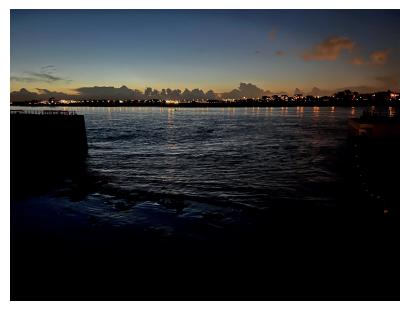




Art depot and transfer space of M HKA.



View along the quay, next to the project location.



View towards the Scheldt river, next to the project location.



View from the Linkeroever, towards the city centre and harbour.



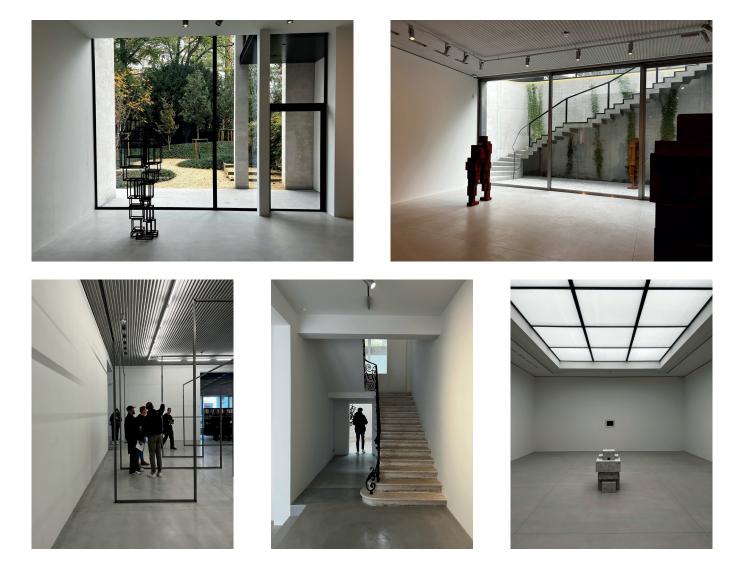
View from the Linkeroever, towards the city centre.



View from the Linkeroever, towards the project location.

### Excursion, Brussels.

**Xavier Hufkens Gallery** The Xavier Hufkens art gallery interistingly had a different approach in terms of materiality to the 'white cube'. Instead it uses gray scale colours; white plastered walls, gray concrete ceilings, gray concrete tiled or cement screed floors, and black window frames. These window openings integrated the exterior spaces behind, like the garden and a staircase. This diverse range of gallery spaces were quite valuable in order to help with the design of a gallery space and curating art works.



Exhibition spaces

With the class.

**Wiels, Contemporary art centre** The Wiels is a former brewery, reconstructed into a museum. It offers a unique space for the exploration and appreciation of contemporary artistic expressions, due to its vast exhibition halls, characterized by their industrial charm. These warehouse/factory like spaces to not take away the attention from the art works, but instead create an interesting relationship. Hence why the columns are not necessarily disturbing.

Since it is a tall museum, we did encounter some problematics. One of the main issues of a vertical museum is the spatial constraints it imposes. Vertical layouts typically involve multiple floors stacked on top of each other, which can result in limited exhibition space on each level. This constraint may restrict the museum's ability to showcase large-scale installations or accommodate ambitious multimedia artworks, limiting the range and scale of artworks that can be displayed.

Additionally, a vertical design can pose challenges for

Exhibition space.

visitor flow and wayfinding. Navigating through multiple floors, each with its own distinct exhibition spaces, can be confusing for visitors, potentially hindering their ability to fully engage with the artworks. The vertical nature of the museum may also result in congestion and bottlenecks in high-traffic areas, further impacting the visitor experience.

Another concern with vertical museums is accessibility. Individuals with mobility limitations or disabilities may face difficulties navigating the multiple levels of the museum. While efforts can be made to provide elevators and other accessibility measures, the vertical design inherently poses more challenges compared to a singlelevel or horizontally oriented museum.

Nonetheless, a tall museum also has its perks, as the rooftop gave an astonishing view over the city.



View over Brussels from the rooftop.

### BOZAR, Centre for Fine Arts The BOZAR

nevers stops to amaze me. Something Aslı Çiçek, who gave us a guided tour through the museum, interestingly said about the Bozar: "*How the art and exposition responds to the rich details of the Bozar*". The amount of detail and attention to materiality that Victor Horta gave in order to create a variety of unique spaces is remarkable. Also his initial idea of creating an art centre that is more than just a museum. Creating a museum that is behind a wall of shopfronts, was not a common approach in his time and age. Despite the efforts, his idea failed and later on the shops were reconstructed into a restaurant and entrance for the auditorium. Nonetheless, it does raise an interesting question of what a museum can and should be.







Exhibition spaces of the BOZAR, scenography by Asli Ciçek.



Material transition of the floor between spaces.



Ventilation system above the glass ceiling.



Façade of the BOZAR (left).

# Excursion, Antwerp.



Images taken from accross the river.

### With Denzel en René.



Images taken from the park.

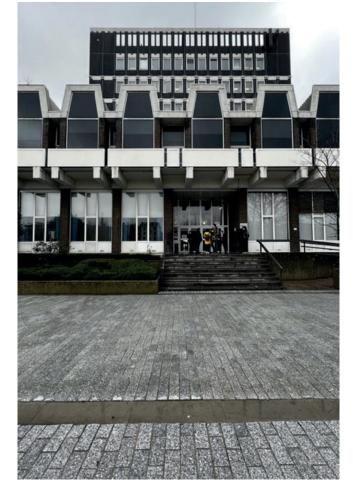


Images taken from the quay.

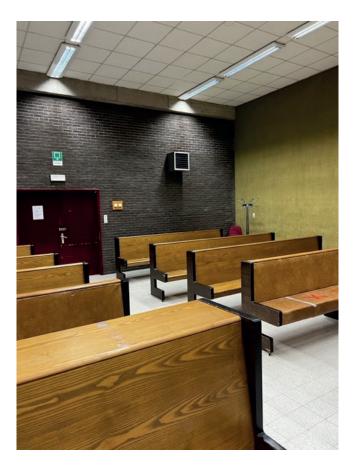


Images taken from the quay.

The **Court of Appeal** building was built in 1974, but only intended to last for 20 years (so until 1994). Due to financial limitations, the building was still used to this day. However, in september 2023, the Court of Appeal will move to a different building, and the current building will be demolished. As can be seen in the images, but also mentioned by the director, this is due to the reason that the building is in a terrible condition. Surprisingly, the elevators didn't go all the way up, so we had to take another stair to reach the roof terrace and former janitor apartment. Nevertheless, it was an unique experience to see the existing building and potential views that it offers over the river, park and the skyline of Antwerp.



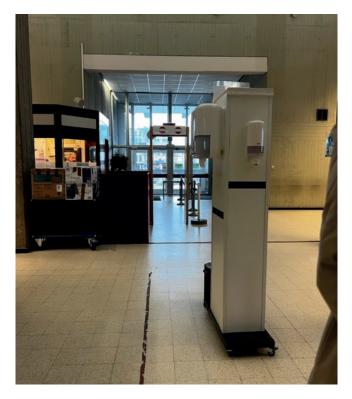
Main entrance from the park.

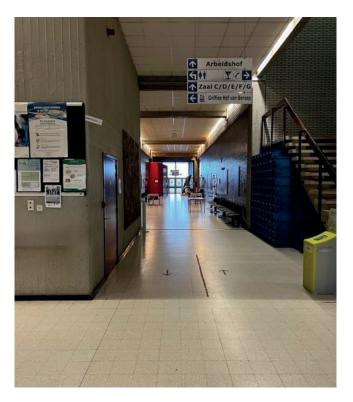


Interior of the court room.



Roof terrace.

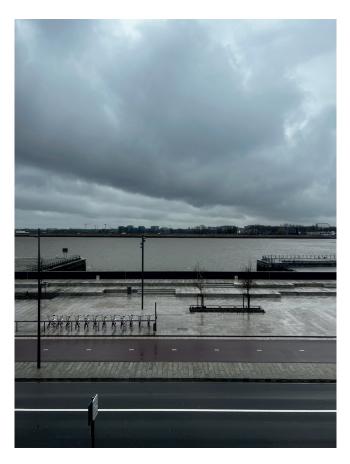




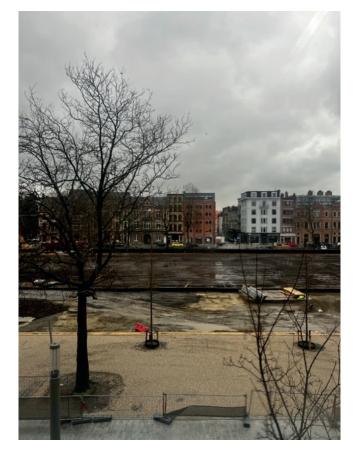
Hallway of the ground floor, looking at both the quay and park.



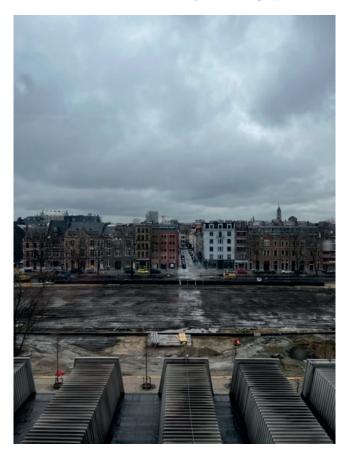
View over the Cathedral of Our Lady, Boerentoren, MAS, quay, Scheldt river, and Linkeroever.



View from the building over the quay.



View from the building over the park.



View from the building over the park.



Visserskaai, seen from the park.



Sidewalk of the Visserskaai.

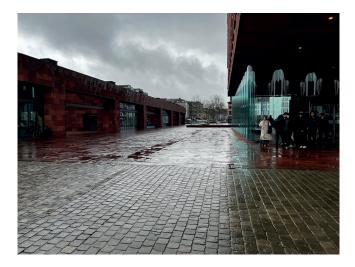


Visserskaai, seen from the quay.

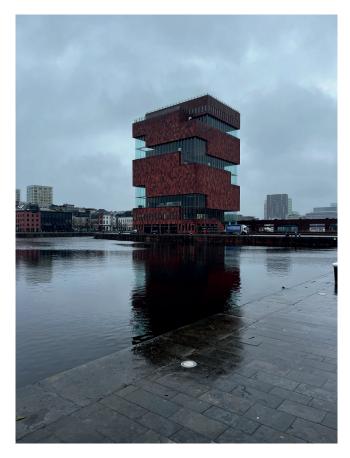


IJzerenpoortkaai, seen from the quay.

MAS The Museum aan de Stroom, also known as the MAS, interestingly was quite comparible to the project. It had a large pavilion with a museum shop, free exhibition, event space, and one undefined space. Despite that you had to pay for the exhibition, the vertical forum space and panorama roof terrace were free. Unfortunately the potential of these space were not given any justice. Currently they only give a view over the city, altough the view was phenomenal and it was pleasant to see what a view a 60m building in Antwerp has, it offered not much else than that, as it were empty spaces. The use of escalators was nice, as the climb of 60m was not tiresome at all. The downside was that, as every next escalator was rotated by 90 degrees, you lost a sense of orientation of the city.



Pavilions next to the main building.



MAS building.

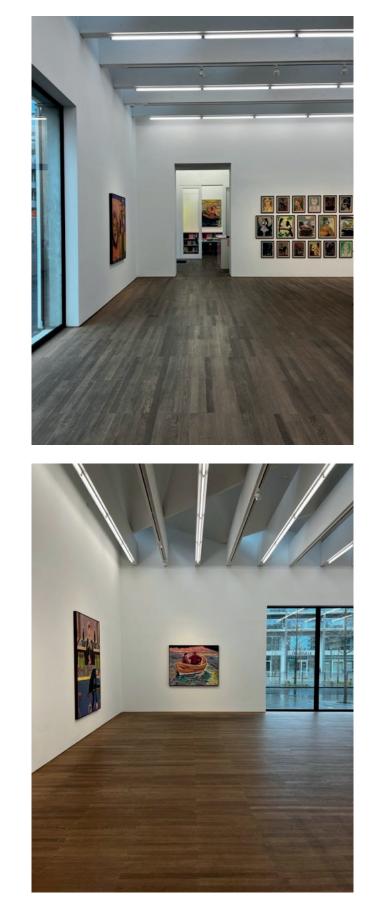


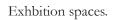
View over the city.



Empty forum space.

**Tim van Laere Gallery** The gallery was small, yet nice. It gave me some similar vibes as the Museum Voorlinden did in terms of materialization.





# Formation of a museum.

### **An Architecture For Art**

### Studio brief 3.



Joseph Beuys & Henning Christiansen, Eurasienstab, 1968 | film still | Courtesy Wide White Space Archive

#### Formation of a Museum

From its roots in the anti-museum of the ICC, via the 'kunsthalle with a collection' that is M HKA, this year's project addresses the programme for a new national museum for contemporary art in Antwerp. Proposed on a site that will recast it as a significant urban figure in Antwerp's ongoing development, the gallery is intended to become part of a museum ensemble in the South of the city that includes both the Photo Museum (FOMU) and the recently transformed and reopened Museum of Fine Arts (KMSKA); establishing a new cultural focus for both Antwerp and Flanders, while also speaking to a network of regional museums and seeking to take its place within a global context.

The layers of critique inherent in this trajectory are evident in the counterpoints established in the clients brief for the proposed museum: questions of material, abstraction, scale and scenography underpin an oscillation between what it describes as anti-museum fascinations and technical museum requirements. Underpinning this are fundamental questions about contemporary art's history and its relation to wider questions of culture, society and the world of art and artistic practice, embodied in its attitude to the very idea of the museum.

(The) art which emerged in the 1950s or 1960s, which might be regarded as the beginnings of what is framed as contemporary art, was concerned with its effects, settings, relations with environments, audiences, and viewers' experience. Rather than being made for the context of either the collector's home (a private matter, concerning ownership, connoisseurship, private pleasure, power) or the museum (removed from the world), both minimal and conceptual art took art to be in, of and about the world, incorporating criticality. It either engaged with or commented upon the conditions of its own visibility, or moved out of the enclosed environment entirely to address and engage with society, the city, and its territories.

Mark Pimlott, *Museum, image and agency, Oase 111* Staging the Museum

How then does one think about the setting of a contemporary art museum in a way that respects this critical history? More immediately, how does one register the foundations of this museum in the work of the American artist, Gordon Matta-Clarke, whose artistic position expressed a deep antagonism to both architecture and the museum as a construct, and whose practice was built upon the radical reimagining of existing structures, exemplified in his project for Antwerp, *Office Baroque*?

As a response to their own reflections on such questions, M HKA propose a future museum whose collection is ordered through four themes: image, action, society and praxis and



### Palace

### **An Architecture For Art**

which they imagine to be physically organised through four potentially overlapping components: collection, exhibition, archive and forum. The architecture that emerges from the interaction between these conditions is intended to attract and foster a diverse audience; a constituent museum that draws all components into a holistic, contemporary social and cultural dialogue.

This offers frame of reference, which you are free to critique. Alongside this we will expect you to consider the project in relation to its situation, understanding how it might address a site with a complex, layered history; an existing building currently scheduled for demolition; a river frontage in the process of transformation; a new piece of city in the making and the highly developed urban structure of Antwerp as a whole.



Archival photographs of the site context, before and after the infilling of the dock

#### Collectively

As a starting point for your individual projects you will undertake two parallel pieces of work over the next three weeks.

Working collectively as a studio you will begin to situate the new M HKA within its complex, layered history and as a key component of an urban context in a state of ongoing transformation. Across a series of scales you will both create

Interiors Buildings Cities

and collate models and model photographs, drawings, debates, texts and photographic imagery. At the scale of the city, we would like you to research and document the urban history, present context, and future plans of the city of Antwerp, focusing in particular on the area of the Nieuw Zuid, in the immediate context of the site. At the building scale, you should document and analyse the current M HKA building, and its sister art museums, placing them into the wider context of your research into reference museums and galleries, already undertaken. In terms of the institutional context, you should explore the particular history of M HKA and its forebears, as a setting for contemporary art practice and its documentation and exhibition; understanding it within the developing context of such practices and in relation to its equally auspicious but very different neighbouring institutions, FOMU and KMSKA The outcome of these exercises should be:

- a shared archive of research material, from which you will construct a series of relevant chapters or section for your collective research documentation;
- a set of clarified architectural drawings of the existing building, the proposed site, its urban situation and its historical development;
- a durable and adaptable working site model or models, constructed at an appropriate scale so that parts can be added or removed.

As a studio, you should work together to structure, organise and undertake this work in a comprehensive and effective way.

#### Individually

Alongside the research you undertake with your colleagues you should each, individually carefully read and analyse the project brief provided by the client, which is issued alongside this overview. There is nothing to stop you organising and sharing tasks within this process if you wish to. From this process of analysis, you should produce analytical drawings, annotated diagrams, models and texts that together will allow you to begin to translate the brief spatially and in terms of built volume. Alongside this you should begin researching ideas and references that will help you answer, for yourself, the questions that you see emerging, and which can offer you direction in terms of the forms, spaces, materials, function, position and atmospheres of your resulting design.

#### **Towards P2**

Through this process of research and analysis, you will each begin to develop a proposal that establishes an appropriate spatial structure within a thoughtfully composed urban volume.

At the P2 you will be able to present, as a minimum outline plans, sections and a model of your initial proposals, in sufficient detail to allow them to be developed to an appropriate level of resolution in MSc 4. These should be presented as part of a design research context that allows you to situate your design in social, political, cultural, functional and artistic terms.



## Project brief.

### 1.3 THE CURRENT MUSEUM: PLANS FOR A FUTURE MUSEUM

### 1.3.1 The profile of the collection, M HKA's 'own' art hypothesis, and the theoretical collection project

M HKA initially described itself as a museum of contemporary art from 1970 onwards, but gradually that time frame shifted to a setting from the post-war avant-garde with a focus on the happenings of the mid 1960s. Unlike some museums of 'modern and contemporary art', the historical avant-garde therefore falls beyond the focus of M HKA. This temporal demarcation can in part be explained by historical reasons, but it also has to do with the complementarity (and collaboration) with the KMSKA, which is only located one block away. M HKA's geographical focus can be described as international with both local-regional and new-regional accents. Based on the conviction that art is 'marked by a "local colour". M HKA claims that local creativity also 'needs an international context'.<sup>9</sup> The more recent purchases of work from Russia and the Far East – 'new centralities in the multipolar art world' - must be understood from this point of view.

The current collection of M HKA is highly interesting, but not a 'world collection' like that of the Stedelijk Museum in Amsterdam. At present, the collection comprises relatively few international masterpieces or well-known reference works that the public wants to be able to see permanently. In recent years, a catching-up policy has been initiated with regard to the collection policy. M HKA has works on permanent loan that were acquired with the budget of the Flemish Commission for Visual Arts (1982-2002). The initial support policy is increasingly getting a focused museum orientation, which is trying to fill in the gaps in the current museum collections and to catch up on the backlog in terms of collection policy. In recent years, a number of key works have been acquired in this context. However, M HKA's own focus today does not lie in building up the collection, but mainly in a *pronounced reflexive-discursive character* and in the starting point of considering both *visual arts and the museum institution as a powerful social actor*.

M HKA calls its own perspective on visual art its 'art hypothesis': 'the image of the art that the museum shapes and presents to the world. M HKA keeps questioning that image, sounds it out, commemorates it."<sup>®</sup> We have already referred to the ICC and the way in which M HKA goes back to the happenings of the 1960s in order to found its (at times anti-museum) attitude in terms of the problematization of museums and art. From these roots it also derives a view of art in which, for example, *the performative* and *the socially critical* are paramount. In its 2011 policy plan, M HKA structured its art hypothesis around two pairs of concepts: the tension between the immaterial and the factual, and the tension between social engagement and the poetic.

Since December 2017, M HKA has been exhibiting a small selection from the collection in a more or less permanent layout. It is this type of exhibition that will form the basis of what we will further call the collection component. The collection story starts out from the post-war avant-garde in Antwerp and Flanders, and takes this past as a starting point to understand the multipolar world of today and tomorrow. The backbone of the collection consists of purchases the itcolf works acquired by the Flemish Community. In addition, there are donations and a few A displays. The catalogue The Collection as a Character (2011) Quantore. Highlighter Ease 635085 offers a first tentative over the hard copy of the digital Ensembles platform. The objective is to give this collehe new museum and to develop it further. While M HKA conceptualizes it roactively - it does not aspire to any encyclopedic exhaustiveness." which it also uses as a guideline by which to deepen the existing collection Image A first the ifferent approaches to still and move inking about the image that is specif re is a long tradition of making and disc In Antwerp and Flanders, and nd Nav Haq (2013), The M HKA Collection: The Collection as a Character, Antwerp, M HKA 

28.06.2019

2019/HFB/0037/33986

Analyzing M HKA's project brief from the design competition.

BULAGE ' Dppervlaktetabel programma van eisen toekomstig Vlaams Hedendaags Kunstmusuer

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4551	x sanitair bezoekers							
		1	152	3,00	456	U	258	775
4.5.5.2 4.5.5.3	X sanitair medewerkers	1	152 Incl	3,00	456	U	258	775
4.5.5.2 4.5.5.3	X sanitair medewerkers X EHBO-lokaal Back-office		incl	3,00	456	U	258	775
4.5.5.2 4.5.53	X sanitair medewerkers X EHBO-lokaal Back-office Back-office werkplaatsen	1	incl incl	3,00		U	258	775
4.5.5.2 4.5.5.3 4.6 4.6.1	X sanitair medeverkers K BHO-lokaal Back-office Back-office werkplaatsen X Werkplaatsen	1	incl incl 3 337 375		17 123 1 688			
4.5.5.2 4.5.53	X sanitair medeverkers X EHBO-lokaal Back-office Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats	1	incl incl 3 337	4.50	17 123 1 688 720	14	224	1008
45.52 4.5.53 4.6 4.6.12 4.6.12 4.6.13 4.6.1.4	X sanitair medeverkers K EHBO-lokaal Back-office Back-	1 1×3 1	Incl Incl 3 337 375 	4,50 4,50 4,50 4,50	17 123 1 688 720 315 360	14 14 14	224 98 112	1 008 441 504
45.52 45.53 16 16.1 4.6.12 4.6.13 4.6.14 4.6.15	X sanitair medeverkers Betk-foffice Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats X Metaalwerkplaats X Schliderwerkplaats X Schliderwerkplaats X Audio- en videoruimte	1 1×3 1	Incl Incl 3 337 375	4.50 4.50 4.50 4.50	17 123 1 688 720 315 360 135	14 14 14 14	224 98 112 42	1 008 441 504 189
4552 4553 1.6 1.6.1 4.6.12 4.6.13 4.6.1.4	X sanitair medeverkers Betk-folfice Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats K Metaalwerkplaats X Schliderwerkplaats X Audio-en videoruimte	1 1×3	Incl Incl 3 337 375 160 70 80 30 35	4,50 4,50 4,50 4,50	17 123 1 688 720 315 360 135 158	14 14 14	224 98 112	1 008 441 504
4552 4553 16 16 16 1 4612 4613 4614 4615 4616 17 172	X sanitair medeverkers Back-office Werkplaatsen X Werkplaatsen X Houtwerkplaatsen X Houtwerkplaats X Audio-en videoruimte X Audio-en videoruimte X Audio-en videoruimte X Audio-en videoruimte X Transport - en handling.	1 1 X Q 1 1 1 1 1	Incl Incl 3 337 375 160 70 80 30 35 35 1 531	4.50 4.50 4.50 4.50 4.50	17 123 1 688 720 315 360 135 158 9 748	14 14 14 14	224 98 112 42 49	1 008 441 504 189 221
45.52 4553 16 16 16 16 16 17 46.12 4.6.13 4.6.14 4.6.15 4.6.16 17	X sanital medeverkers Betk-Office Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats Audio- en videoruimte Audio- en videoruimte Audio- en videoruimte X Opsjagruimte voor technisch materiaal Back-office art. handling K Transport - en handlingzone X Situi S sas	1 1 × ¢ 1 1 1 1 1	Incl Incl 3 337 375 160 70 80 30 33 35 1 531 29	4,50 4,50 4,50 4,50 4,50 4,50	17 123 1 688 720 315 360 135 158 9 748 877	14 14 14 14 14 14	224 98 112 42 49 181	1 008 441 504 189 221 1 228
45.52 45.53 46.53 46.12 46.13 46.14 46.15 46.16 47.21 47.21 47.22 47.23	X sanital medeverkers Betk-Office Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats Audio- en videoruime Audio- en videoruime Audio- en videoruime Audio- en videoruime X Transport - en handling X Transport - en handling X Transport - en handling X Transport - en handling X Transport - sen handling X Transport	1 1 X Q 1 1 1 1 1	Incl Incl 3 337 375 160 70 80 30 35 35 1 531	4.50 4.50 4.50 4.50 4.50 6.80 6.80	17 123 1 688 720 315 360 135 158 9 748 877 815	14 14 14 14 14 14 14 14	224 98 112 42 49 181 163	1 008 441 504 189 221 1228 1 228 1 142
45.52 45.53 46.53 46.12 46.13 46.14 46.15 46.16 47 172 4721 4722 4723 4724	X sanital medeverkers Belc-office Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats X Houtwerkplaats X Schliderwerkplaats X Audio- en videoruimte X Ooslagruimte voor technisch materiaal Back-office art handling X Transport - en handlingzone X Stuis / sas X Zone voor laden en lossen X Overslagruimte Registratie, controle en onderhoud	1 1 × ¢ 1 1 1 1 1	inci inci 3 337 375 70 80 30 35 1 531 1 531 129 120 260 inci	4,50 4,50 4,50 4,50 4,50 4,50	17 123 1 688 720 315 360 135 158 9 748 877	14 14 14 14 14 14	224 98 112 42 49 181	1 008 441 504 189 221 1 228
4552 4553 66 61 4612 4613 4614 4615 4616 17 72 4721 4722 4723	X sanital medeverkers Betk-Office Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats Audio- en videoruime Audio- en videoruime Audio- en videoruime Audio- en videoruime X Transport - en handling Back-office art. handling X Transport - en handling X Transport - en handling X Transport - en handling Rekoffice art. Julia State Statistic State Statistic State Verspätkratik, gruimte Lingkeken/uitgatken/i	1 1 × ¢ 1 1 1 1 1 1 1 1 1	inci inci 3 337 375 70 70 80 30 30 35 35 35 26 1 531 29 129 120 260 inci	4.50 4.50 4.50 4.50 4.50 6.80 6.80 6.80	17 123 1 688 720 315 360 135 138 9 748 877 816 1 768	14 14 14 14 14 14 14 14	224 98 112 42 49 181 168 364	1 008 441 504 189 221 1 228 1 228 1 142 2 475
45.52 45.53 46.13 46.12 46.13 46.14 46.15 46.16 47.21 47.22 47.23 47.24 47.22 47.23 47.24 47.25 47.24 47.25 47.24	X sanitair medeverkers Betk-Office Back-office werkplaatsen X Werkplaatsen X Houtwerkplaats Audio- en videoruime Audio- en videoruime Audio- en videoruime Abck-office art. handling Back-office art. handling Costagruimte voor technisch materiaal Back-office art. handling Costagruimte voor technisch materiaal Costagruimte R Transport - en handling Transport - en handling Costagruimte R Teatsport - en handling Verpaktingsruimte i inpakken/uitgakten/ Verpaktingsruimte i inpakken/uitgakten/ Berging voor opslag kisten/plastiekfolie/inpakmateriaal Berging voor opslag kisten/plastiekfolie/inpakmateriaal	1 1 × ¢ 1 1 1 1 1 1 1 1 1 1 1 1	inci inci 3 337 375 70 80 30 35 1 531 1 531 129 120 260 inci	4.50 4.50 4.50 4.50 4.50 6.80 6.80	17 123 1 688 720 315 340 135 158 9 748 877 816 1769 135	14 14 14 14 14 14 14 14	224 98 112 42 49 181 163	1 008 441 504 189 221 1228 1 142
45.52 45.53 46.12 46.13 46.14 46.15 46.16 46.15 46.16 47.21 47.21 47.22 47.23 47.24 47.25 47.26 47.27 47.27 47.27	X sanital medeverkers Back-office Volkaal Back-office verkplaatsen X Werkplaatsen X Werkplaatsen X Metrolaats X Houtwerkplaats X Audio- en videoruimte X costagruimte voor technisch materiaal Back-office art handling Back-office art handling X Transport - en handlingzone X Sulis / sas X Zone voor laden en lossen X Overslagruimte (inpakten/uutgakten) X Pergistratie, controle en onderhoud X Verpaktingsruimte (inpakten/uutgakten) X Berging voor opslag materiaal en hulpmiddelen X Builte voor collectubeher	1 1×3 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Incl Incl 3 337 375 50 70 80 30 35 35 1 531 29 100 100 100 100 100 100 100 100 100 10	4.50 4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 6.80 6.80 6.80 6.8	17 123 1 688 720 315 340 135 158 9 748 87 816 1769 135 \$0 50	14 14 14 14 14 14 14 14	224 98 112 42 49 181 163 364 42 28	1 008 441 189 221 1 228 1 142 2 475 189 126
45.52 4553 661 46.12 46.13 46.15 46.16 46.15 46.16 17 72 4721 4722 4723 4724 4725 4726 4727 4723 4724 4725 4726 4727 4731 4732	X sanital medeverkers Betk-Office Back-office verkplaatsen X Werkplaatsen X Houtwerkplaats X Houtwerkplaats X Audio- en videoruimte X costagruimte voor technisch materiaal Back-office art handling X costagruimte voor technisch materiaal Back-office art handling X costagruimte voor technisch materiaal Back-office art handling X costagruimte voor technisch materiaal X costagruimte voor technisch materiaal X costagruimte voor technisch materiaal X costagruimte voor technisch materiaal X costagruimte (inpakter/uitgakteen) X explicitue coortole en onderhoud X Verpaktingsruimte (inpakter/uitgakteen) X Berging voor opslag materiaal en hulpmiddelen X Buimte voor collectüebeheer X Quarantalneruimte	1 1 × ¢ 1 1 1 1 1 1 1 1 1 1 1 1 1	Ind Ind 3 337 375 160 70 70 80 80 80 80 80 80 80 153 153 153 153 153 153 153 153 20 260 Ind Ind 30 20 27	4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 6.80 4.50 4.50 4.50	17 123 1 688 720 315 360 105 9 748 877 816 1768 135 90 122	14 14 14 14 14 14 14 14	224 98 112 42 49 181 165 364 42 28 38	1 008 441 504 189 221 1228 142 2 475 189 126 770
45.52 4553 6.1 4.6.12 4.6.13 4.6.14 4.6.15 4.6.16 4.7 72 4.721 4.722 4.723 4.724 4.725 4.726 4.727 1.73 4.731 4.732 4.735	X sanital medeverkers Betko-folceal Backoffice werkplaatsen X Werkplaatsen X Houtwerkplaats X Metaalverkplaats X Audio- en videoruime X Audio- en videoruime Backoffice art handling Backoffice art handling X Transport - en handling X Transport - en handling X Transport - en handling X Transport - en handling Statute - en handling X Transport - en handling Statute - en handling X Transport - en handling Statute - en handling X Transport - en handling X Burling voor opslag kisten/plastlefolie/inpakmateriaal Berging voor opslag kisten/plastlefolie/inpakmateriaal X Burling voor collectlebeheer X Quaranalneruimte X Werkateller	1 1 × 3 1 1 1 1 1 1 1 1 1 1 1 1 1	Ind Ind 3 337 375 160 70 70 80 80 80 80 80 80 80 153 153 153 129 120 120 160 161 80 260 161 161 80 20 27 234 36	4.50 4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 6.80 6.80 6.80 6.8	17 123 1 688 720 315 340 135 158 9 748 87 816 1769 135 \$0 50	14 14 14 14 14 14 14 14	224 98 112 42 49 181 163 364 42 28	1008 404 504 189 221 128 2475 189 126 170 142 270 142
45.52 4553 66 61 46.12 46.13 46.14 46.15 46.16 46.15 46.16 4721 4721 4722 4723 4723 4724 4725 4725 4725 4725 4725 4725 4725	X sanital medeverkers Brito-Okaal Back-office Verkplaatsen X Werkplaatsen X Werkplaatsen X Houtwerkplaats X Houtwerkplaats X Audio- en videoruimte X costagruimte voor technisch materiaal Back-office art handling X consideruimte voor technisch materiaal Back-office art handling X costagruimte voor technisch materiaal Back-office art handling X cost sever job sever seve	1 1×3 1 1 1 1 1 1 1 1 1 1 1 1 1	ind ind 3 337 375 70 80 30 35 35 35 260 ind ind 80 260 ind ind 80 260 260 ind 30 260 260 ind 53 20 260 ind 53 53 20 55 55 55	4.50 4.50 4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 6.80 4.50 4.50 4.50	17 123 1 688 720 315 360 135 158 9 748 97 97 95 1769 122 1053 162 163	14 14 14 14 14 14 14 14	224 28 12 42 49 181 168 364 42 28 36 328	1 008 441 504 189 221 1228 1 142 2 475 189 126 170 70 1 474
45.52 4553 46.1 46.12 46.13 46.14 46.15 46.16 47.21 47.22 47.23 47.24 47.25 47.26 47.27 47.27 47.23 47.24 47.25 47.26 47.27 47.31 47.32 47.35	X sanital medeverkers Betko-folceal Backoffice werkplaatsen X Werkplaatsen X Metajverkplaats S Houverkplaats S Addio- en videoruimte C Opstagruimte voor technisch materiaal Backoffice art handling Backoffice art handling S Transport - en handling S Transport - en handling S Transport - en handling R Transport - en handling S Tra		Ind Ind 3 337 3375 160 70 80 80 80 80 80 80 80 80 80 80 1531 129 120 120 120 120 120 120 120 260 Ind 1531 224 36 6 6 7 7 04	4.50 4.50 4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.5	17 123 1 688 720 315 350 153 5748 877 816 155 50 122 1053 162 4725 3 143	14 14 14 14 14 14 14 14 14 14 14	224 98 102 42 46 46 46 46 28 38 38 328 38 328 328 329 50 945	1 008 441 504 1221 221 221 2475 189 126 170 1 427 26 615
4552 4553 4553 46 6 6 1 4613 4614 4613 4616 4616 4616	X sanital medeverkers Betko-folceal Backoffice werkplaatsen X Werkplaatsen X Houtwerkplaats Audio- en videoruime A doutsen videoruime A opsiagruimte voor technisch materiaal Backoffice art. handling Backoffice art. handling X Transport - en handling X		Ind Ind 3 337 3375 100 70 80 80 80 80 80 80 80 80 80 80 80 1531 129 120 120 160 Ind 161 80 200 27 224 36 67 57 704 9 20	4.50 4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50	17 123 1 688 720 315 360 135 158 9 748 97 97 95 1769 122 1053 162 163	14 14 14 14 14 14 14 14 14 14 14	224 98 112 49 181 168 364 42 42 28 38 328 328 328 50	1008 404 504 189 221 128 2475 189 126 170 142 270 142
4552 4553 46 66 66 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	X sanital medeverkers Betko-frice Back-office Verkplaatsen Werkplaatsen Werkplaatsen S Houtwerkplaats M Houtwerkplaats S Heala/werkplaats S Heala/werkplaats S Audio- en videoruimte C costagruimte voor technisch materiaal Back-office arc handlingone S Joine voor laden en lossen V Oversiagruimte (Inpakten/Juitgakten) S Verpaktingsruimte (Inpakten/Juitgakten) S Berging voor opslag materiaal en hulpmiddelen S Berging voor opslag materiaal en hulpmiddelen S Werkateller S Gesidene binnendepot Back-office Ingistlek en technieken S Ostek verkingsruimte S Ostek verkingsruimte S Sork berging voor opslag materiaal en hulpmiddelen S Werkateller S Gesidene binnendepot Back-office Ingistlek en technieken S, Bork berging, en gebouwbeheer S, Houtewerken S, Kitchenete	1 1 × 3 1 1 1 1 1 1 1 1 1 1 1 1 1	Ind Ind 3 337 375 70 80 30 35 35 153 29 20 260 Ind Ind 80 260 260 Ind 80 260 260 Ind 80 260 260 Ind 80 260 70 80 80 80 80 80 80 80 80 80 80 80 80 80	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	17 123 1 688 720 315 340 135 158 97 748 815 158 97 748 815 159 90 1053 1055		224 296 112 49 9 9 160 364 42 28 38 42 28 38 38 228 50 9 45 9 45 9 45 8	1 008 441 504 189 221 1228 142 2 475 189 126 170 1424 227 6 655 44 44 98 29
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4552 4553 4553 461 4612 4613 4614 4615 4616 4615 4616 472 4722 4722 4722 4722 4722 4722 4722	X sanitair medeverkers Betko-fifce Backofifce Backofifce Backofifce Backofifce Werkplaatsen X Herajverkplaats X Herajverkplaats X Schliderwerkplaats X Addio- en videoruimte A Opolagruimte voor technisch materiaal Backofifce art. handling X Transport - en handling X Transport - en handling X Transport - en handling Backofifce art. handling X Transport - en handling X Transport - e	1 × đ 1 × đ 1 × đ 1 1 × đ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ind Ind 3 337 337 80 80 80 80 80 80 80 80 80 80 80 1531 129 120 120 160 161 80 20 27 224 260 161 60 60	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	17 123 1 688 720 315 340 135 158 97 748 815 158 97 748 815 159 90 1053 1055		224 98 102 42 49 40 40 40 40 40 40 40 40 40 40 40 40 40	1 009 441 504 199 221 1228 1 142 2 475 169 126 170 1 474 227 6 675 6 45 6 44 9 8 29 78 29 78 294
4552 4553 46 46 46 46 46 46 46 46 46 46 46 46 46	X sanital medeverkers Betko-frice Back-office loss A werkplaatsen X Werkplaatsen X Werkplaatsen X Metaalwerkplaats X Houtwerkplaats X Audio- en videoruimte X Costagruimte voor technisch materiaal Back-office art handling X Transport – en handlingsone X Sutis / sas X Jone voor laden en lossen X Overslagruimte X Pergistratie, controle en onderhoud X Werpackingsruimte (inpakken/uitgakken) X Berging voor opslag materiaal en hulpmiddelen X Berging voor opslag materiaal en hulpmiddelen X Werkateller X Outantaineruimte X Outantaineruimte X Berging voor opslag materiaal en hulpmiddelen X Werkateller X Gestoten binnendepot Back-office ingisteke n technieken X Ootskervelokaal (MER) X Kitchenette X Sanitair medeverkers gescheiden) X Nederfumen (Ind. douches, gescheiden) X Berging voor opslag materiaal X Berging voor sologa kontentente X Outantaineruimte X Outantaineruimte X Berging voor opslag materiaal en hulpmiddelen X Werkateller X Kitchenette X Sanitair medeverkers gescheiden) X Registruinte (Ind. douches, gescheiden)	1 1 × 3 1 1 1 1 1 1 1 1 1 1 1 1 1	Incl Incl 3 337 375 70 80 30 35 35 153 10 29 20 260 Incl Incl 30 260 Incl 80 20 260 Incl 90 20 20 20 20 20 6 5 6 5 6 5 770 80 80 80 80 80 80 80 80 80 80 80 80 80	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	17 123 1 688 720 315 340 135 158 97 748 817 158 97 748 816 1768 1053 1055 1		224 224 12 12 49 161 161 364 42 28 33 338 30 30 328 30 328 328 328 328 328 328 328 328 328 328	1 008 441 504 189 221 1228 142 2 475 189 125 142 2 475 189 125 142 2 475 189 126 1474 498 99 78 44 98 99 78 44
4552 4553 4553 16 4612 4613 4614 4615 4616 4615 4616 4721 4721 4721 4721 4722 4722 4722 4722	X sanital medeverkers Betk-Office Back-office verkplaatsen Werkplaatsen Werkplaatsen Werkplaatsen Werkplaatsen S Houverkplaats M Houverkplaats	1 × đ 1 × đ 1 × đ 1 1 × đ 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Ind Ind 3 337 337 80 80 80 80 80 80 80 80 80 80 80 1531 129 120 120 160 161 80 20 27 224 260 161 60 60	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	17 123 1 688 1720 315 360 105 105 105 105 105 105 105 10		224 98 102 42 49 40 40 40 40 40 40 40 40 40 40 40 40 40	1 009 441 504 199 221 1228 1 142 2 475 169 126 70 1 424 227 6 675 6 45 6 44 9 8 29 78 29 78 29 78 29 78 29 78 29 75 575
4552 4553 4553 4612 4612 4612 4613 4614 4615 4616 4615 4616 4722 4722 4722 4722 4722 4722 4722 472	X sanital medeverkers Betko-folceal Backoffice werkplaatsen X Werkplaatsen X Metalverkplaats S chuutwerkplaats X Aduio- en videoruime A oostagruimte voor technisch materiaal Backoffice art. handling Backoffice art. handling X ransport - en handling X ransport - en handling X ransport - en handling Status - en handling X ransport - en handling X verstellen en lossen X verstellen X verstatier X werkateller X werkateller X bootservolkaal (MED) X kitchenette X sanital medewerkers gescheiden) X kerguimten X berging voor schoonmaak X centrale berging jogistiek f	1 × đ 1 × đ 1 × đ 1 1 × đ 1 1 1 1 1 1 1 1	Incl           Incl         Incl           Incl         337           375         Incl           100         30           301         Incl           302         Incl           1133         Incl           260         Incl           30         20           27         224           36         675           7704         9           200         6           16         60           500         250	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	17 123 1 688 720 315 340 135 158 97 748 817 158 97 748 816 1768 1053 1055 1		224 98 92 42 43 44 44 45 44 28 38 38 328 38 328 328 38 328 328 38 328 32	1 008 441 504 189 221 1228 142 2 475 189 125 6 197 1 00 1 474 2 675 44 98 29 78 44 98 29 78 44
4552 4553 4553 46 4612 4613 4614 4615 4616 4612 4616 4612 4721 4722 4722 4722 4722 4722 4722 47	X sanital medeverkers Betko-fokaal Backoffice Backoffice Backoffice Backoffice Backoffice X Werkplaatsen X Houtwerkplaats X schilderwerkplaats X Werkateller X Werkateller X Hoofdserverkplaatherverkers gescheiden) X Schenette X Schonette X Scho	1 1 × 3 1 1 1 1 1 1 1 1 1 1 1 1 1	Ind Ind 3 337 375 0 0 0 35 35 35 35 35 35 35 35 35 35 29 20 29 20 20 20 20 20 20 20 20 20 20 20 20 20	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	17 123 1 688 720 315 340 135 158 9748 847 845 1768 135 90 122 1053 54 223 143 3143 327 70 21 55 220 0 350 125 210 56 220 0 350 125 210 20 20 20 20 20 20 20 20 20 2		224 224 12 12 49 9 9 9 9 9 9 161 161 364 42 28 33 338 50 50 22 8 9 9 13 28 8 9 22 8 9 13 28 9 9 12 45 9 161 164 364 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	1 008 441 504 189 221 142 2 475 189 125 189 125 107 0 1 474 98 29 78 44 98 29 78 44 98 29 78 44 98 29 78 44 98 29 78 44 192 107 107 107 107 107 107 107 107 107 107
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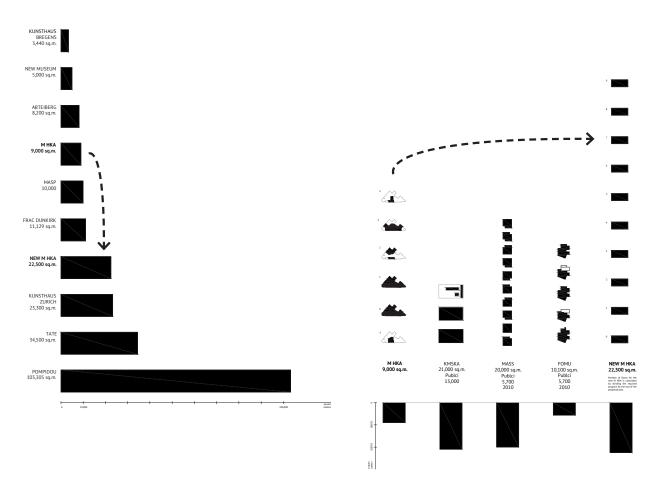
Analyzing the program of demands.

Given that M HKA as the future Flemish Museum of Contemporary Art (VMHK) wants to upscale into a large museum, comparable to the size of KMSKA and MAS, the aim is to give substance to the entire program of demands.

Current total m <sup>2</sup> of M HKA	9.000 m <sup>2</sup> (gross).
Desired total m <sup>2</sup> of VMHK	15.000 m <sup>2</sup> (net) or 22.350 m <sup>2</sup> (gross), excluding outdoor spaces.
Proposed m <sup>2</sup>	13.765 m <sup>2</sup> (net), excluding outdoor spaces.

- Permanent collection
   Temporary collection
   Library & Archive
   Forum
   Back-office
- 6. Outdoor space

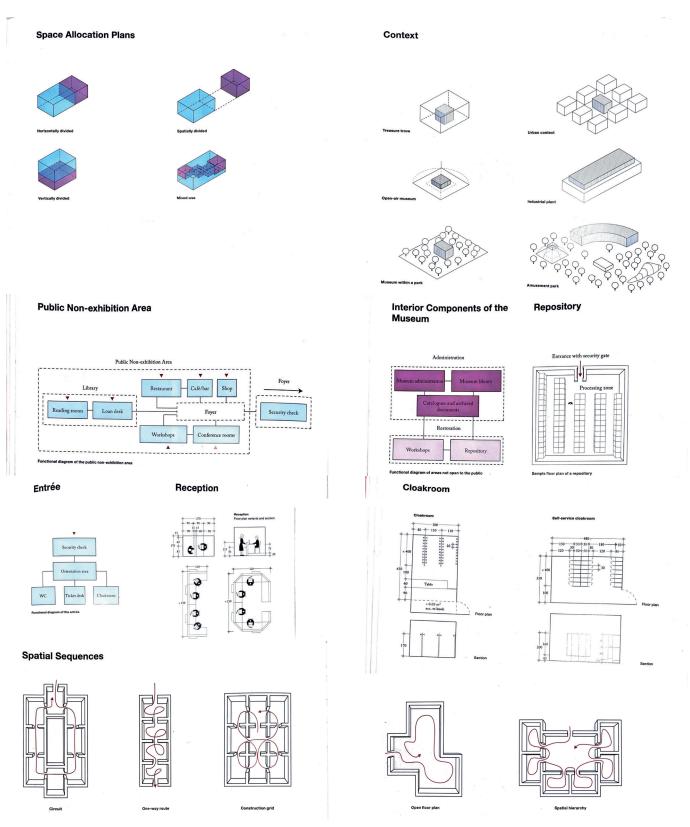
Required m <sup>2</sup>	Proposed m <sup>2</sup>
3.032 m <sup>2</sup>	2.912 m <sup>2</sup>
3.150 m <sup>2</sup>	2.828 m <sup>2</sup>
1.901 m <sup>2</sup>	1.551 m <sup>2</sup>
3.608 m <sup>2</sup>	2.825 m <sup>2</sup>
3.337 m <sup>2</sup>	3.649 m <sup>2</sup>
350 m <sup>2</sup>	400 m <sup>2</sup>



Upscaling of M HKA into VMHK.

### Research.

**Reading** Schittich, C. (2016). *Museum Buildings: Construction and Design Manual*. München: DETAIL. https://doi.org/10.11129/9783955532963



Museum buildings, construction and desing manual by Schittich (2016).

**References** Depot Boijmans Van Beuningen, designed by MVRDV (2017).

Kimbell Art Museum Expansion, designed by Kendall/ Heaton Associates & Renzo Piano Building Workshop (2013).

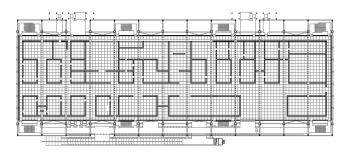
FRAC Dunkirk, designed by Lacaton & Vassal (2015).

Centre Georges Pompidou, designed by Richard Rogers & Renzo Piano (1977).

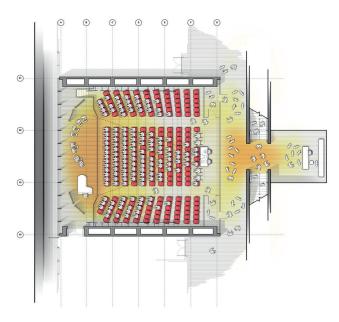
Section of FRAC.

Section of Kunsthaus Zurich.

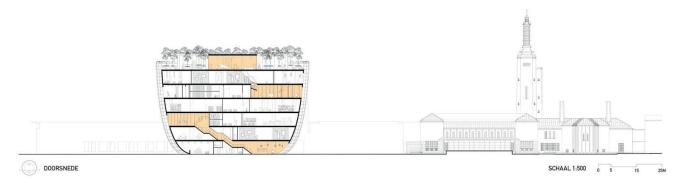
To get a first grasp of what dimensions would fit with the requirements of the program of demand and what spatial sequences would make sense for a museum, I looked into the book *Museum Buildings: Construction and Design Manual*, the previous precedent studies and some contemporary reference projects.



Fourth floor of Centre Pompidou.



Auditorium plan of Kimbell Art Musem Expansion.



Section of Depot Boijmans Van Beuningen.

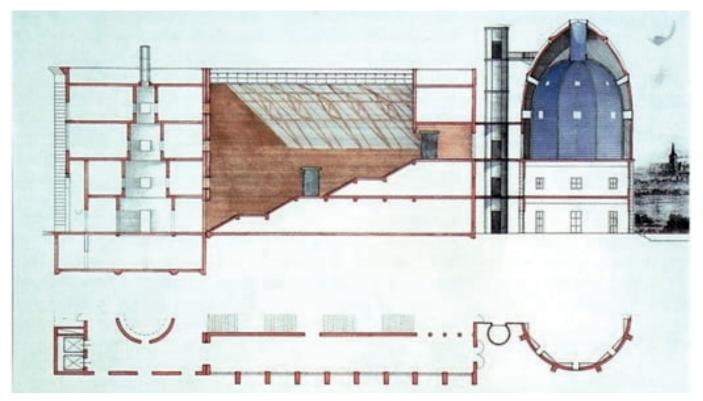
**References** Bonnefantenmuseum, designed by Aldo Rossi (1995).

Musée de l'Orangerie, designed by Firmin Bourgeois (1852).

Since the round room is somewhat of an awkward shape to hang on artworks, making it somewhat inconvenient to utilize as a gallery space. I looked into different approaches that deal with the shape of a round room.

The first example is the Bonnefantenmuseum. This museum uses the shape in two ways. One (left image) is by putting sculpture in a round room, so it does not put anything onto the walls. The other (right image) is by making the walls slightly angled, thus making it appear to be round while making it able to hang something onto the walls.





Plan and section of the round and round shaped exhibition spaces of the Bonnefantenmuseum.



The second example is the panorame rotunda rooms of the Musée de l'Orangerie. Instead of a round room, it is an elliptical room, specifically built to display Monet's monumental murals on its curving white walls. The murals' colossal dimensions, however, rendered them difficult to accommodate within the confines of a traditional museum or gallery setting. Nonetheless, the oval room and and the shifting conditions of light and atmosphere create the perfect space necessary to do the paintings justice.



Panorama Rotunda and the Water Lilies murals of Claude Monet.

_ (	Orangerie des Tuileries —	— Transformation en Musee. —
- Annexe	DU LUXEMBOURG	DONATION CLAUDE MONET
ECHELLE 0.01 PM	COŢE. DE I	LA SEINE / Unisse fair à Archificite des Palais du Louvier et des Jouernes Paris de 20 Janvier 1993

Floor plan of Musée de L'Orangerie, with the Panorama rotunda exhibition spaces on the right.

**Reading** Encyclopaedia Britannica. (n.d.). Forum. In *Britannica*. Retrieved from <u>https://www.britannica.com/</u>topic/forum-ancient-Rome

NL Architects. (2019, December 15). Forum Groningen Multifunctional Building. *ArchDaily*. Retrieved from <u>https://www.archdaily.com/930102/forum-groningen-</u> <u>multifunctional-building-nl-architects</u>

Cameron, D.F. (1971). The Museum, a Temple or the Forum. The Brooklyn Museum.

The question of what the forum space is or could be struck me. I started to wonder and formulate what the forum space will be for the design of M HKA. By both researching what the forum used to be and is in modern terms, combinded with reading an article about what the forum space of a museum should become, I concluded the following statement.

In Ancient Rome and Greece, **the Forum** was a public gathering place. It served as a revitalized city square where the people of Rome could gather for commercial, political, judicial and religious pursuits. Vitruvius proposed a 3:2 length-to-width ratio.

The Groninger Forum is intended as a general meeting place for residents and visitors of the city of Groningen. It has a nickname as 'the living room of Groningen'. It provides a cohesive program of cultural activities such as exhibitions, courses, lectures, films, youth activities and debates and takes care of the library function in the municipality of Groningen. It also has a close collaboration with the Groningen debate center DwarsDiep, the Hanze University of Applied Sciences and the University of Groningen.

According to Duncan F. Cameron, former director of the Brooklyn Museum in 1971, the forum space is:

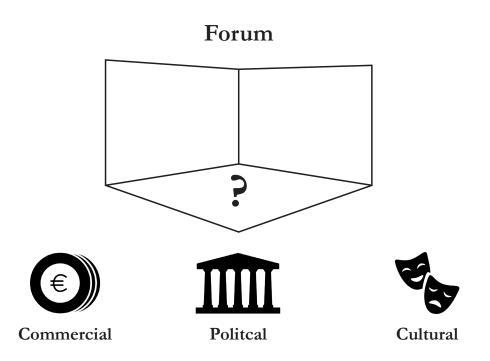
"Museums must concern themselves with the reform and development of museums as museums. They must meet society's need for that unique institution which fulfills a timeless and universal function the use of the structured sample of reality, not just as a reference but as an objective model against which to compare individual perceptions. At the same time, and with a sense of urgency, the forums must be created, unfettered by convention and established values. The objective here is neither to neutralize nor to contain that which questions the established order. It is to ensure that the new and challenging perceptions of reality—the new values and their expressions—can be seen and heard by all. To ignore or suppress the innovation or the proposal for change is as mindless as to accept that which is new because it is novel."



School of Athens by Renaissance painter Raphael.



Groninger Forum.

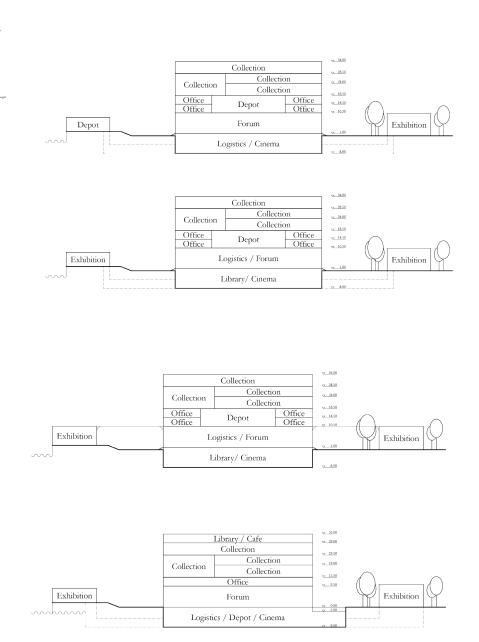


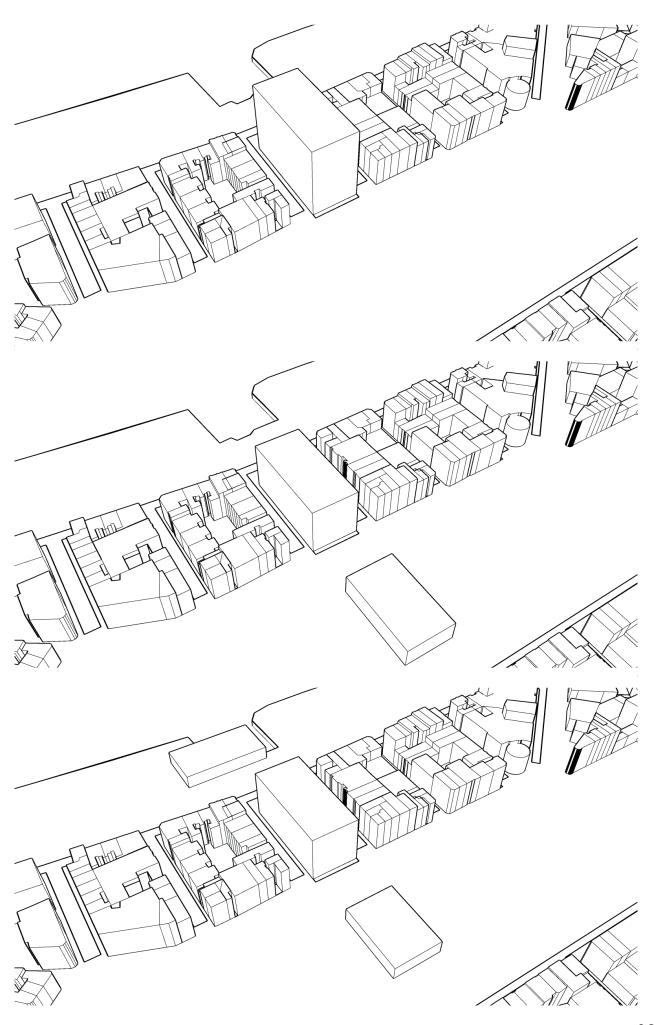
The Museum's Forum will become a place where residents and visitors of the city of Antwerp could gather for commercial, political, and cultural pursuits, ensuring that the new and challenging perceptions of reality-the new values and their expressions-can be seen and heard by all.

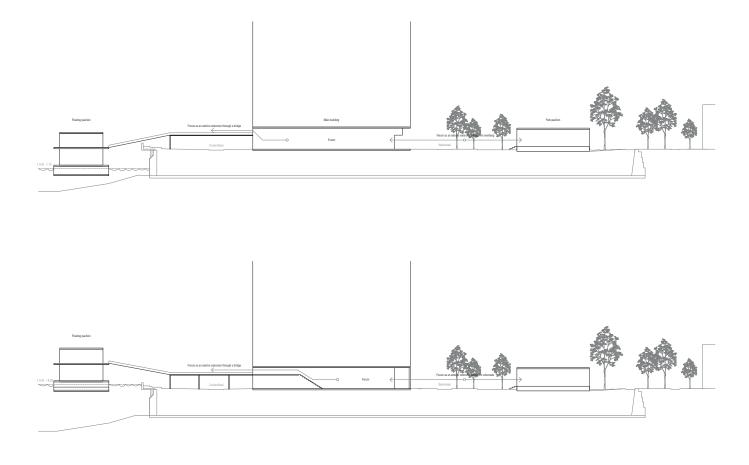
# Design.

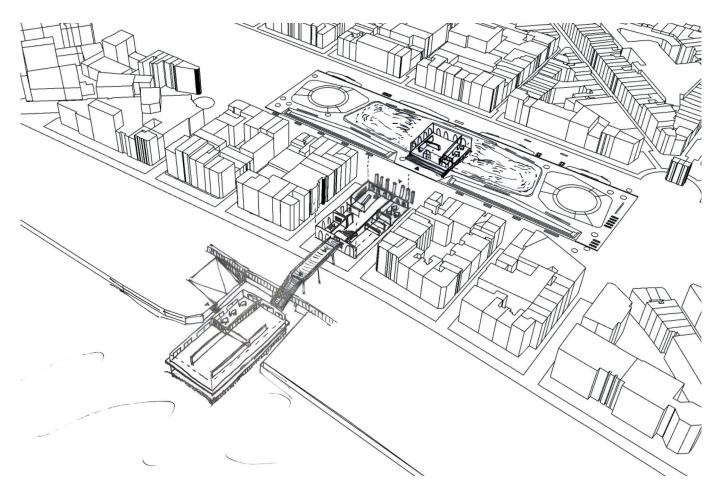
Based on the previous reserach, I tried to make a first series of volumes and program stacking. Three different studies were conducted. After building the first mock-up volume; giving a rough estimation on how the program of the demand could be translated into a volume, I found the building height somewhat hostile to its surrounding. It was about three times higher than the neighbouring buildings. Personally, I found this to be a misfit, thus I want to distribute the volume into smaller pieces. This resulted in two different option than the first one. One with a main volume on the given site and a volume in the park, and another one with a main volume on the given site, one volume in the park and another one along the quay or possibly (floating) on the Schelde river. The strategy for the main volume formulated into three different layers. The plinth, build up until the height of the existing ninetheenth century layer; embedded in the urban structure, and consisting of public functions and working spaces. The core, containing the museum overlooking, the neighbourhood and contemporary buildings. And a crown, which is an elevated public function, overlooking the city of Antwerp.

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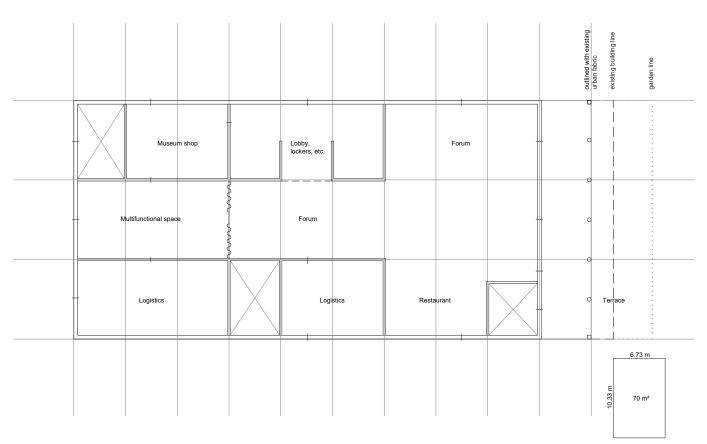




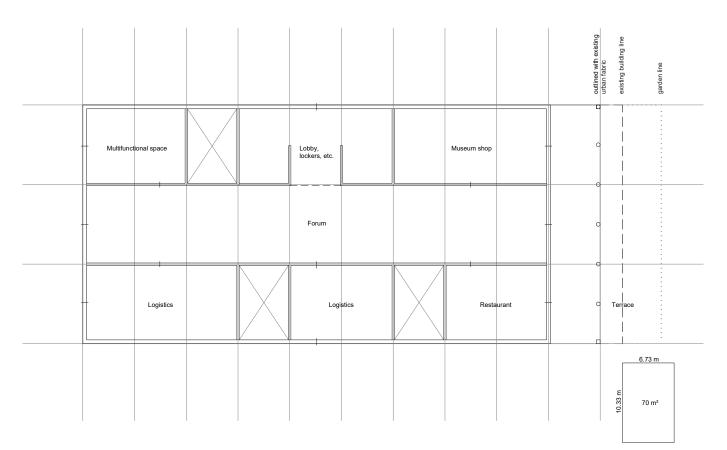




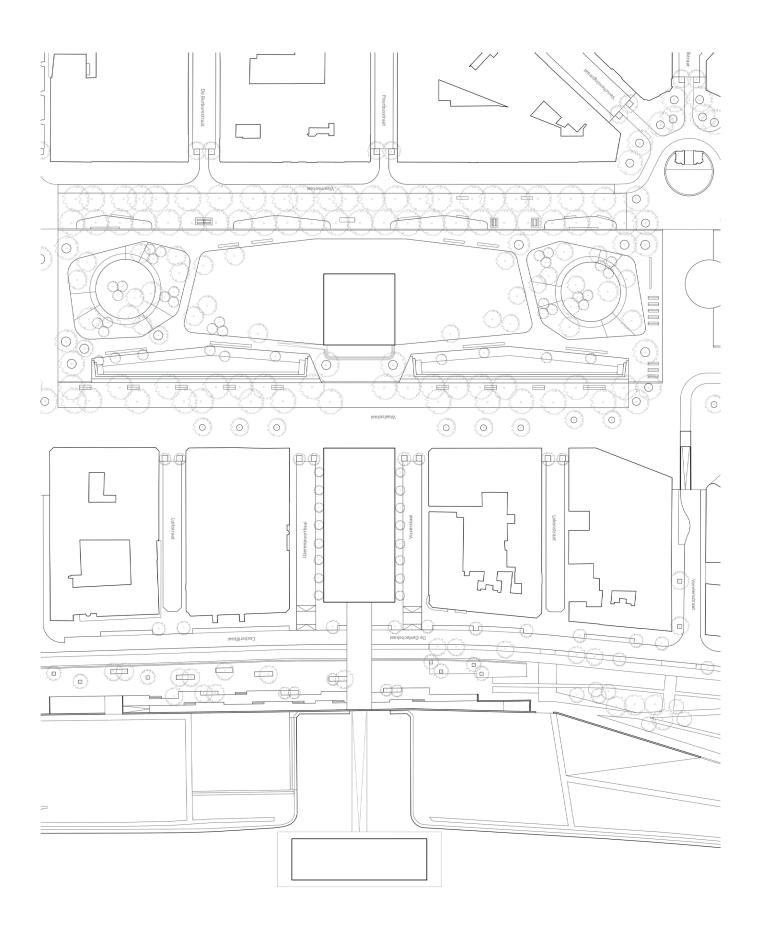
Forum space as a horizontal continuation between the three different buildings in section and sketch.



Ground floor option 1.

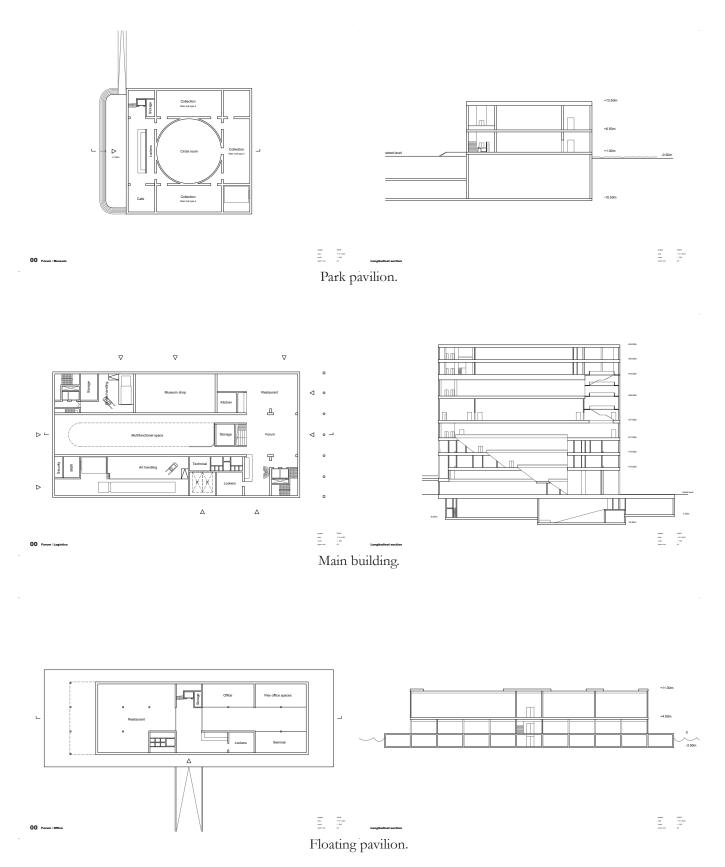


Ground floor option 2.



Site plan.

The redistribution of the program into three different buildings was further explored, and resulted in a first set of more detailed drawings.



As I continued working on the history research, I came along two interesting master theses. One focused on what materials can be considered, and are used as, local materials. And the other was an in-depth research on material and building techniques in masonry buildings found in Belgium. These led to a series of maps which show where a variety of raw materials can be found in Belgium and where these are produced and processed into building materials. Combining these maps, and some literature, I did a study to show what the material culture of Belgium and Antwerp looks like. In conclusion, with the natural resources of which Belgium has access to, concrete, wood, brick, stone, marble and glass can be considered as local building materials (Van Cauwenberge, 2018). Despite not mentioned in the sources, the resources used to manufacture the mentioned materials can also be used to create plaster, thus allowing it to be considered as a local material as well. The location of the different materials form a direct correlation to Belgium's building and material culture as well, as bricks are more common in Flanders than stone and vice versa in Wallonia.

Local resources require less emissions than importing resources and are in some cases of a better aesthetic and quality compared to an equivalent product from somewhere else. That is why these maps might eventually be helpful in choosing the materialization of for my own project.





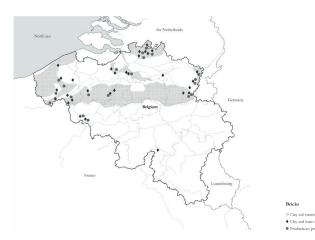








Building materials found in Antwerp.











• Quar

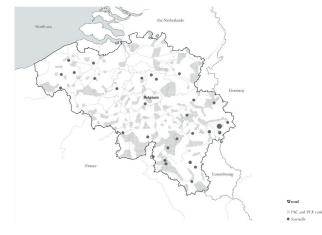








♦ Sand ♦ Limes



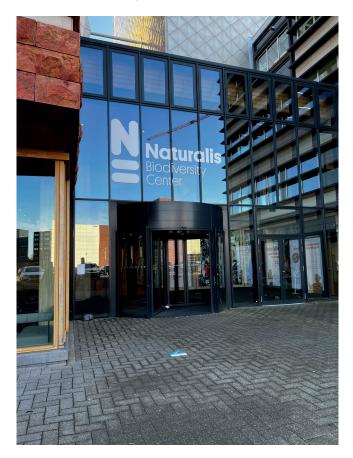
Building materials and their source found in Belgium.

# Excursion, Leiden.

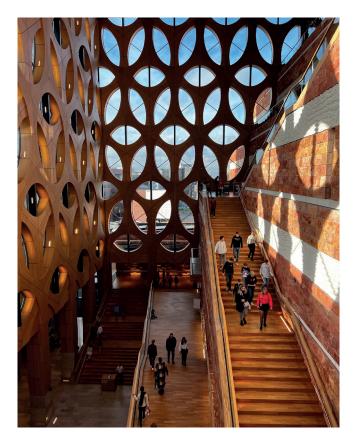
Naturalis Biodiversity Center As we approached the building from the train station, it was hard to find the entrance, as the orientation of the façade was hard to read (although the materialization felt proper, given the type of the museum). Apparently there was one at the front and rear of the building. Once we entered the building, we were somewhat stunned by the enormity of the atrium. On the one hand a nice forum space, connecting all of the different commercial and welcoming functions with a large staircase leading you to the actual museum. On the other hand it didn't really feel like a public space for other activities than those of the museum. To sum up the museum itself, it was very scenographic and some sort of sensation curation. I would say a perfect match to alure children and such for educating purposes, but not something to look after for in an art museum. Nonetheless, it did feel like a museum you could comfortably spend an afternoon at, as it had a cafe, toilets and occasionally workshops on the bottom, middle and top floor and the lazy stair, although you had to take the same one to go back or take the elevator once at the top, made circulation quite easy.

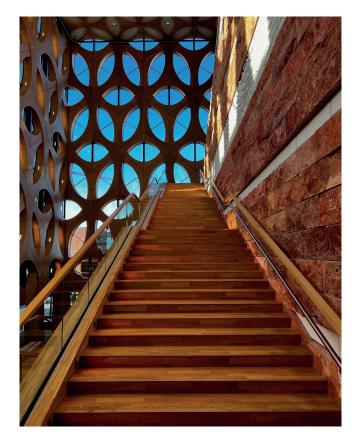


Façade of Naturalis.



Back entrance of the building.





The atrium and large staircase.



Scenography of the prehistoric skeletons..



Coffee corner on the second floor.

#### Museum De Lakenhal

All in all it was an

interesting museum to see. Displaying a collection consisting of contemporary and classical artworks in both renovated and newly build rooms. Some of the personal favourite things about the museum were the interior finishes, furniture and façade of the extension. The craftmanship of the wooden furniture like benches, lockers, doors, tables and so on were stunning to see and the atmosphere that the different colours, not smoothly painted or plastered, of the walls gave were impressive. The warm feeling that these materials and colours gave, made me feel very welcomed and warm. After a conversation with the lovely lady from the information desk, I was amazed by the fact that the building consisted of so many different layers of building and renovation periods. Not knowing this beforehand, it made complete sense why some spaces in terms of materiality and scale felt so different. So, in a way, it was interesting to see what these different scale of spaces could do and what kind of artworks it could display; large rooms with different sizes of paintings and objects, and small rooms or rather cabinets with fewer and in some cases smaller paintings or other objects like in one room fabrics spread out on a table. The former creating more distance to perceive the object, and the latter to get closer and more confronted with the object.





Main entrance.

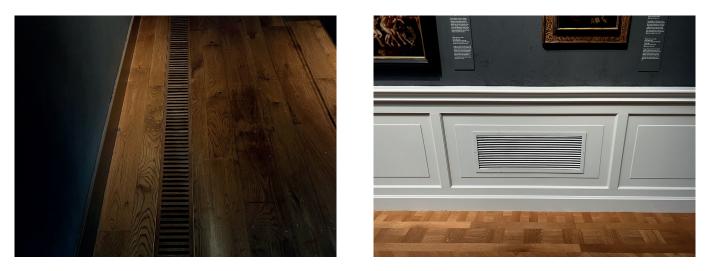


Entrace to the museum cafe.





Materiality, form and details of the extension.



Some details of ventilation in the old parts of the museum.



Roughly plastered or painted walls.





Exhibition spaces in the old part.





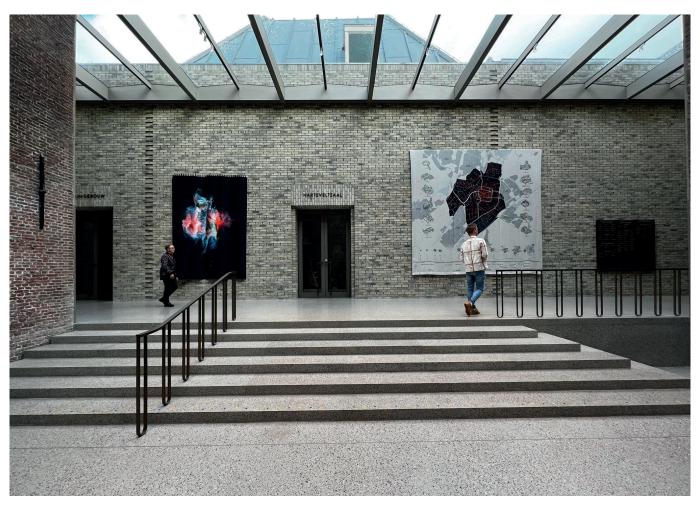


Wooden furniture.



Kembal 1st 1866 641 1778 re renocatie 1874 nurseum Stedeligte nurseum 1890 Hartevelt 2001 geopend va 1900 heet het Lahenhal 1900 1921 Pape vlengel gegend 2019 hergening Van Sterpgebouw

Model and timeline of the museum.



The atrium, connecting both old and new.



Exhibition space of the extension.



Detail of the hallway leading to the older sections.

#### **Rijkmuseum Boerhaave**

I probably learned more scientifically than architecturally from this museum. It was truly super educative, but with a mishmashed façade of three or more different building periods it felt somewhat strange to approach the building and walking around in the exhibition spaces we had the idea of merely walking around in some sort of poorly lighted attic. Perhaps that like Naturalis this fits well with the type of collection one wants to curate, as it felt very scenographic as well. Especially some thematic rooms like the medicine section. Perhaps that the highlight was the collector's cabinet, as it was a modern representation of the cabinets of curiosity.



Main entrance and its four different façades.

'God schiep de aarde, behalve Nederland, want dat deden de Nederlanders zelf'

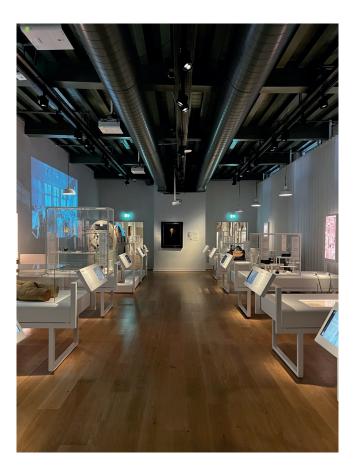
- oud gezegde

'God created the world, but the Dutch created the Netherlands'

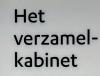
- old saying

Old Dutch saying.





Exhibition space.



In de achttiende en negentiende eeuw was het verzamelen en ordenen van dieren, planten en mineralen op zijn hoogtepunt. Lades, kitzjes, kabinetten, zieft pakhuizen puilden uit van de inheemse en exotische soorten, ook uit de koloniën. De wereld kwam letterlijk en figuurlijk binnen handbereik, niet in de laatste plaats omdat de netwerken van verzamelaars vaak samenvielen met koloniale invloedssferen. Deze moderne reconstructie van een achteinde-eeuws verzamelkabinet geeft een goed beeld van de activiteien van Westerse verzamelaars en onderzoekers uit de Verlichting.

### Collectors' cabinet

The collection and categorisation of animals, plants and minerals reached a peak in the 18th and 19th centuries. Drawers, checks, cabinets and even warehouses were packed with native and exotic species, including from the colonies. The world was literally and figuratively within arm's reach, not least because the networks of collectors of then coincided with colonial spheres of influence. This modern reconstruction of an 18th century collector's cabinet offers greater insight into the activities of Western collectors and researchers from the Enlightenment.



Collection of curiosities.

#### Rijksmuseum van Oudheden

The

entrance hall was enormous, with at the back the first collection object as this grandeur welcoming gesture, the information desk, lockers, cafe and museum shop on one side, and the entrance to the museum on the other. Like Naturalis, maybe even to a larger extend, it was publicly not so special, but it did give a first welcoming impression. The museum itself had an interesting chronological story; displaying the most ancient pieces of Egypt first and those of Greek and Roman afterwards. The only downside was that, once upstairs, you had to walk down the same stairs. In that sense, none of the museums seemed to have an alternative approach to vertical circulation and movement. Also the way certain objects were curated and how the rooms were divided into smaller sections felt properly done. It was also heartwarming to see some older ladies sitting on a chair and sketch Ancient Greece sculptures. Never have I ever seen such an interaction in a museum before.



Main entrance.



Scenography.



Exhibition space.

### Rijksmuseum Volkenkunde

we didn't have much time to visit the final museum of our trip. But by coincidentally the temporary exposition was located on the ground floor. Making use not only be able to visit the museum in a short amount of time, although not seeing the entire collection, but also realizing that this is in a practical sense quite useful as well. This way returning guests can easily visit the museum again once the temporary exhibition changes. The only concern that we had, was the relation between the contemporary and permanent exhibition, as it was not clear in both signage and circulation when one or the other began and ended.

Unfortunately



Path leading towards the main entrance.



Exhibition space.

## Excursion, The Hague.

Louwman Museum It was fun to experience the postmodernist architecture of the Louwman Museum. I quite liked the spectacleof the wooden ceiling. Despite that the façade and lobby were very disney-like and colorful, the cars were displayed in unfinished concrete showrooms. It was pleasant that you could take the elevator up and walk the stairs down, ending up in the cafe. An interesting detail we noticed during our arrival was that cars older than 40 years were allowed to park for free in front of the door, which at the same time also functioned as a kind of business card for the museum.



Postmodernistic façade.



The unfinished concrete ceiling of the showrooms.



Entrance showroom.



Parking sign for 40+ year old cars.

### Museum Voorlinden

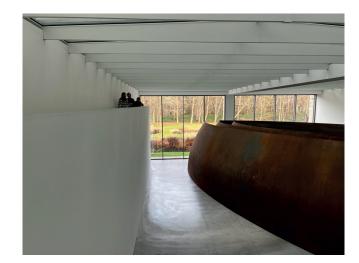
The museum

had a pleasant, homely, atmosphere, which seemed to be due to the laminated floor. It was also pleasant to see the involvement, with the use of long corridors that ended with a window and through curation, of the beautiful surroundings. It felt as if the natural outside world was brought into the museum's inner world. Just like Renzo Piano's Beyeler Foundation. The light filter in the ceiling was interesting as well. Almost no direct sunlight was exposed onto the walls. As a result, the works of art were equally shaded. The spaces also seemed to be rearranged, as not every wall went all the way up to the ceiling. This may also have been the cause of the unclear routing, as the rooms were not logically connected.



Exterior of the museum.





Exhibition spaces.





Homely feeling of the interior.



# Excursion, Amsterdam.

**Stedelijk Museum Amsterdam** Aside from the weird bathtub shape of the extension, I had higher expectations of a museum with over 650.000 visitors a year. The forum space was enourmous, but had little to offer. It had just one bench, which was always taken, and a small corner for to the wardrobe and museum shop. I certainly think they could have dedicated more space to create a semi-public or make it much smaller with the current elements they offered. The exhibition spaces where alright, but not very special. I personally prefer the white walls combined with the wooden floor of the Voorlinden Museum, as it felt more homely than in this case.



Ticketing part of the forum.



Commercial and gathering part of the forum.



Exhibition space.



Enfilade of exhibition spaces.

### Rijkmuseum

As probably my

favourite museum in The Netherlands, the Rijksmuseum never stops to intrigue me; its fine arts, master pieces and astounding architecture. Some key things I noticed during the visit were the large forum space, library and spatial organisation of the Gallery of Honour. Interestingly the large forum space was devided into three sections. A space where you could gather on the one side, in the middle a space where you can drop off your jacket and bag, and a space where you could get food and drinks and buy a souvenir on the other side. The library was, to my own surprise as I did not recall this at all, part of the exhibition to a certain extend. As the final room after a series of exhibition spaces, you could see people working and studying on the archive and library downstairs. Whilst this is usually a seperated or closed off room, it now was able to integrate as part of the museum. Lastly, the Gallery of Honour, where some of the best works of the museum are put on the wall, I noticed something about the spatial organisation. Whilst often you find exhibition spaces as part of a series, connected through a enfilade, it was not the case here. Instead there was a large space in the middle, which allowed movement and provided places to sit, but most importantly laid a focus on the masterpiece of the museum, Rembrandt's Nachtwacht. It both felt like one big room, but also the opposite. As this large middle part was connected to smaller rooms, before you would be able to see the Nachtwacht from closeby. Additionally it was nice to see, like in Naturalis, that there was a coffee corner somewhere between the first and second part of the exhibition. Making it able to rest a bit, which is nice in an enormous museum like this.



Gallery of Honour.



Gathering part of the forum.



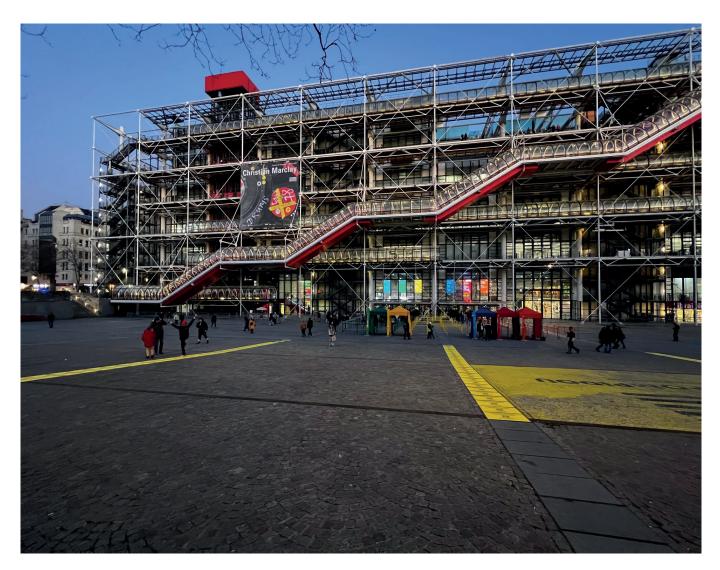
Commercial part of the forum.



Library.

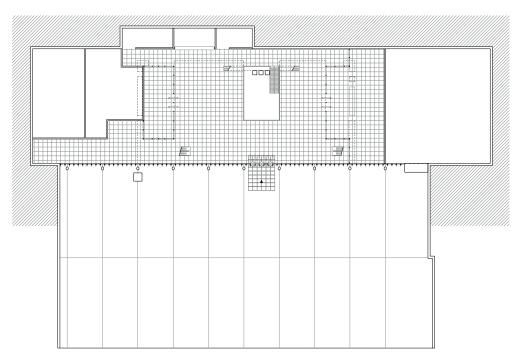
## Excursion, Paris.

**Center Pompidou, Musée du Louvre, Palace of Versailles, Musée de l'Orangerie** The Centre Pompidou had an inmense amount of public space on the ground floor, especially when the piazza in front is included as well. It was somewhat of a pitty that the large forum space was not entirely public, since you must go through a security check and the library was not freely accessible. Nonetheless, it offered much more than the average museum does, as it had an interactive installation for children, boutique shop, book shop, a cinema, and much more. Going up, the experience of slowly looking over the city, with an outdoor balcony on the fifth floor, was phenomenal. The art spaces were far from a white cube, as they often displayed the installations through the ceiling and had a wooden floor. An interesting detail was the section between some of the art spaces that led to toilets. Each exhibition space was connected to a long hallway in the middle. Something similar could be seen in classical museums like the Louvre and the palace of Versailles. Additionally, besides the impressive Water Lilies of Monet, it was interesting to see the releationship of a panorama rotunda exhibition space with modern art.



Centre Pompidou.

### Individually.

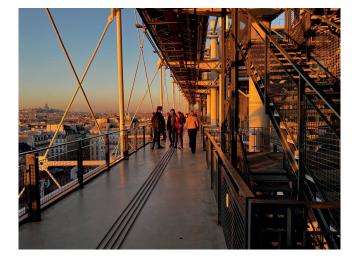


Centre Pompidou, ground floor..



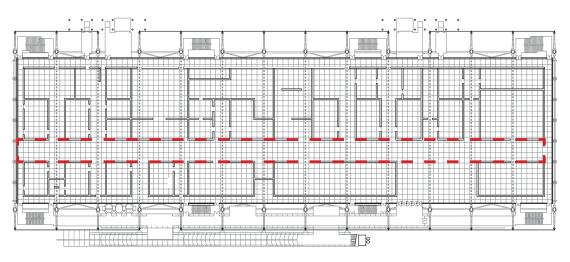


The main forum space.





View over Paris from the fifth floor.



Centre Pompidou, fourth floor.



Exhibition spaces.



Palace of Versailles.

Musée de l'Orangerie.

Musée du Louvre.

**Musée du Louvre** The Louvre was very special to visit. Aside from it enormous amount of museum spaces and art works, it probably would take an enormous amount of pages to describe this museum as well. So, to summarize some of the unique elements, it would match these three images. After a long walkthrough of museum spaces, at some point you could encounter a place to rest or take your mind away from all of the art works. Something like a museum shop or small cafe, could be found in between the painting galleries. But the most unique encounter was the hidden atrium in the sculpture wing, with some benches and trees, which made it personally very special.



Sculpture atrium.



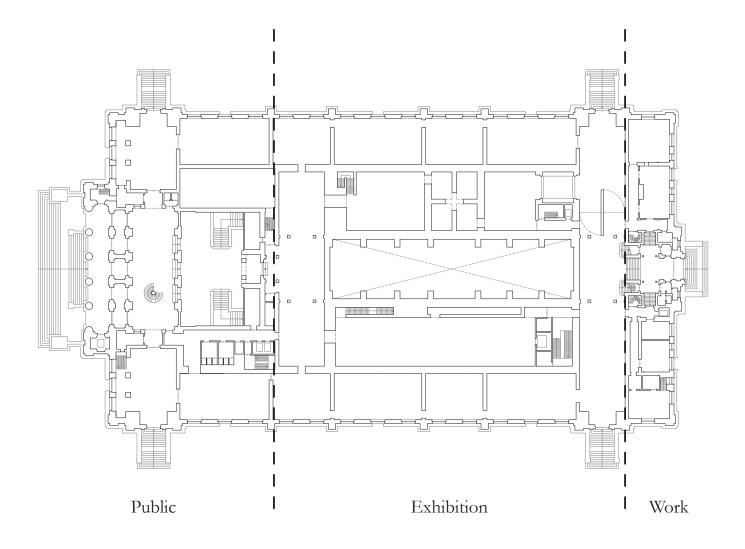


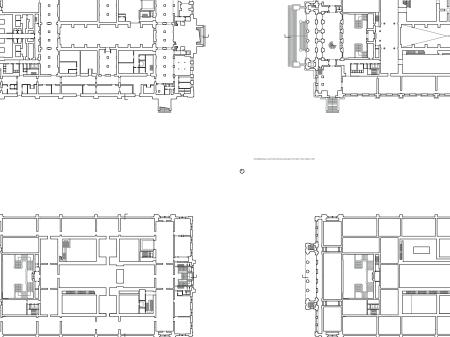
Cafe.

Museum shop.

# Research.

**Reference** Koninklijk Museum voor Schone Kunsten Antwerpen, founded by Napoleon Bonaparte in 1810. Designed by architects Frans van Dijk & Jean-Jacques Winders (1890), reconstructed by KAAN Architecten (2022). Denzel and I collaborated in redrawing the floor plans and sections of the Koninklijk Museum voor Schone Kunsten Antwerpen (KMSKA), as part of the drawing group for the collective research. We found a nice set of drawings from KAAN's intervention, and started to redraw them according to the same principle as we did for the precedents. What I personally found interesting finding out during the process of redrawing, was the clear seperation in functions. Public functions at the front accesible through the main entrance, the exhibition spaces in the middle, and the offices at the back.





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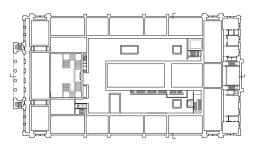
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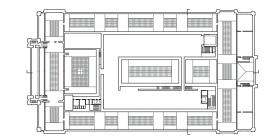
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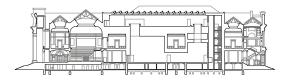
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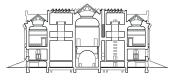
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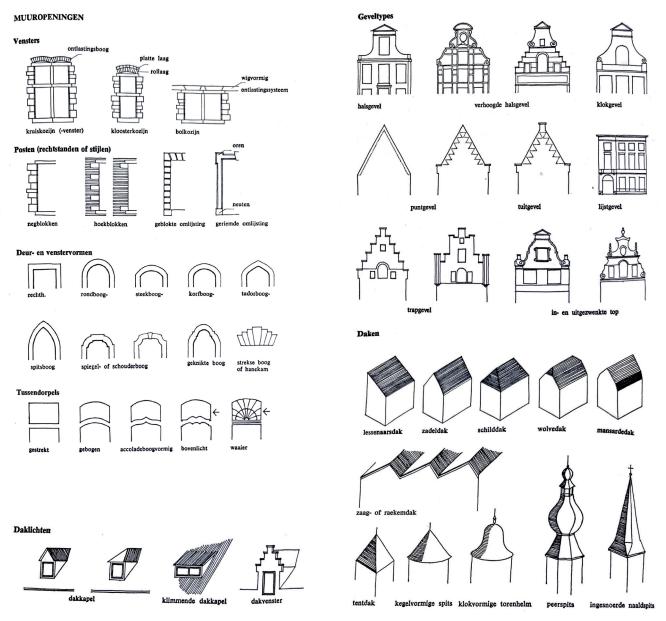
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**Reading** Van Aerschot-Van Haeverbeeck, et al. (1989). Bouwen door de eeuwen been.

Van Cauwenberge, E. (2018). Lokale bouwmaterialen in de Belgische context [Master's thesis]. Universiteit Hasselt. As part of the history research, for the collective research, I did some research about the building and material culture of Belgium and in particular Antwerp. The book Bouwen door de eeuwen heen, written by Van Aerschot-Van Haeverbeeck et al. (1989), focuses on the city of Antwerp and its wide range of different building styles. Through showing a selection of the inventory of the city its cultural property, a distinguish between the assets could be made. Thus marking a set of four different building styles, namely Gothic, Renaissance, Traditional and Modern architecture. Additionally a fifth style; the Flemish Renaissance Revival, has been added as it had a major influence in Antwerp and the surroundings of M HKA and played a role in influencing the international architecture stage. Additionally, the book gave an overview of building characteristics found in Antwerp.



City centre of Antwerp (photo taken by Brittany Varano).



Building characteristics found in Antwerp.

Looking into the existing public spaces and future plans in Antwerp.

Along the Scheldt quay.

### Droogdokkenpark

Park,, hangars with workshops and hangars with a Maritime Museum (which contains part of the MAS collection), tide park, and pavilions with a cafe.

### Kattendijksluis and Rijnkaai

Remainders of the former harbour activities (such as hangars and cranes), recreation, offices, and the Red Starline Museum.

### Bonapartedok and Loodswezen

WOII monument, offices, recreation, events and ceremonies, and a park.

### Schipperskwartier and centrum

Noorder- en Zuiderterrassen, Kasteel het Steen, pavilions with restaurants, cruise ship terminal.

### Sint-Andries and Zuid

Park, sports, open-air podium and a former atomic shelter.

### Nieuw Zuid

Park and water forest, three pavilions; viewpoint, technical, and (most likely to become) restaurant.

### Petroleum Zuid

Companies and greenery.

### Other city projects.

### Linkeroever

Park and green landscape with pavilions, mainly restaurant and one art pavilion Kunstcentrum aan de Stroom (KAS).

#### Stadspark

Art in the park.

#### Park Brialmont.

Pavilion with a visitor centre.



Brialmont pavilion (Cluster landschap & stedenbouw).



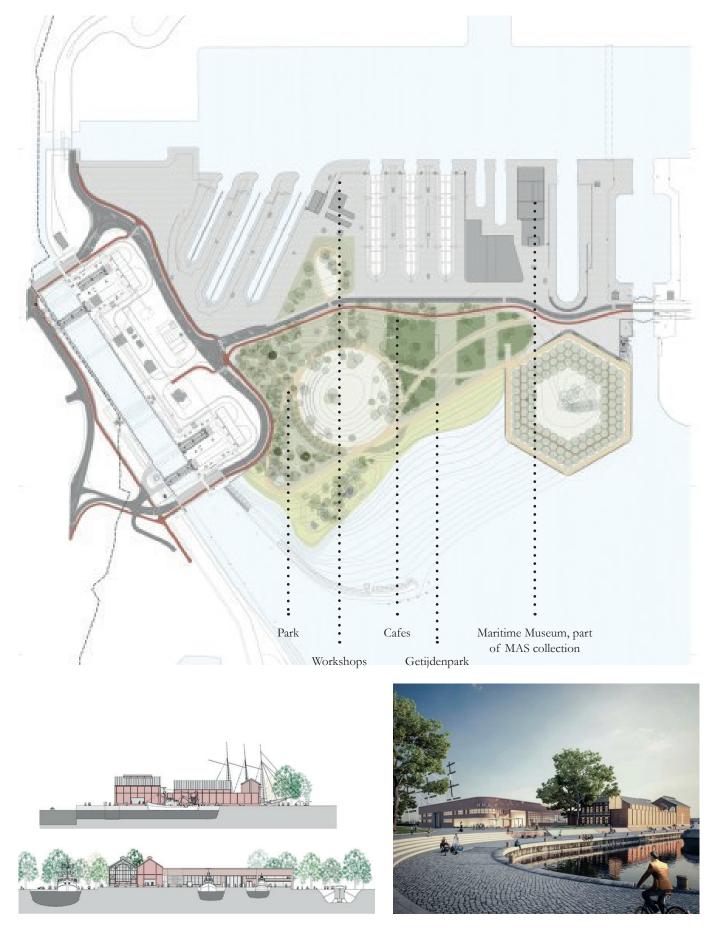
KAS pavilion (Studio Inarco).



Noorderterras pavilion (own image).



Parks in Antwerp (Omgeving landscape architecture).



Site plan of the Droogdokkenpark and the design proposal of its Maritime Museum (Atelier Kempe Thill).

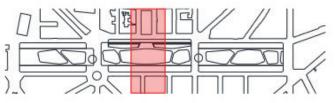
Scheldt axis as a gesture, refering to the former connection between the docks and river. Some sort of exit point from the park to the water, likewise to the former lock

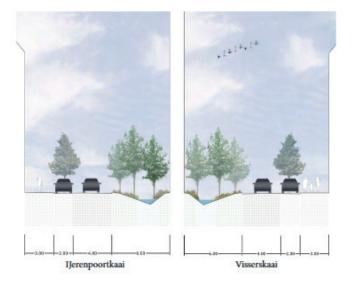


#### 4. De Scheldeas

De Scheldeas maakt de plek terug zichtbaar waar vroeger de waterverbinding werd gemaakt tussen Zuiderdokken en Schelde. Aan beide zijden van het Hof van beroep wordt een nieuwe waterstructuur geïntegreerd. Deze werkt als verbinding tussen het grote waterbasin aan de Weide en de Schelde. Deze waterstructuur wordt opgevat als een wadi die rijkelijk beplant wordt met zowel oeverbeplanting, struiken en bomen.

Om deze waterstructuur te realiseren moet het profiel van de Visserskaai en de IJzerpoortkaai worden aangepakt. Beide straten worden opgevat als enkelrichtingsstraat met aan één zijde parkeren. Een voldoen ruim voetpad wordt voorzien aan de zijde van de gebouwen. Aan de zijde van het Hof van beroep wordt de groene waterstructuur ingeplant.

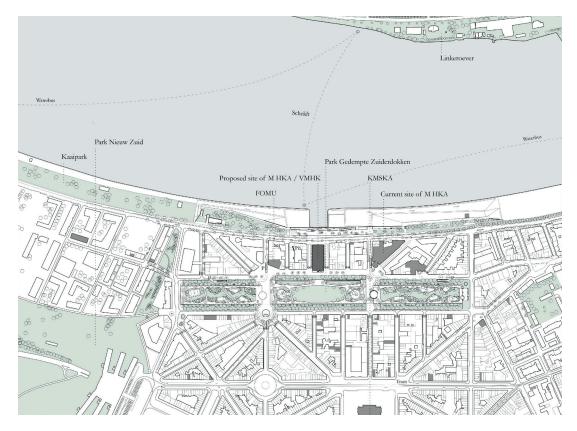




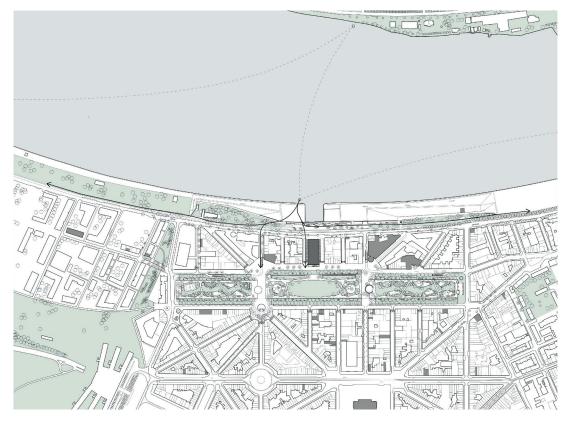
Zuiderdokkenpark at the heigh of the project site (Tractebel, ADR Architects, Georges Descombes).

After analyzing the site; the late nineteenth-century neighbourhood 'Het Zuid', I found out that the city district is also refered to as 'Zuid-Museum'. This can be seen clearly as three of the major museums of Antwerp; FOMU, KMSKA and M HKA, are located in this area, along many smaller galleries. Perhaps you could say that it is the art and cultural scene of Antwerp is emerging within this neighbourhood. Along its monumental axis' you can see that some connect the museums Het Zuid with other museums of Antwerp. Connecting the FOMU, KMSKA and M HKA with museums such as the MAS, Museum Plantin-Moretus, ModeMuseum, Museum De Reede and Red Star Line Museum.

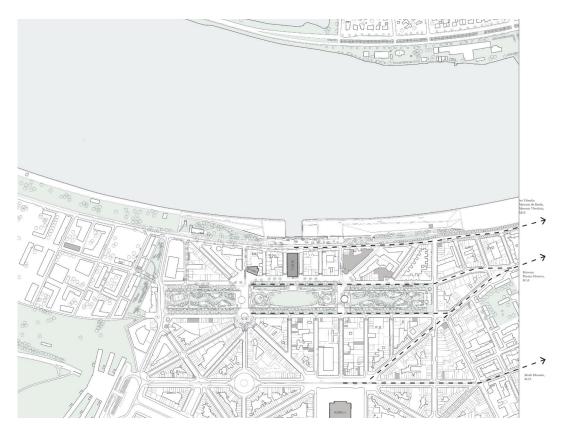
One problem I do encounter in this area, is the genericness of the park and quay, compared to the programming found in other parks and parts of the quay. Nonetheless, this might bring an opportunity for the pavilions to improve the quality of these public spaces. Especially with the new waterbus line connecting the neighbourhood with the Linkeroever and city centre.



Parks, museums and galleries located in Het Zuid.



Waterbus line connecting the neighbourhood with other parts of the city.



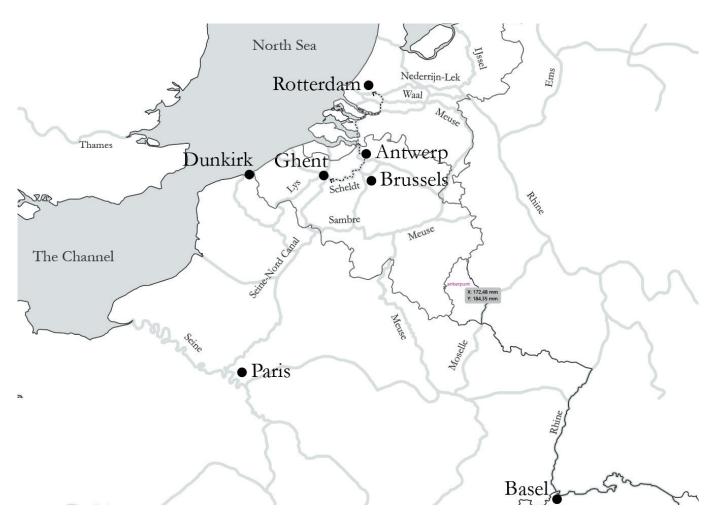
Culture axis.

The concept for the floating pavilion, was further developed into a floating pavilion that is part of a larger network; a collaboration with FRAC in Dunkirk, SMAK in Ghent, kunstmuseum in Basel, Museum Boijmans van Beuningen in Rotterdam, Kunstmuseum in Basel, and so on (as seen on the map). By using tugs it would be able to sail on the rivers and canals of Europe, from city to city. Thus, instead of people and art being transported to a museum, the museum comes to their city instead, in a more sustainable manner as well. The one concern that occurs, is what if the pavilion is unable to go underneath lower fixed bridges. Like the Floating Office of Powerhouse Company, it could be a possibility to make the pavilion, or a part of it, demountable. Another solution would be setting a limit to its height, but also to its exhibition spaces, so it will be able to go underneath most of the bridges.

It was a fun and interesting concept, but unfortunately the idea got ceased.



Demountable construction by Powerhouse Company.



Map of rivers and canals, which connects major cities with a contemporary art museum.

Tackling the genericness of the quay and park allows for interesting curations with artworks. Using the three different scapes; waterscape, cityscape, landscape, found in the three different buildings.





Waterscape

FRAC, by Lacaton & Vassal.

Centre Pompidou, by Richard Rogers & Renzo Piano



Landscape

Xavier Hufkens Gallery, by Robbrecht en Daem Architecten.

Overhead clearance of vessels, in meters		Minimum headroom recommended for bridges, in metres					
CLASS	E.C.M.T. 1961	BELGIUM	FRANCE	FEDERAL REP. OF GERMANY	THE NETHERLANDS	DANUBE REGION	Existing maximum variations
I	3,55	4,10	3,70	and _ have	5,30	-	3,70-5,30
II	3,95	4,30	4,10	-	6,30	-	4,10-6,30
III	4,20	-	-	4,00	6,60	-	4,00-6,60
IV	4,40	6,50	5,25	4,00-5,25 (*)	7,00	6,40	4,00-7,00
V	6,70	7,00	5,25	5,25-9,10 (*)	7,00-9,10 (*)	7,50-8,00 (*)	5,25-9,10
VI	-	7,50	6,00	9,10	9,10	9,50-10,00 (*)	6,00-10,00

(\*) The recommended headroom is not identical on the different waterways or parts of the system of this class.

Adapting to the overhead clearance of European bridges (Leonard, R. & Working Group 9 of the Permanent Technical Committee, 1990). **References** Bonnefantenmuseum, designed by Aldo Rossi (1995).

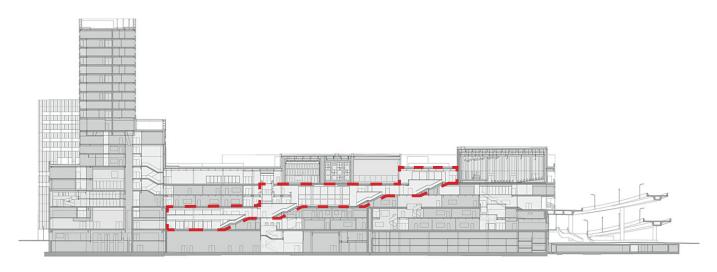
Toni-Areal, designed by EM2N (2014).

Harrow New Civic Centre, designed by Gort Scott (in progress).

After a discussion with Susanne, we came to the conclusion that the mid section of the forum space lacked a proper strategy. She gave me tip to look at Toni-Areal by EM2N, who have this large staircase going all the way up, from ground floor to the top floor. This reminded me of Aldo Rossi's Bonnefantenmuseum as well. What I noticed in both plans, is that they have this forum space in front of the staircase. Something that functions as a gathering place, or where other public functions were located. Given that the future VMHK desires to become more than a museum, and more like a public building, I think this concept aligns well with their desire. And as to imaging such a place, I think the forum space of the Harrow New Civic Centre shows this the best. A public space where you can find an information desk, seatings, a cafe, and a rather open space connected to the upper floors (with a large staircase as well).

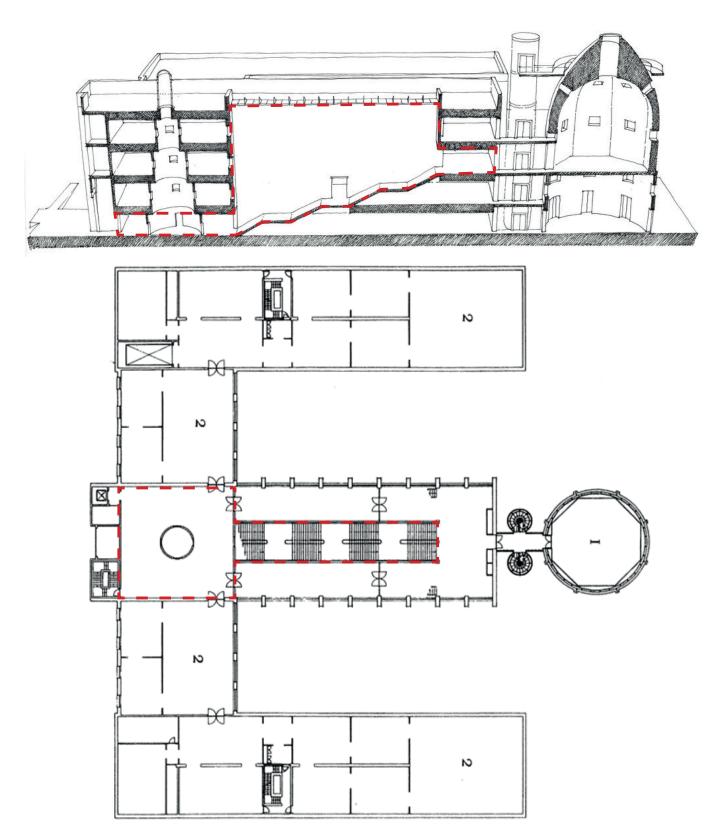


Harrow New Civic Centre by Gort Scott.

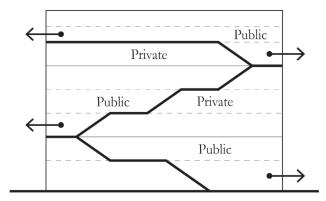




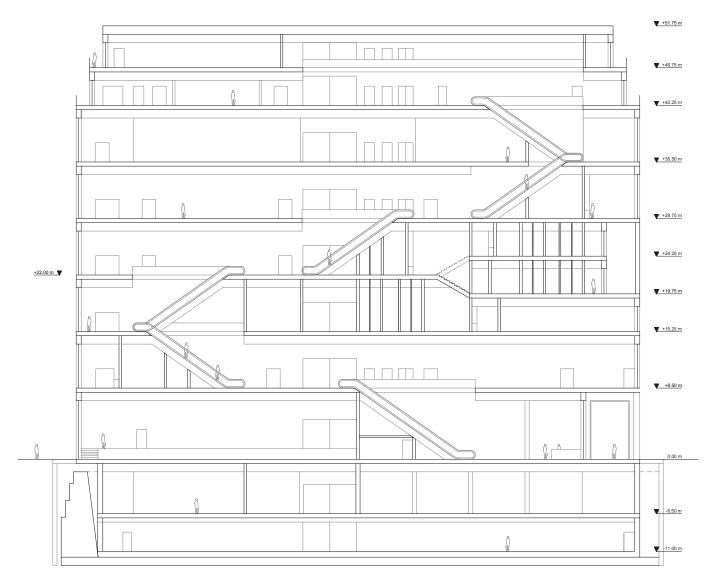
Toni-Areal by EM2N.



Bonnefantenmuseum by Aldo Rossi.

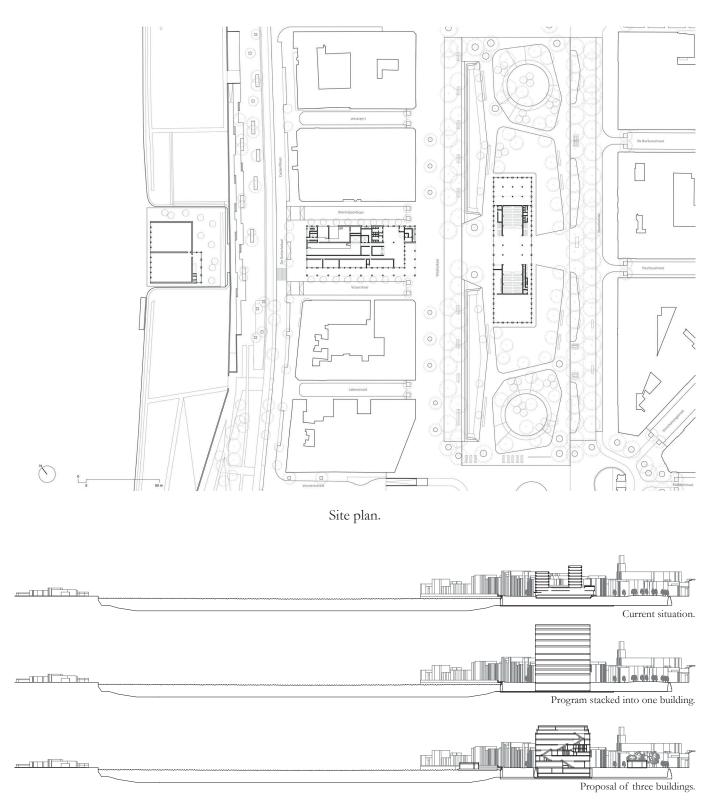


Vertical movement through the main building. Public spaces in front of the escalators, private functions behind.



Longitudinal section.

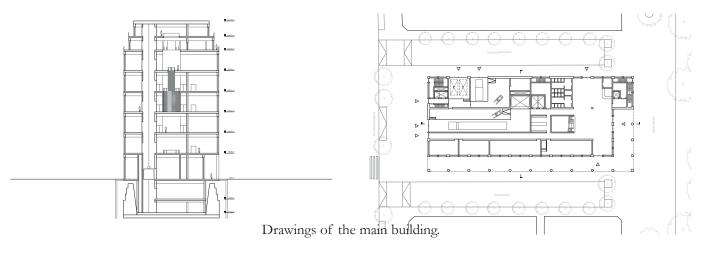
# P2 presentation.

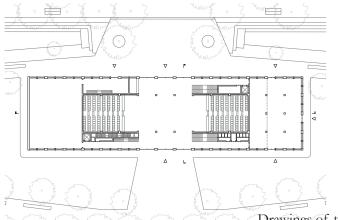


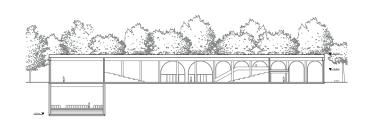




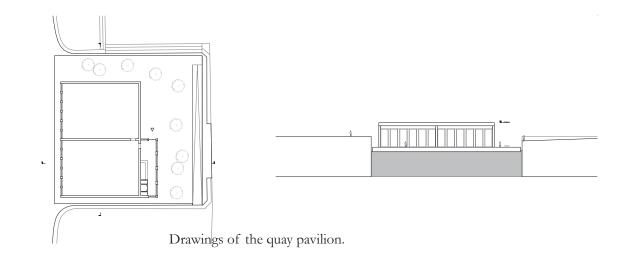
Model images







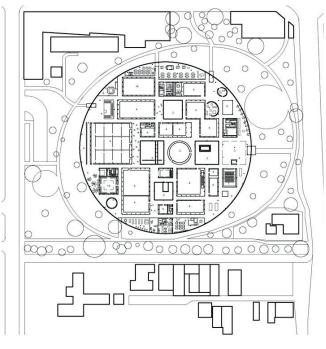
Drawings of the park pavilion.



# Research.

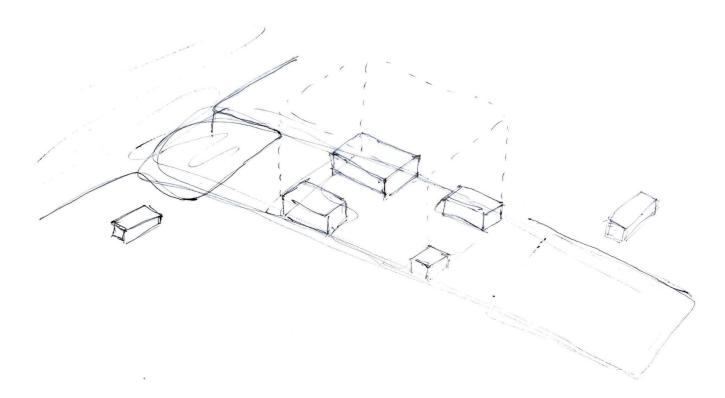
**References** Kanazawa Museum of Contemporary Art, designed by SANAA (2004).

The remarks taken from P2 led to a further study on the redistribution concept. Looking back at the previous research and excursions it became clear that this redistribution of the program over the site is similar to the MAS. Thus the design can be related as some sort of a family museum. But unlike the MAS, it will be as smaller pavilions. Simultaneously, this created the concept of creating a continuing path of pavilions from the quay, through the ground floor (also as an exit point from the park to the water) of the building, to the park. Something related to the pavilion-like floor plan of SANAA's Kanazawa Museum of Contemporary Art. The ground floor, enclosed by an open plinth, carrying the heavy weight of the mass that is above through a serie of filigree columns. Similar to Atlas, who carries the heavens or sky for eternity, it carries the culture and knowledge of the institution/museum.

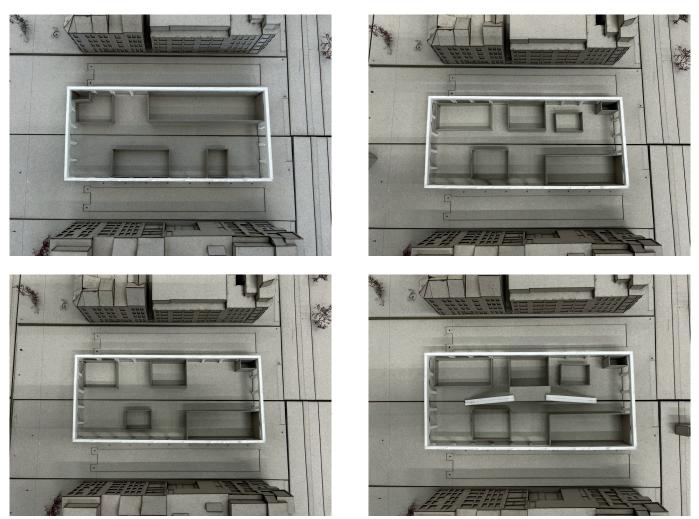




Kanazawa Museum of Contemporary Art.



Series of pavilions.



Model study, testing different configurations of the concept.

**References** Het Nieuwe Instituut, designed by Jo Coenen (1993).

Neues Luzern Theater, designed by Cometti Truffer Hodel Architekten (2022 competition, unbuilt).

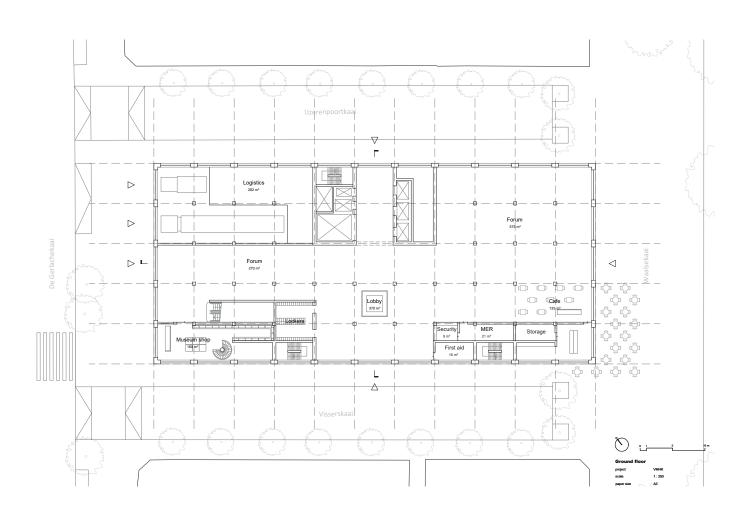
BOZAR, designed by Victor Horta (1928, currently renovated by Barbara van der Wee architects).

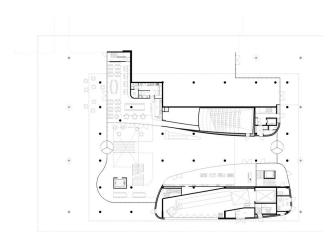
Fries Museum, Bierman Henket architecten (2012).

Centre Pompidou, designed by Renzo Piano & Richard Rogers (1977).

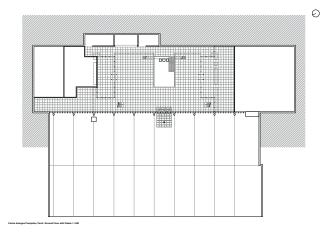
To further develop the pavilion concept, I looked into a variety of ground floor plans, regarding their spatial sequences, scales, and pavilion-like compartmentalizing.

I also looked into the fire safety regulations of Flanders. For example evacuation: a room has to be within a range of 30m of the evacuation route and 45m of the nearest fire stair or exit. The second stair or exit has to be within an 80m reach. The current plans meet these requirements. This was found on the website of Brandbeveiliging Vlaanderen, but is also mentioned in art. N4/1 KB of 7 juli 1994.

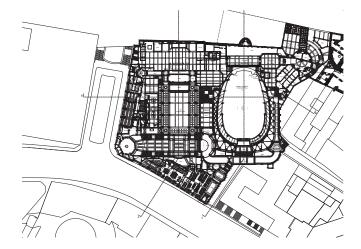




Fries Museum, Bierman Henket architecten.



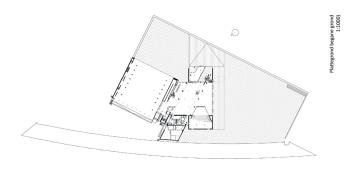
Centre Pompidou, Richard Rogers & Renzo Piano.



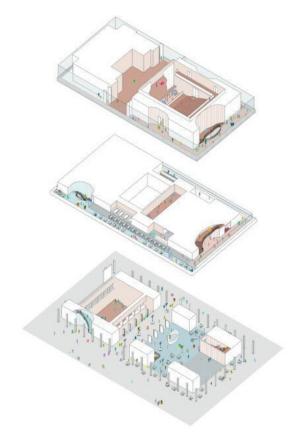
BOZAR, Victor Horta & Barbara van der Wee architects.







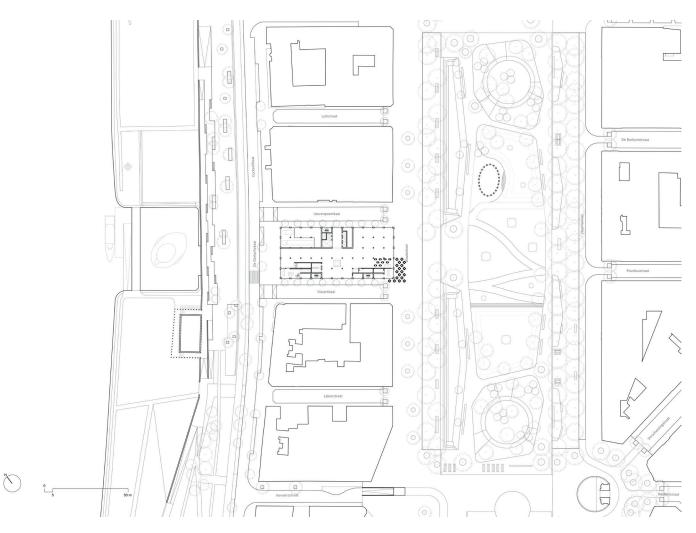
Het Nieuwe Instituut, Jo Coenen.



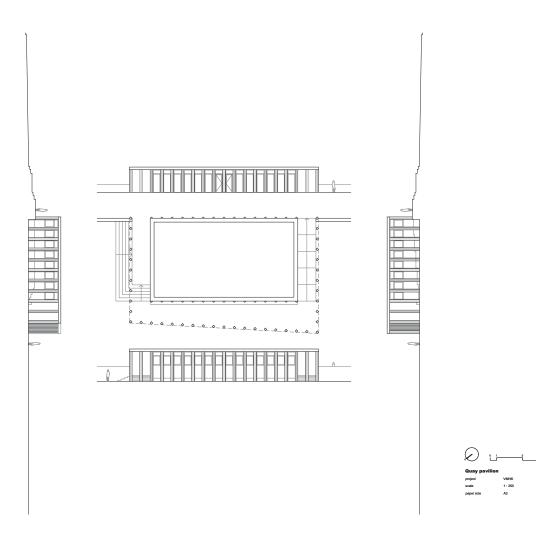
Project journal 131

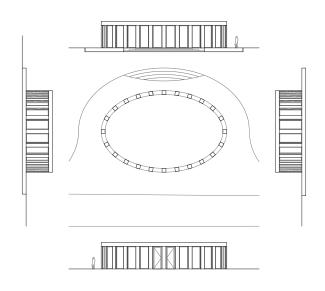


In order to both match the architecture with the one of the main building and find a characteristic that matches the park and quay, a same column like approach was used for the design of the pavilions.



Ground floor plan.







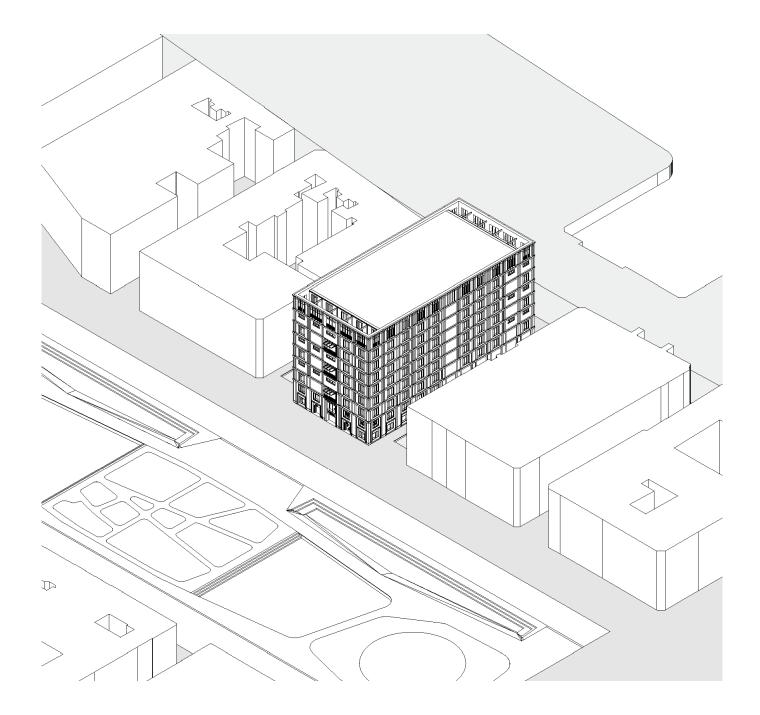
10

Pavilion plans.

# Change.

#### A difficult moment of realization

The building and its concept started to look like, and align to the idea of, a warehouse. Although it might seem a bit unclear at this point in the journal, as there is not much mentioned about it yet, later on it will be due to its appearance, structure and flexibility. With this shift, the concept of redistributing the program no longer made any sense, despite its introduction during P2. As sad as it was in the first place, since I truly liked the idea and all of the effort that I put into it, I had to make the tough decision to focus on the new concept. But that is just the difficult reality you sometimes have to face as a designer, kill your darlings, and move on in order for it to become better...



# Research.



Sculpture on the Scheldt quay.

Looking back at the previous site and city analysis, I've noticed that some of the design proposals, such as the Stadspark and Zuiderdokkenpark, consider including public artworks as part of engaging with the public. Additionally, the quay recently added a sculpture next to the site.

Finding out about the possibility of public art displayed in the park, I got curious to know more about the impact of this on the public.



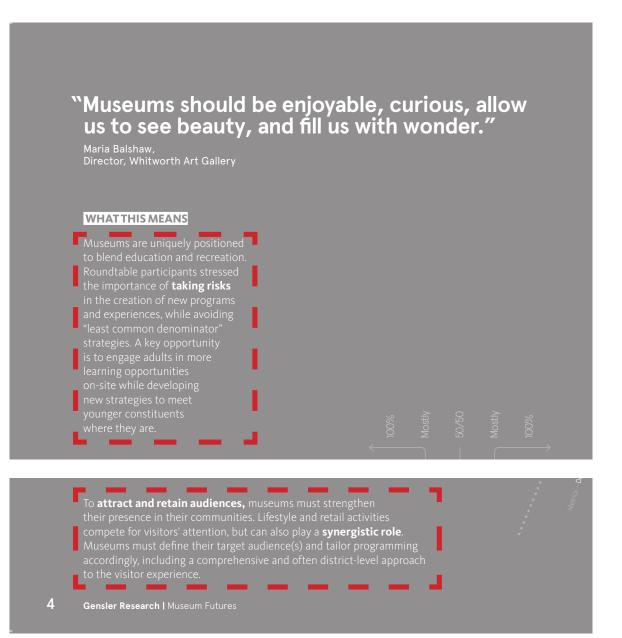
Art in the Zuiderdokken Park (vlaamsbouwmeester, Tractebel, ADR Architects).



Art in the Stadspark (Omgeving landscape architecture).

**Reading** Balshaw, M., et al. (2015). *What is the future of the museum?* Gensler Research.

Although this article focuses on the future of the museum, especially regarding the digitilization of art and the museum, there is some truths in how to reach and include the interests of different audiences.



**Reading** Sharp, J., Pollock, V., Paddison, R. (2005). Just Art for a Just City: Public Art and Social Inclusion in Urban Regeneration. In *Urban Studies, Vol. 42* (no. 5–6), pp. 1001–1023. American Anthropological Association. https://doi.org/10.1080/00420980500106963

1998), this is not to suggest that its use is politically neutral. Deutsche (1996) argues forcefully how the promotion of public art and architecture appears to neutralise politically its use within the city yet masks its political outcomes, particularly on those excluded from the new image created. Contemporary trends in public art in the city have tended to eschew monumentalism as it was expressed in the 19th century with its thinly disguised appeal to élite interests. Further, much as public art and architecture in Rome or Florence in the Reformation had been fashioned to celebrate the city and in the 19th century became part of the process of forging the City Beautiful, so its present use, in part at least, can be seen as part of the ongoing goal of beautifying the city. Yet the (re)aestheticisation of cities is not an apolitical exercise; the Hausmannisation of European cities in the 19th century and its 'imposed' nature and socially divisive outcomes have their parallels in the contemporary restructuring of the city under what Harvey (2000) has described as 'neoliberalised urban authoritarianism'. Much as histori-

bourgeois revanchism underpinning contemporary urban gentrification (Smith, 1996).

periodically embenished with graguit. The story the Donald Dewar statue tells is one repeated elsewhere, that public art can be read in different ways and that its uses to beautify the city or celebrate its reimagineering do not necessarily enjoy universal consensus. In this respect, public art is no different from art in general where matters of taste and preference become paramount. For public art, these issues become magnified precisely because of its visibility and hence its 'inescapability', although reactions to it can vary from the highly vocal and oppositional to the unaffected. Time can help to mellow public opinion to artworks so they become part of not just the taken-for-granted but also of the accepted landscape of the city. A few invailing of the statue to

its audiences and to create spaces—whether material, virtual or imagined—within which people can identify themselves, perhaps by creating a renewed reflection on community, on the uses of public spaces or on our behaviour within them. Public art, then, does not-

adaptability that gives it such cultural viaollity. Public art not only contributes to the visual attractiveness of the city and has the ability to aestheticise urban spaces, but also, through public art, authorities can signal their willingness to deal with social and environmental problems. For many

and mutable nature of these concepts. Deutsche (1996, p. 270) worries that those who see public art as leading to the enhancement of community miss the point in that they "presume that the task of democracy is to settle, rather than sustain, conflict". Public space and the controversies surrounding public art can only reflect their constituent communities. Hall and Robertson (2001, p. 19) argue that the role of public art should be to encourage the sound of contradictory voices-voices that represent the diversity of people using the space-rather than aspire to myths of harmony based around essentialist concepts". Phillips further points to the bureaucracy that so much public art now has to negotiate given the intended goals of inclusion-from the different committees that must examine and accept proposals to considerations of health and safety-that any critical edge is lost and the resultant work must be bland, engaging everyone but offending no-one. She says

social cohesion of the city. Key to the creation of social cohesion is the belief that public art, or the processes through which it is produced, is able to create a sense of inclusion. By this token, public art should be able to generate a sense of ownership forging the connection between citizens, city spaces and their meaning as places through which subjectivity is constructed. Initially, we outline the rationale for identifying myblic or act the citizens

#### Why Public Art?

Public art is not simply art placed outside. Many would argue that traditional gallery spaces are public in their openness to interested viewers, while, conversely, others would insist that the privatisation of public space has meant that art placed in public space is not necessarily for all. Thus, public art is art which has as its goal a desire to engage with

urban regeneration agencies, the search to repeat the 'Guggenheim effect' has become a mantra through which the reinvention of the city is to be realised within which public art, and particularly iconic design, occupies a critical position.

As the literature attests it is too easy for both

It is important to remember here that, regardless of the scale and type of intervention, the installation of public art within the urban fabric is inevitably a political exercise. Thus, as Jameson has argued, buildings

interpellate me—[they] propose an identity for me, an identity that can make me uncomfortable or on the contrary obscenely complacent (Jameson, 1997, p. 129).

מווע נווכ זכוו מז כונוצכוו מוכ וכמו, וו טוומו ווכטומוכט. The power of interpellation of public art is both a source for consensus and conflict within the reinscription of place. Within official discourse, the benefits of public art are expressed in its ability to instil civic pride and to contribute to local distinctiveness, yet the ability of public art to be seen as at odds with its intended symbolism emphasises its contentious nature. The play of inclusion in public art operates at two interconnected levels in the ways in which it is read as part of city space and the processes through which it is implemented. Sufficient experience exists to demonstrate that the two are connected, suggesting that a sense of ownership is a key component of inclusion. Yet neither is fixed precisely because of the multiplicity of ways in which public art is read and the fluidity of urban societies that defy the unity of community.

competitive city. It is in the banal urban spaces in which everyday life is constructed and experienced in particular that the advocates of public art have been able to argue (and demonstrate) how the insertion of public art can aspire to be inclusive as process if not necessarily as outcome. Yet the capacity of public art to foster **Reading** Zebracki, M., De Bekker, D. (2018). Public Art for an Inclusive City: Producers and Publics on the Social Potentials and Problems of Flagships Vis-à-Vis Community Art. In *City & Society, Vol. 30* (no. 1), pp. 14–44. American Anthropological Association. <u>https://</u> doi.org/10.1111/ciso.12153

urban regeneration (Selwood 1995; Remesar 2005; McCarthy 2000; Evans 2009). Public art is usually understood as publicly funded works of art that are located in freely accessible outdoor locations and, ideally, serve community interest (Lacy 1995; Miles 1997). But the spatial and social conditions of public art are complex and polemic (Senie and Web-

every corner or our society and perhaps, in part, that is with it both or an most controversial and misinterpreted art disciplines today." Issues such as the increasing privatization and desired direct participation in the cultural and arts sectors have put the "publicness" and "ownership" of public art in a new light (see Ehrenfeucht 2014). They have, therefore, deconstructed various dichotomies of permanent/ephemeral, public/private, indoor/outdoor, artist/amateur, etc. (see Crehan 2011a). Although this study juxtaroses urban flagship with community art along contrasting experiences of

bear the responsibility for the increase of their own incomes and for tigntening ties with the public" (Rijksoverheid.nl 2015).<sup>3</sup> There is vivid advocacy of public art's alleged contribution to urban policy priorities, particularly concerning social inclusion and cohesion (see Belfiore 2002; Sharp, Pollock, and Paddison 2005; Cartiere and Zebracki 2016). Yet,

Pollock and Paddison (2010, 336) argued that "in recent decades, advocacy for public art has fallen on fertile ground." Public art is claimed to have a wide range of physical-aesthetic, economic, social, and cultural-symbolic advantages: for example, tackling social exclusion, improving social cohesion, facilitating urban regeneration, strengthening a sense of place, heightening cultural empowerment, and boosting the local economy (e.g., Roberts 1995; Zebracki, Van Der Vaart, and Van pre particularities of and relationships between the artwork, the site, and people (Massey and Rose 2003; Zebracki 2013). Sometimes, public art sites have the potential to clearly operate as so-called micropublics (after Amin 2002): spaces of interpersonal encounters and dialogues where social difference is expressed and used as a vehicle to learn or question the "other" (see also Bishop 2005; Radice 2015; Zebracki and palmer 2017). Bishop (2005) defines this quality as public art's social relational aesthetics, a regime that is particularly manifest in spheres of antagonism where contesting publics (or "counterpublics") emerge (see also Warner

broader socio-spatial scales. The social dynamism of a micropublic is prone to the negotiation (and potential "transgression") of cultural norms, values, and boundaries, which as such may (re)produce social inclusions or exclusions (Bishop 2005; Radice 2015). As explained in the

Art in public space can be seen as an open-air show and therefore the street is one of the visual arts podiums... We want to take this further, in harmony with future city developments, and obtain substantial artistic quality by enlisting local artists with an international reputation. (Municipality of 's-Hertogenbosch 2009, 41)

architect's view that the regeneration's aim was to thaw more visitors to the city. Connecting to Lefebvre's (1991) concept of conceived space, the underlying principle of the redesign of the market was to make a positive change to the tourist's mental map of the city at large. Eventually, this would enable both new and positive everyday experiences and imaginations (lived space), and actual visits to, as well as symbolic appropriations of, the city (perceived space). The figure of Bosch played a major **References** Museum Arnhem sculpture garden, designed by Karres en Brands (2022).

Kröller-Müller Museum sculpture garden, designed by Bram Hammacher & Jan Bijhouwer (1961).

Teatro del Mondo, designed by Aldo Rossi (1979).

Rubber duck, designed by Florentijn Hofman (2007).

Taking the literature into consideration, the space that is leftover between the pavilions creates an in- and outdoor forum landscape, suitable for public art. Public art is something currently missing in the program of demands, which offers great opportunities to include a wider range of audience, such as communities and locals, include the environmental qualities of the site while also improving the quality of the quay and park, and to offer a possibility which goes beyond the privitisation of art.



Sculpture garden of Museum Arnhem.





Sculpture garden, Kröller-Müller Museum in Otterlo.

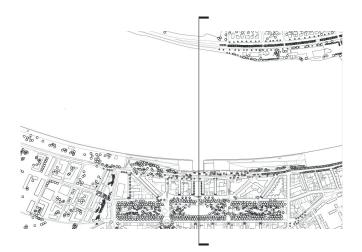


Teatro del Mondo (Aldo Rossi).



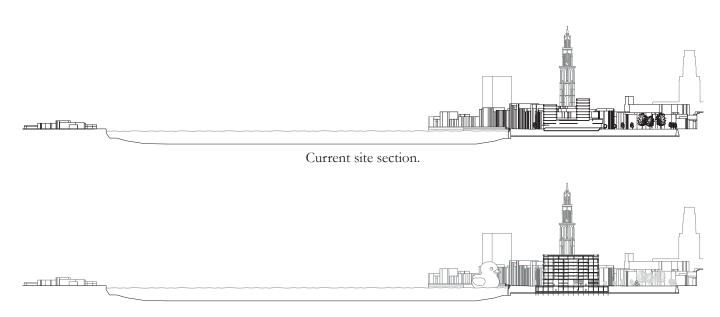
Rubber duck (Florentijn Hofman).

# Design.

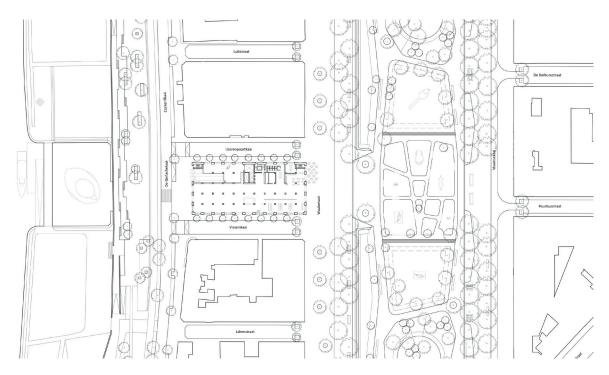


This addition to the program of demands will be formulated as two outdoor forum spaces, one in the gap of the quay with a floating artwork, and the other as a sculpture garden. The indoor forum space will consist of a gathering and event space which displays either local, community, amateur, or other types of art works.

As a reformed and simplified version of the pavilions, instead of adding more buildings than the main building to the site, it tries to fit in the public artworks into the design of the quay and park. It uses what is already there, whilst still improving the overall quality of the plans and marking the site as the art scene of Antwerp with the addition of the new museum and forum spaces.



Proposed site section.



Site plan.



Waterscape

Rubber duck by Florentijn Hofman.

Centre Pompidou, by Richard Rogers & Renzo Piano

Cityscape



Landscape

Minneapolis Sculpture Garden, Spoonbridge and Cherry by Claes Oldenburg & Coosje van Bruggen. **Reading** M HKA. (n.d.). Architectuur. Retrieved from https://www.muhka.be/nl/about-m-hka/architecture

# Research.

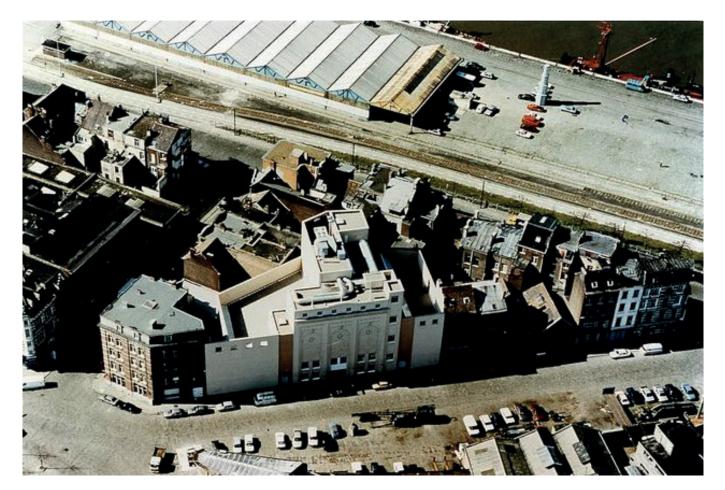
When it was decided in the first half of the 1980s that Antwerp would have a museum of contemporary art, a building in the vicinity of the Royal Museum of Fine Arts (KMSKA) was sought. A former grain silo was purchased on Leuvenstraat, which had served as a storage facility until 1969 and later as the discotheque 'The Palace'.

The renovation was entrusted to the Antwerp architect Michel Grandsard, who was known as a collector for his involvement in visual arts. He emptied the building, had it basements added, and adapted it to the needs of a contemporary museum. The art deco-style façade, the positioning of the staircase in the tower, the numerous columns in the central space that had to bear the weight of the grain, and the sloping ceiling of the grain funnel in the reception area were preserved. To the left and right of the main volume with its decorative façade, the old extensions of the silo and some adjacent hangars were replaced by museum halls behind plain facades. On June 20, 1987, the museum, with 1,500 m<sup>2</sup> of exhibition space, was officially inaugurated.

Soon, it became apparent that the available exhibition space was insufficient, and there were also problems with other functions. In August 1992, a second renovation was initiated, and once again Michel Grandsard was appointed for the task. The exhibition space was expanded towards Wapenstraat with an additional hall, a cylindrical volume was added on Waalsekaai, and a series of rooms extending towards the Scheldt River were constructed, tapering to a point like a gigantic piece of cake. This way, 2,500 m<sup>2</sup> of exhibition space was added. On the remaining plots on Wapenstraat and Cockerillkaai, offices, a library, a storage facility, studios, and a loading dock were built. The first exhibition in the "new" M HKA opened on June 26, 1993.

In September 2003, the entrance hall was renovated by the architectural firm Robbrecht and Daem to improve certain outdated or less functional aspects of the interior architecture. Additionally, 165 m<sup>2</sup> of extra exhibition space was created, and the two wings of the museum were better connected on the ground floor.

After more than twenty years, the M HKA building was in need of significant refurbishment. During the technical renovation in 2009, the museum's exterior facade was renovated and painted in a new color. Artist Enrico David was invited to create an artwork for the exterior facade of the museum.



Aerial view of M HKA at its starting point.



disco The Palace.

Flemish Museum of Contemporary Art.

**Reading** Rossi, A. (1982). *The architecture of the city*. Cambridge, Mass.: MIT Press.

**References** Surrounding buildings of VMHK in Het Zuid.

Cadix harbour building designed by Sergison Bates architects (2021).

Stapelhuis Sint-Felix, designed by Felix Pauwels (1863).

Lecture Somers, D. (15 September, 2022). The Berlage Keynotes: Bovenboum, Antwerp. Technische Universiteit Delft.

In his book Aldo Rossi writes the following:

"One can say that the city itself is the collective memory of its people, and like memory it is associated with objects and places. The city is the locus of the collective memory. This relationship between the locus and the citizenry then becomes the city's predominant image, both of architecture and of landscape, and as certain artifacts become part of its memory, new ones emerge."

By this, Aldo Rossi means that the collective memory exists not as an abstract category of thought, unverifiable by scientific means, but it exists in the relation between the urban fabric of the city and those who inhabit it. Given that the building height might be fifty to sixty meters, the new museum building will become a present object in a predominantly low-rise area and even city. Which means that a likely new artifact will emerge. Since the port city of Antwerp, and the neighbourhood of Het Zuid, has a centuries old history of harbour activities and that the site is placed on top of a former lock, the building typology of a warehouse aligns with the genius loci, thus collective memory, of the city.

In his lecture, Dirk Somers also makes an interesting comparison between a former warehouse and contemporary interpretations of a warehosue appearance.







Comparison between warehouse like architecture in Belgium taken from Dirk Somers' lecture.



Stapelhuis Sint-Felix (Felix pakhuis), located at the Godefriduskaai.







Surrounding buildings of VMHK.

**Reading** Wouter, D. (2006). Art Factories: Museums of Contemporary Art and the Promise of Artistic Production, from Centre Pompidou to Tate Modern. In *Fabrications* (Vol. 16, pp. 23–42), DOI: <u>https://doi.org/1</u>0.1080/10331867.2006.10539578.

Sir Nicholas Serota is captured in quite a contradictory discourse. Asked what ideas he had on what the museum building had to be, he postulates that they were not looking for an architect that would give them 'what is commonly regarded as a neutral solution'. They were looking rather for 'strong architecture', for 'spaces that are not neutral white cubes but that have identity'. The paradigm of neutrality, which Serota identifies with the white cube, has too often led to a schizophrenic architecture, where the architectural pyrotechnics of the exterior and the entrance hall are opposed to sterile and anonymous exhibition spaces.

Simultaneously, Serota disapproves of the flexible box. The highly equipped volume with moveable partitions results, in his estimation, in 'a very transient, temporary feeling' which does not allow art to 'sit comfortably'. A flexible exhibition space risks being ultimately as characterless as a white cube. While Serota finds the precarious combination between identity and aloofness, or variety and standardization, difficult to achieve in an entirely new building, he considers it characteristic for converted industrial spaces, since they offer an alternative to each of the three common presentational models: the white cube, the flexible container and the architecturally expressive room. An industrial space is neutral, but not as aseptic as a white cube; it is flexible, but it avoids the volatility of a flexible box; it has identity, but does not lose itself in architectural caprices. An industrial building has identity and history and therefore forces the architect to assume a respectful attitude. To argue this further, Serota cites the outcome of the questionnaire, stating that 'we know from the experience of the last 20 years that some of the best installations of contemporary art have been made in converted warehouse buildings'. While initially speaking about museum space in terms of a showcase - 'spaces in which we ... want to focus on the objects' - he suddenly switches to the museum as a workplace - as 'artists have responded very positively to working with these former industrial spaces.' When Davidson asks if the typology of the industrial space is 'parallel to work that's being developed since the 1960s', he immediately agrees. As the museum needs to be 'an instrument that can be played by artists', the building needs to offer a context in which the artists like to move in and get to work. And for this, new buildings do not suffice, because they do not have patina.

Personel notes on the article:

"The warehouse, as a typology, was not founded by the museum. On the contrary, the contemporary art museum found the warehouse."

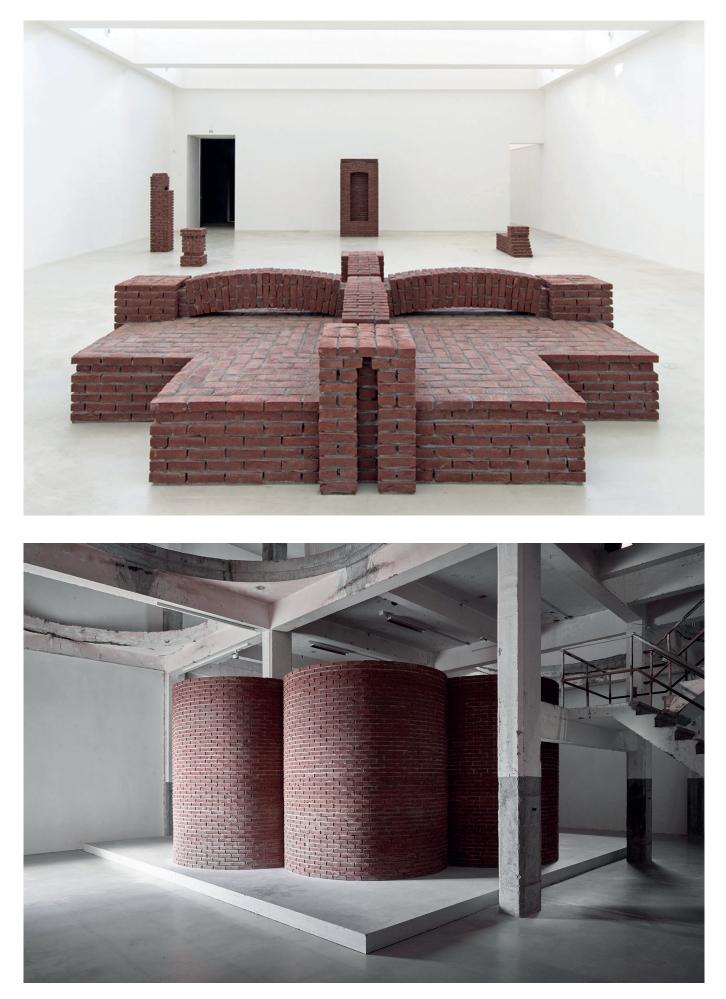
Within this typology, inherent qualities emerge as a response to the prevailing characterless neutrality exhibited by the white cube, the flexible container, and the architecturally expressive room. Rather than subscribing to the extremes embodied by these architectural elements, the warehouse typology offers a distinctive amalgamation of neutrality, flexibility, and a sense of identity and history<sup>\*</sup>.

\*It is worth considering whether the perception of historicity pertains more to the typology of the warehouse, as this shares a history of development, or to the age of the building in question. References Kirkeby, P. (1966-2017). Brick sculptures.

**Images** Taken from De Kanaal, Axel Vervoordt Gallery, designed by Bogdan & Van Broeck, Coussée & Goris, and Stéphane Beel (2017). Similar to Aldo Rossi, Per Kirkeby, shares a similar conceptual perspective when it comes to the notion of collective memory. As Per Kirkeby himself wrote:

"Why Bricks? I do not know. But I cannot do it with other materials. I have tried. I lie on the couch for a moment and am back in my childhood. Bricks everywhere. The Grundtvig church and its surroundings. The council housing from the thirties and forties which for me, still represent the peak of Danish architectural achievement. Train journeys in the summer holidays with a ticket hanging around one's neck. The brick station buildings. The raihvay towns... It is the mood, the brick's load of memories and stories... other gains were color, light, the concentration of the fantastic, organic material... aesthetic aspects of a far too pleasurable character."

What is so interesting about these works is the confrontation of history with a newly made sculpture. One that is never realized, but one that allows you to sense history. History as an idea. It's not historical this sculpture, but it allows you to think of what history might be.



Per Kirkeby's brick sculptures from the Axel Vervoordt Gallery collection.

**Reading** Koolhaas, R., Mau, B. (1997). Typical Plan. In *S*, *M*, *L*, *XL* (pp. 334–351). Köln: Benedikt Taschen Verlag.

Some notes from the typical plan.

• The typical plan does not demand a particular architecture, its only function is to exist.

• The typical plan is an architecture of the rectangle; any other shape makes it atypical – even the square. ... At its best, it acquires a Platonic neutrality: it represents the point where pragmatism, through sheer rationality and efficiency, assumes an almost mystical status.

• You can only be in the typical plan, not sleep, eat, or make love.

• The typical plan is gridded, through the development of anti-ideological devices.

• The typical plan is neutral, not anonymous.

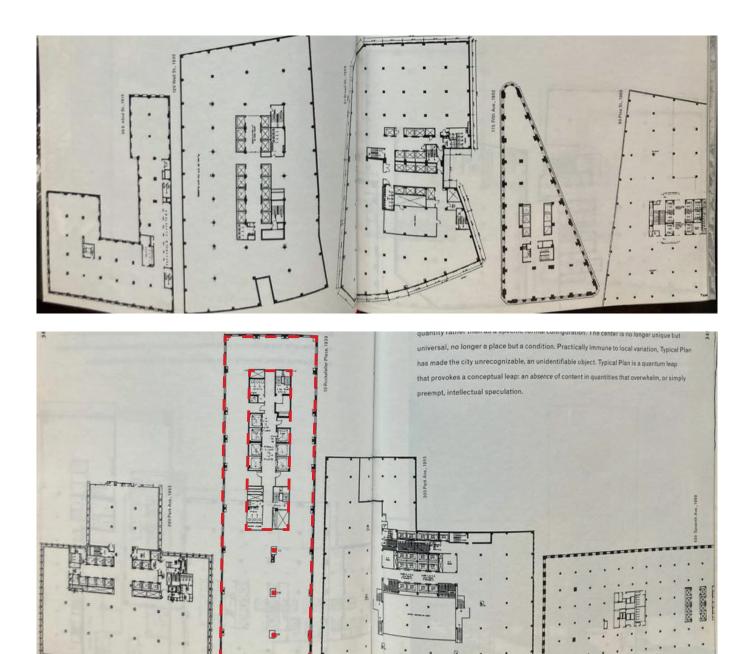
• Very understandable labyrinths organize the traffic between the exalted and the impare zones of the typical plan. These spaces – restrooms, urinoirs, pantries, service chairs, tracking bays – are the sanctuaries for all those primitive aspects upon whose exclusion the correct unfolding of business depends.

• The typical plan is as empty as possible: a floor, a core, a perimeter, and a minimum of columns.

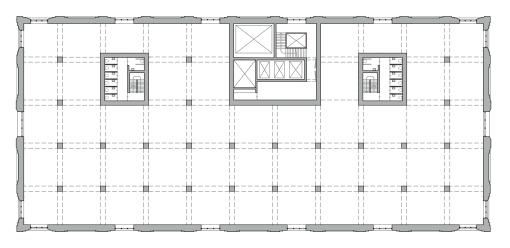
• The typical plan is about exclusion, evacuation, non-event.

• By making no choices, the typical plan postpones it, keeps it open forever, while all other architecture preempts the future.

So, in my understanding of what Koolhaas means by this, is that the typical plan is about the permanent elements of the plan; structure and cores (elevators, stairs, toilets). I would say that this is somewhat related to the warehouse. A large open plan, for storing stuff, with some cores for basic needs and movement, and in some cases space for an office. For this reason, the typical plan will form the base for (most) of the floor plans of the museum.



Elements of the typical plan; skin, beams, columns and cores.



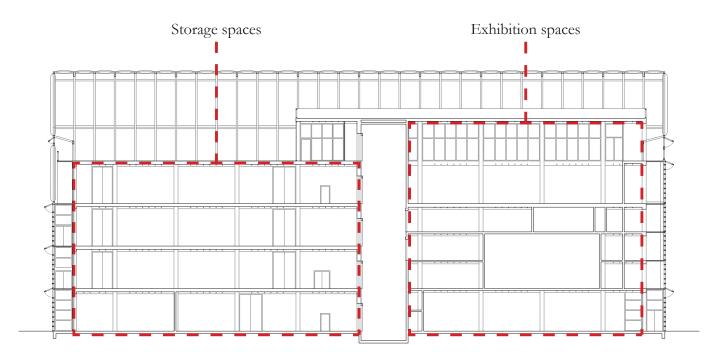
Implementation of the typical plan in the museum's floor plan.

# Design.

The brief is also analyzed again. The aim is still to give substance to the entire program of demand, although the specificity of the program, like the different types of permanent and temporary collection, storage space, office spaces, is reinterpreted. Instead the distribution of the spaces should follow the logic of a warehouse and should allow for flexibility. I do not follow the desired dimensions of the spaces, but will be giving the total amount of m<sup>2</sup>, which allows for more modular spaces, thus flexibility.

In the final proposal I will give a designation for each  $m^2$ , but the building should allow for changes. Thus the typical floor plan will contain on each floor a general storage space for all material needed in order to change and facilitate different functions. Enabling the museum to decide the internal layout (rooms, heights, wall positions, lighting fixtures, etc.).

This approach shares the same sort of idea that is found in the FRAC. In the museum's extension, a storage space is situated on each floor.



Longitudinal section of the FRAC.

BULAGE ' Oppervlaktetabel programma van eisen toekomstig Vlaams Hedendaags Kunstmusuem

#### AGENTSCHAP FACILITAIR BEDRIJF

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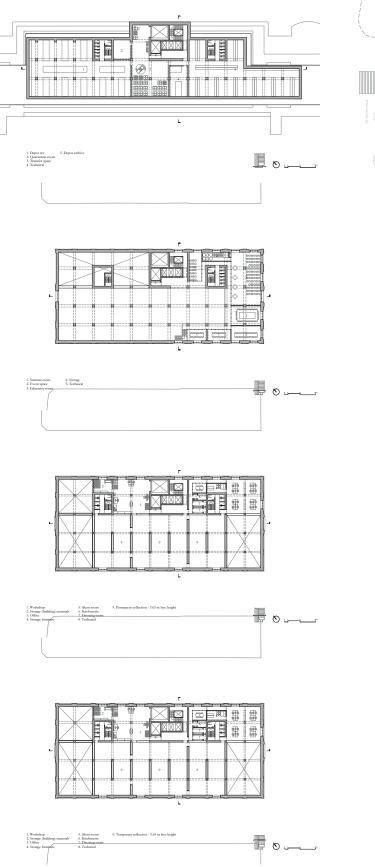


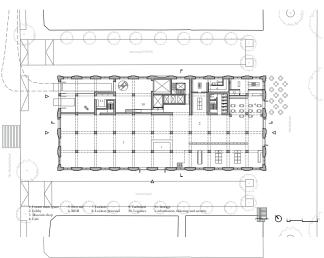
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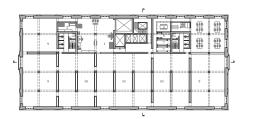
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46.12 46.13 46.14 46.15 46.16 47 472 4721 4722 4723 4724 4725 4726 4727 473 4731 4732 4735 4735 4736	Y Houtwerkolaats     X Metaalwerkolaats     Schilderwerkolaats     Schilderwerkolaats     Audio- en videoruimte     Voslagruimte voor technisch materiaal     Backoffice art. handling     Y Transport - en handling     X Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y Y	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 30 1 531 1 531 1 20 260 1 incl 1 incl 30 20 27 234 36	4.50 4.50 4.50 6.80 6.80 6.80 6.80 6.80 6.80 6.80 4.50 4.50 4.50 4.50	315 360 135 9 748 816 1768 135 50 122 1053 162	14 14 14 14 14 14 14 14 14 14	98 112 42 49 181 168 364 42 28 42 28 30 328 50	441 504 189 221 1228 1 142 2 475 189 126 170 1 474 227
46.12 46.13 46.14 46.15 46.16 47 472 4722 4723 4724 4725 4725 4726 4727 473 4731 4731 4732 4735 4736 48	Y Houtwerkolaats     X Metaalwerkolaats     Schilderwerkolaats     Schilderwerkolaats     Audio- en videoruimte     Vopslagruimte voor technisch materiaal     Backoffice art. handling     Y Transport - en handli	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 35 1 531 120 260 Incl Incl 90 20 20 22 234 36 675	4.50 4.50 4.50 6.80 6.80 6.80 6.80 4.50 4.50 4.50 4.50	315 360 135 138 <b>9 748</b> 87 816 1768 135 90 122 1053 162 163	14 14 14 14 14 14 14 14 14	98 112 42 49 181 168 364 42 28 38 328	441 504 189 221 1228 142 2475 189 126 170 1474
46.12 46.13 46.14 46.15 46.16 47 4721 4722 4723 4724 4722 4723 4724 4725 4726 4727 4731 4732 4735 4736 4736 4736 4736 4736 4736 4736 4736	Houtwerkplaats     Ketalwerkplaats     Schiderwerkplaats     Schiderwerkplaats     Audio- en videoruimte     Back-office art. handling     Back-office art. handling     Schiderwerkplaats     Sc	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 30 1 531 1 531 1 20 260 1 incl 1 incl 30 20 27 234 36	4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 7.00	315 360 135 138 9 7 48 97 9 748 97 915 1768 135 90 122 1053 163 163 163 163 163 163 163 163	14 14 14 14 14 14 14 14 14 14 14 14	98 112 42 49 181 168 364 42 28 36 36 38 38 39 50 945	441 504 189 221 1228 142 2 475 189 126 170 1474 227 6 615
46.12 46.13 46.14 46.15 46.16 47 472 4722 4723 4724 4722 4723 4724 4725 4726 4727 473 4731 4732 4735 4736 4731 4731 4732 4735	Y Houtwerkolaats     X Metaalwerkolaats     X Schilderwerkolaats     X Schilderwerkolaats     X Audio- en videoruimte     Voslagzuimte voor technisch materiaal     Backoffice art. handling     X Transport - en handling     X Overslagruimte     X Pregistratie, controle en onderhoud     X Berging voor coslag kisten/jastzlekfolie/inpakter/all     X Berging voor coslag kisten/jastzlekfolie/inpakter/all     X Berging voor coslag kisten/jastzlekfolie/inpakter/all     X Guetalier     X Werkateller     X Werkateller     X Fotofservokaal (MER)     X Hooffservokaal (MER)		70 80 35 1531 09 00 260 16d 16d 16d 16d 16d 20 27 224 86 675 675 7704	4.50 4.50 4.50 6.80 6.80 6.80 6.80 6.80 6.80 6.80 4.50 4.50 4.50 4.50	315 360 135 138 <b>9 748</b> 87 816 1768 135 90 122 1053 162 1053 162 4 725 <b>3 143</b> 22	14 14 14 14 14 14 14 14 14 14 14	98 112 42 49 181 168 364 42 28 42 28 30 328 50	441 504 189 221 1228 1 142 2 475 189 126 170 1 474 227
46.12 46.13 46.14 46.15 46.16 47 472 472 472 472 472 472 472 472 472	Houtwerkplaats     Ketaleverkplaats     Schilderwerkplaats     Schilderwerkplaats     Schilderwerkplaats     Audio- en videoruimte     Costagruimte voor technisch materiaal     Back-office art handling     Transport - en handlingzone     Sulus / sas     Zone voor laden en lossen     Voerslagruimte in naken/uitgakken     Verpakingsruimte i nipakken/uitgakken     Werkakingsruimte i nipakken/uitgakken     Werkakingsruimte i nipakken/uitgakken     Werkakingsruimte i nipakken/uitgakken     Verpakingsruimte		70 80 35 1531 19 20 260 Incl Incl 30 20 27 234 36 675 704 9 20 6	4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.5	315 360 135 138 <b>9 748</b> 87 816 1768 135 90 122 1053 142 1053 142 <b>3 143</b> <b>3 143</b> 22 70 21	14 14 14 14 14 14 14 14 14 14 14 14 14 1	98 112 42 49 181 168 364 42 28 36 36 328 328 328 328 328 328 328 328 328 328	441 504 189 221 1228 1142 2.475 189 126 170 1.474 227 6.615 44 98 29
46.12 46.13 46.14 46.15 47 472 472 472 472 472 472 472 472 472	Houtwerkplaats     Metalwerkplaats     Schiderwerkplaats     Schiderwerkplaats     Audio-en videoruimte     Audio-en videoruimte     Sobiagruimte voor technisch materiaal     Back-office art. handling;     Transport - en handling;     Zone voor laden en lossen     Oversiagruimte     Nervol taken en lossen     Voersättigsruimte (inpakken/luityakken)     Werpakkingsruimte (inpakken/luityakken)     Werpakkingsruimte (inpakken/luityakken)     Werpakkingsruimte (inpakken/luityakken)     Werpakkingsruimte     Voorsjag materiaal en hulpmiddelen     Werkatelier     Voor collectiebeheer     Voorsolagt materiale in hulpmiddelen     Werkatelier     Voersolen binnendepot     Back-office logistek en technieken     Xoesk beelingings: en gebouebeheer     Xitchenette     Sanitalr mederenette     Sientialr mederenette     Sientialr mederenette     Sientialr mederenette     Sientialr mederenette	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 35 1531 09 00 260 16d 16d 16d 16d 27 224 36 675 6 16	4.50 4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 3.50 3.50 3.50	315 360 135 138 9 7 48 97 97 90 1768 90 122 1053 182 4 725 <b>3 143</b> <b>3 2</b> 70 21 56	14 14 14 14 14 14 14 14 14 14 14 14 14	98 112 42 49 181 165 364 42 28 36 364 328 328 328 328 50 545 13 28 8 22	441 504 189 1221 1228 142 2475 189 126 170 127 6 675 44 98 29 78
46.12 46.13 46.14 46.15 472 472 472 472 472 472 472 472 472 472	Houtwerkplaats     Metaalwerkplaats     Schliderwerkplaats     Schliderwerkplaats     Schliderwerkplaats     Audio- en videoruimte     Vopslagruimte voor technisch materiaal     Backoffice art. handling     Transport - en handling     Yransport - en handling     Yransport - en handling     Vorgakruimte voor technisch materiaal     Suls / sas     Suls / sas     Vorgakruimte     Vorgakruimte     Verpakruimte     Suls     Verpakruimte     Suls     Verpakruimte     Suls		70 80 35 1531 19 20 260 Incl Incl 30 20 27 234 36 675 704 9 20 6	4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.5	315 360 35 35 37 87 87 816 1768 105 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 105 105 105 105 105 105 105 105	14 14 14 14 14 14 14 14 14 14 14 14 14 1	98 112 42 49 181 168 364 42 28 36 36 328 328 328 328 328 328 328 328 328 328	441 504 189 221 1228 1142 2.475 189 126 170 1.474 227 6.615 44 98 29
46.12 46.13 46.14 46.15 46.16 47 472 472 472 472 472 472 472 472 472	Houtwerkplaats     Metaalwerkplaats     Schilderwerkplaats     Schilderwerkplaats     Schilderwerkplaats     Audio- en videoruimte     Costagruimte voor technisch materiaal     Back-office art. handling     Transport - en handlingzone     Jone voor laden en lossen     Overslagruimte ingescheiden onderhoud     Werpakingsruimte i ingeken/uitgakken)     Werpakingsruimte i ingeken/uitgakken)     Werpakingsruimte     Werpakingsruimte     Werpakingsruimte     Werpakateler     Kotehoneten     Kotehoneten innendepot     Backoffice logistek en technieken     Kitchenete     Kitcheneten     Kitederuimte ind.gouchese, gescheiden)     Kitegruimten     Merging voor solonamaak	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 35 1531 09 00 260 16d 16d 16d 16d 27 224 36 675 6 16	4.50 4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 3.50 3.50 3.50	315 360 135 138 9748 977 905 1768 105 90 122 1053 163 163 163 163 163 163 163 16		98 112 42 49 181 165 364 42 28 36 364 328 328 328 328 50 545 13 28 8 22	441 504 189 1221 1228 142 2475 189 126 170 1474 227 6 615 44 98 29 78
4.6.12 4.6.13 4.6.14 4.6.15 4.6.15 4.6.15 4.6.15 4.6.15 4.7 4.72 4.722 4.722 4.722 4.723 4.724 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.744 4.7444 4.7444 4.74444 4.744444444	Y Houtwerkolaats     X Metaalwerkolaats     X Schliderwerkolaats     X Audio- en videoruimte     X Audio- en videoruimte     X Ooslagruimte voor technisch materiaal     Backoffice art. handling     X Transport - en handlingsone     X Transport - en handlingsone     X Suis (s sa     X Core voor laden en lossen     X Overslagruimte     X Pregistratie, controle en onderhoud     X Vergastratik, sortrole en onderhoud     X Vergastratikeroligistieken/lastratiekfolie/inpakmetriaal     X Vergastratikeroligistieken/lastratiekfolie/inpakmetriaal     X Vergastratikeroligistieken/lastratiekfolie/inpakmetriaal     X Vergastratikeroligistieken/lastratiekfolie/inpakmetriaal     X Vergastratikeroligistieken/lastratiekfolie/inpakmetriaal     X Vergastratikeroligistieken technieken     X Verstastleeroligistieken technieken     X Sontain medeverkers gescheiden1     X Kitchenette     X Santain medeverkers gescheiden1     X Keerguimten     Derging voor sonoomaak     centrate berging logistieken	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 35 1531 199 100 240 1nd 1nd 1nd 1nd 20 21 234 36 7704 9 20 6 16 60 	4.50 4.50 4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 5.50 3.50 3.50 3.50	315 360 35 35 37 87 87 816 1768 105 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 1053 105 105 105 105 105 105 105 105	14 14 14 14 14 14 14 14 14 14 14 14 14	98 112 42 49 181 166 364 42 28 38 328 50 328 50 945 28 8 22 84 84 140 350	441 504 189 221 1228 142 2 445 2 8 189 125 6 615 645 645 645 29 78 29 78 29 29 29 29 29 29 29 29 29 29 20 1575
4.6.12 4.6.13 4.6.14 4.6.14 4.6.15 4.6.15 4.6.15 4.72 4.72 4.72 4.72 4.72 4.72 4.72 4.72	Houtwerkplaats     Metalwerkplaats     Schilderwerkplaats     Schilderwerkplaats     Schilderwerkplaats     Audio- en videoruimte     Costagruimte voor technisch materiaal     Back-office art. handling     Transport - en handlingzone     Sulus / sas     Zone voor laden en lossen     Voersiagruimte in ingkenrylite     Noersiagruimte ingkkenrylite     Noersiagruimte     Noersiagruimte ingkkenrylite     Noersiagruimte	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 × <i>d</i> 2 × 30	70 80 33 1531 29 200 200 27 27 20 27 234 36 675 704 9 9 20 6 16 16 16 16 16 20 20 27 26 16 20 20 20 20 20 20 20 20 20 20	4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 7.00 7.00 7.00 7.00 7.00 7.00 7.00 7	3 i5 360 155 158 9 7 48 877 816 1768 135 50 122 1053 142 1053 142 21 55 220 0 350		98 112 42 43 181 168 364 42 28 326 50 945 50 945 50 945 50 945 50 945 50 945	441 504 189 1228 1 142 2 475 189 126 170 1 474 227 6 615 
4.6.12 4.6.13 4.6.14 4.6.14 4.6.15 4.6.16 4.6.15 4.72 4.721 4.721 4.722 4.723 4.724 4.723 4.724 4.723 4.7244 4.7244 4.7244 4.72444 4.724444444444	Y Houtwerkolaats     X Metaalwerkolaats     X Schilderwerkolaats     X Audio- en videoruimte     X Audio- en videoruimte     X Audio- en videoruimte     X Costagruimte voor technisch materiaal     Back-office art handling     Transport - en handlingzone     X Zone voor laden en lossen     X Zone voor laden en lossen     X Overslagruimte i inpakten/uitpakten     X Pregistrate, controle en onderhoud     Werpaktingsruimte i inpakten/uitpakten     X Berging voor oopslag materiaal en hulpmiddelen     X Burging voor oopslag materiaal en hulpmiddelen     X Guarantaineruimte     X Outrantaineruimte     X Outrantaineruimte     X Gestoren binnendepot     Backoffice logistek en technieken     X Sortkatere gescheiden     X Kitchenete     X Santiair medewerkete gescheiden     X Kitedriette     X Santiair medewerkete gescheiden     X ber gruimten ind. douches, gescheiden     X ber gruip logistek     Ferstensaling logistek     Y Gestore logisteks	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 × <i>d</i> 2 × 30	70 80 35 1531 199 100 240 1nd 1nd 1nd 1nd 20 21 234 36 7704 9 20 6 16 60 	4.50 4.50 4.50 4.50 4.50 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 3.50 3.50 3.50 3.50 3.50 3.50 3.50 4.50	315 360 135 138 9748 977 905 1768 90 122 1053 162 3143 32 70 21 56 210 56 210 56 210 56 210 350 215 315 215 215 215 215 215 215 215 2		98 112 42 49 181 166 364 42 28 38 328 50 328 50 945 28 8 22 84 84 140 350	441 504 189 221 1228 142 2 445 2 8 189 125 6 615 645 645 645 29 78 29 78 29 29 29 29 29 29 29 29 29 29 20 1575
46.12 46.13 46.14 46.15 46.16 47 47 47 47 47 47 47 27 47 28 47 26 47 27 47 28 47 26 47 27 47 28 47 27 47 28 47 27 47 28 47 27 47 28 47 27 47 28 47 21 47 21 47 21 47 21 47 21 47 21 47 22 47 24 47 24 47 24 47 24 47 47 47 47 47 47 47 47 47 47 47 47 47	Houtwerkolaats     Metaalwerkolaats     Schliderwerkolaats     Schliderwerkolaats     Audio- en videoruimte     voslagruimte voor technisch materiaal     Backoffice art. handling     Yransport - en handling     Yransport - en handling     Yransport - en handling     Yransport - en handling     Verpakruimte     Verpakruimte     Verpakruimte     Verpakruimte     Verpakruimte     Verpakruimte     Verpakruimte-     Verpak	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 × <i>d</i> 2 × 30	70 80 33 1531 29 200 200 27 27 20 27 234 36 675 704 9 9 20 6 16 16 16 16 16 20 20 27 26 16 20 20 20 20 20 20 20 20 20 20	4.50 4.50 4.50 4.50 6.80 6.80 6.80 6.80 6.80 6.80 6.80 6.8	3 i5 3 60 1 55 1 58 9 7 48 8 77 8 16 1 7 78 9 7 48 1 7 78 1 7 78 1 25 3 10 1 22 1 0 53 1 62 4 7 72 3 143 3 2 7 0 2 10 5 5 2 20 0 3 50 1 25 2 10 3 70 2 10 3 70 3 7		98 112 42 49 181 166 364 42 28 38 328 50 328 50 945 28 8 22 84 84 140 350	441 504 189 221 1228 142 2 445 2 8 189 125 6 615 645 645 645 29 78 29 78 29 29 29 29 29 29 29 29 29 29 20 1575
4.6.12 4.6.13 4.6.14 4.6.14 4.6.15 4.6.16 4.7 772 4.722 4.722 4.722 4.722 4.722 4.723 4.724 4.722 4.723 4.7244 4.7244 4.7244 4.724444 4.724444444444	Houtwerkplaats     Metalwerkplaats     Schilderwerkplaats     Schilderwerkplaats     Schilderwerkplaats     Audio- en videoruimte     Costagruimte voor technisch materiaal     Beck-office art handling     Transport - en handlingzone     Sulus / sas     Zone voor laden en lossen     Overslagruimte ingaken/uitgakken     Werkakingsruimte ingaken/uitgakken     Serging voor opsiag materiaal en hulpmiddelen     Werkakingsruimte     Gesizen binendepot     Gesizen binendepot     Backoffice logistek en technieken     K. Stichenete     Sanlair medewerkete gescheiden     Merging voor opsiag kescheiden     S. Kitchenete     Sanlair medewerkete     Sanlair medewerkete     Sanlair medewerkete     Sanlair medewerkete     Sering logistek     Fietsensaling     Technische lokalen     Storogiagnoor logistek     Soro opsiagnaling     Storo opsiagnaling	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 2 × <i>d</i> 2 × 30	70 80 35 1531 29 200 200 27 27 20 27 27 20 27 27 26 16 16 16 16 16 20 20 27 27 26 16 15 20 20 20 20 20 20 20 20 20 20	4.50 4.50 4.50 4.50 4.50 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 3.50 3.50 3.50 3.50 3.50 3.50 3.50 4.50	315 360 135 138 9748 977 905 1768 90 122 1053 162 3143 32 70 21 56 210 56 210 56 210 56 210 350 215 315 215 215 215 215 215 215 215 2		98 112 42 43 181 168 364 42 28 328 50 945 7 13 28 8 22 8 8 22 84 140 350 227	441 504 189 221 1228 1228 2475 169 126 70 1474 2475 70 1474 2475 70 1474 2475 70 1474 27 6655 77 8 29 9 78 29 21 1021
4.6.12 4.6.13 4.6.14 4.6.15 4.6.16 4.7 172 4.722 4.722 4.722 4.722 4.723 4.724 4.725 4.726 4.726 4.726 4.726 4.726 4.726 4.726 4.726 4.726 4.726 4.727 4.73 4.736 4.727 4.73 4.736 4.727 4.7377 4.737777777777	¥ Houtwerkojaats           × Metaalwerkojaats           × Audio- en videoruimte           × Oopslagruimte voor technisch materiaal           Back-office art. handling           × Transport - en handling zone           × Suis / sas           × Overslagruimte           × Pregistratie, controle en onderhoud           × Pregistratie, controle en onderhoud           × Berging voor opslag kisten/plastekrolitigraken!           × Berging voor opslag kisten/plastekfolie/inpakmeriaal           × Gueratalneruimte           × Werkatelier           × Hoofdserverkoaal (MED)           × Gesioten binnendegot           Back-office algistek en tachnieken           × Santlair medwerkers gescheiden!           × Kitchenette           × Gestoten bering logistek           × Berging voor opslag kitstek           × Gestote berging logistek           × Santlair medwerkers gescheiden!           × Kitchenette           × Gestote berging logistek           × Gestote berging logistek           × Gestote berging logistek           × Gestote loerging voor logistek	1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 35 1531 199 100 240 1nd 1nd 1nd 30 20 27 234 36 67 704 9 20 6 16 60 100 250 240 240 240 240 250 240 250 260 1531 260 260 260 260 260 260 260 260	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	3 35 360 135 138 9 7 48 97 95 96 1768 90 122 1053 163 163 163 163 163 163 163 16		98 112 42 49 181 166 364 42 28 39 328 50 328 50 328 50 22 84 84 82 22 84 140 350 227 55	441 504 189 221 1228 1 142 2 4/5 2 4/5 189 126 189 126 6 4/5 6 4/5 44 98 29 78 29 78 294 40 91 5/5 1 021
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46.12 46.13 46.14 46.15 46.16 46.16 47 472 4721 4722 4723 4725 4725 4725 4725 4725 4725 4725 4725	Houtwerkplaats     Metaalwerkplaats     Schliderwerkplaats     Schliderwerkplaats     Schliderwerkplaats     Audio- en videoruimte     Vopslagruimte voor technisch materiaal     Backoffice art. handling     Transport - en handling     Transport - en handling     Transport - en handling     Transport - en handling     Vorsakriverkplaats     Suid / sas     Vorsakriverkplaats     Vorsakriverkeren	1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 35 1531 199 200 260 incl incl 30 20 20 27 20 20 20 20 20 20 20 20 20 20	4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.50	3 15 360 155 158 9 7 48 87 86 1768 1768 155 90 122 1053 90 122 125 120 125 120 125 120 125 120 125 120 125 120 125 125 125 125 125 125 125 125		98 112 42 43 181 166 364 42 28 36 364 28 50 945 13 8 20 945 13 8 22 8 8 22 24 8 40 350 227 25 55	441 504 189 221 1228 1422 2 475 189 126 700 127 40 40 227 6 455 20 24 20 1575 1021 1021 381 381
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4612 4613 4614 4615 4615 4615 4615 4615 4615 4721 4721 4722 4723 4723 4723 4723 4725 4725 4725 4725 4725 4725 4725 4725	K         Houtwerkolaats           X         Metaalwerkolaats           X         Audio- on videoruimte           X         Audio- on videoruimte           X         Ooslagruimte voor technisch materiaal           Back-office arth handling;         Status           X         Status           X         Status           X         Zone voor laden en lossen           X         Oversagruimte           X         Dersagruimte           X         Persingruimte in pakken/uitgakken)           X         Berging voor ooslag kisten/plastiekfolie/inpakmateriaal           X         Buckoffice logistelk en technieken           X         Outsrantinervimee           X         Werkatelier           X         Fotostudio           X         Gestoren binnedegot           X         Gestoren lind. douches, gescheiden)           X         Indedowerkers gescheiden)           X         Indedowerkers gescheiden)           X         Indedowerkers gescheiden) <td>1 1 1 1 1 1 1 1 1 1 1 1 1 1</td> <td>70 80 30 35 1531 U29 260 Ind 100 260 Ind 30 20 27 224 36 675 704 9 20 6 16 16 16 16 16 16 20 20 27 224 36 6 16 16 10 20 20 20 20 20 27 224 36 6 15 7 20 20 20 20 20 20 20 20 20 20</td> <td>4.50 4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.5</td> <td>3 35 360 155 158 9 748 877 816 1768 135 50 122 135 50 123 143 3 143 3 143 3 2 2 10 0 3 50 125 3 2 2 10 0 3 50 125 2 20 0 3 50 125 2 20 0 3 50 125 2 20 0 3 50 125 2 20 0 3 50 125 2 20 0 125 2 20 0 0 3 50 125 2 72 2 20 0 0 3 50 125 2 72 2 72 2 72 2 75 156 156 156 156 156 156 156 15</td> <td></td> <td>98 112 42 43 181 168 364 42 28 328 50 945 7 1 28 8 22 8 22 23 28 8 22 24 40 350 227 55 57 50 50 50 20 42 105 50 50 20 20 42 32</td> <td>441 504 189 221 1228 11222 2 475 16 170 1 474 98 29 79 76 44 98 29 77 78 294 98 29 78 294 1021 16 381 390 1021 76 99 99 99 99 99 99 99 102</td>	1 1 1 1 1 1 1 1 1 1 1 1 1 1	70 80 30 35 1531 U29 260 Ind 100 260 Ind 30 20 27 224 36 675 704 9 20 6 16 16 16 16 16 16 20 20 27 224 36 6 16 16 10 20 20 20 20 20 27 224 36 6 15 7 20 20 20 20 20 20 20 20 20 20	4.50 4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 4.50 4.50 4.5	3 35 360 155 158 9 748 877 816 1768 135 50 122 135 50 123 143 3 143 3 143 3 2 2 10 0 3 50 125 3 2 2 10 0 3 50 125 2 20 0 3 50 125 2 20 0 3 50 125 2 20 0 3 50 125 2 20 0 3 50 125 2 20 0 125 2 20 0 0 3 50 125 2 72 2 20 0 0 3 50 125 2 72 2 72 2 72 2 75 156 156 156 156 156 156 156 15		98 112 42 43 181 168 364 42 28 328 50 945 7 1 28 8 22 8 22 23 28 8 22 24 40 350 227 55 57 50 50 50 20 42 105 50 50 20 20 42 32	441 504 189 221 1228 11222 2 475 16 170 1 474 98 29 79 76 44 98 29 77 78 294 98 29 78 294 1021 16 381 390 1021 76 99 99 99 99 99 99 99 102
4612 4613 4613 4613 4613 4615 4615 4615 4615 4615 4615 4615 4615	¥ Houtwerkolaats           × Metalwerkolaats           × Audio- en videoruime           X Oolsaruime voor technisch materiaal           Back-office art. handling;           X Trassort - en handling;           X Does your technisken vitrasken vitrasken vitrasken;           X Does your technisken vitrasken;           X Does your technisken vitrasken;           X Berging; yoor ooplag, tisten/plastiekfolie/inpakmateriaal           X Fotostudio           X Est berging; en gebouwbeneer           X, Hotofberverkikaal (HER)           X, Kitchenette           X, Santair medeverkers geschelden)           X, Berging; yoor schoonmaak           X centrale berging; togistiek           Pietsensalling;           X tordigererline voor laden en lossen           Back-office administratie           X Kantooroverbigkek	1 1 1 1 1 1 1 1 1 1 1 1 1 1	70           80           30           35           1531           99           260           ind           30           200           201           30           202           30           203           304           305           307           30           30           30           200           40           40           41           1727           423           36           Ind. Seminariactostaten Incl.forum           1nd. Seminariactostaten Incl.forum           30           75           20           23           50	4.50 4.50 4.50 4.50 6.80 6.80 6.80 4.50 4.50 4.50 4.50 4.50 7.00 7.00 7.00 7.00 7.00 7.00 7.00 7	3 35 360 155 158 9 748 877 816 1768 135 50 122 135 50 123 143 3 143 3 2 24 72 3 143 3 2 20 0 3 50 125 3 2 20 0 3 50 125 20 21 25 20 0 3 50 125 227 272 272 272 275 275 275 2		98 112 42 43 181 168 364 42 28 328 50 945 7 1 28 8 22 8 22 23 28 8 22 24 40 350 227 55 57 50 50 50 20 42 105 50 50 20 20 42 32	441 504 189 221 1228 1142 2 475 199 126 170 1474 2475 102 1474 98 29 78 294 498 29 78 294 498 29 78 294 490 1575 1021 381 380 200 76 99 99 910 2102 76

Analyzing the program of demands.

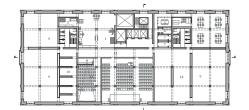
Final set of drawings; plans, sections, elevations.



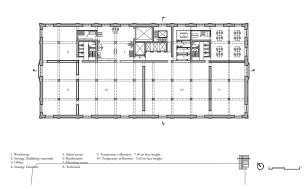


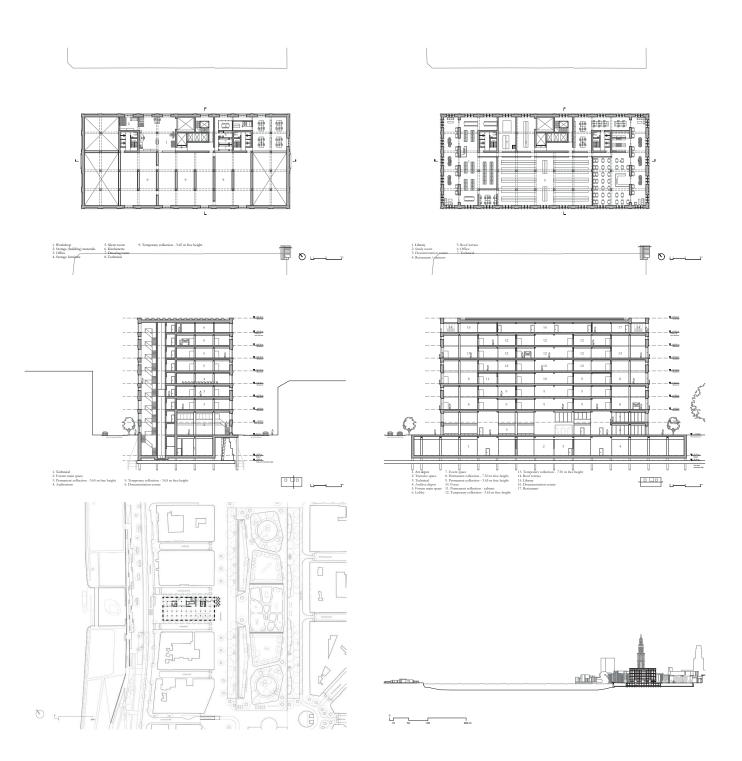












**Reference** Museum Küppersmühle, extension designed by Herzog & de Meuron (2021).

Shylight, at the Rijksmuseum, designed by Studio Drift (2019). Also suggest to look at <u>https://www.youtube.com/</u> watch?v=giuhQuvG680&ab\_channel=StudioDRIFT As noticed during the visit of the Wiels, the design for the VMHK is vertical as well. It is most likely that people will take the elevator up and go down by stairs or elevator). Herzog & de Meuron's extension of the Museum Küppersmühle created an inspiringly new staircase. The staircase itself can be seen as an artwork on its own, thus creating an interesting vertical movement through the museum

In order to promote staircase usage and create an interesting experiencing while moving vertically through the building, the visitors can experience the city through the window openings in the staircase while moving downwards. Additionally, inspired by Studio Drift, artworks will be hanging in its shaft.



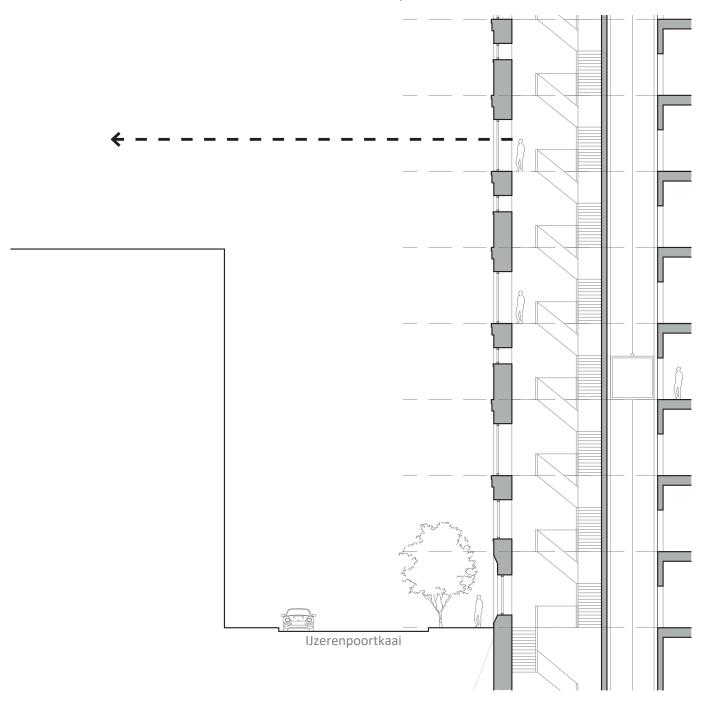
Staircase of Museum Küppersmühle.



Staircase of Rijksmuseum.



View over the city.



Cross section.

# Material matters.

### **An Architecture For Art**

## Studio brief 4.



Materialisms © Roshan Adhihetty. Source: eflux

#### **Materials Matters**

Material culture and the material presence of things is a fundamental concern for what we might consider as contemporary art, with what things are made of and how they are made defining the conception, image or aura established by the resulting piece. These material conditions might be found, left raw or become highly refined and/or composed. At the start of the MSc4 course, this first brief asks each of you, alongside the ongoing development of the forms, spaces and orders of your project, to begin to address its material character, considering how it is made, what it might be made from or finished with and the resulting image it projects. This will not only encompass the visual character of a material but also influence the ways in which it meets other materials or is assembled, thus defining the resulting tectonic character of your building.

Such concerns are essential in conceiving authentic architecture, yet we are now fully aware that we must address other, even more fundamental, questions with urgency. These are embodied in the choices many of you have already made within this project, in your proposals to keep elements of the existing structure on the site, or even to work with the museum as found. 'What should we build?' and 'with what can we build today?' have become pressing questions for our profession. As a generation of young architects, starting your careers, you have been confronted with the overwhelming scientific consensus that our collective, societal failure to address resources in a sustainable

Interiors Buildings Cities way is driving our planet into a potentially irreversible process of destructive degradation. A process that will make it less inhabitable for us all. The realisation that processes of building construction and demolition, together, account for almost 40% of the World's carbon footprint means that architects must shoulder a significant share of the ethical responsibility to radically reduce waste and material consumption and seek to work in relation to the very finite resources available. Beyond the possibilities for architectural expression defined through the material and tectonic choices you make, this brief asks you to take the next step in considering these questions of how a building can be sustainable, encompassing questions of resource use, circularity and operational consumption, but also addressing the social consequences of a material choice or a construction process.

Working individually or in groups, as you choose, you will investigate the materials you are considering to employ within your proposals. These might be ones traditionally used in construction, for example timber or concrete (precast and insitu), looking at the typical ways in which they are employed in the making of buildings, and exploring how their manufacture, usage and potential for circularity can or might be optimised. Equally, your research might lead you to more experimental or less-tested materials or composites. In either case, you should look at both traditional and more innovative practices and methods, exploring their risks and opportunities. The specific concerns will vary



### An Architecture For Art

OUR RED NATIONS WERE ALWAYS GREEN	ATOMIC BOMB FOUR CORNERS NAVAJO MINERS DYING	ECONOMIC CAPITAL MARKET SCHEMES MUST DEFER	TEWA SAY MUST BEHAVE AS OKU PIN	DONT CLEAR GREEN COVER NO FRESH OXYGEN	ICE THAT WAS TO NEVER MELT	SEED SIVING WHITE FEATHERS MEDICINE SONG	NITROGEN OXIDE AMMONIA PHOSPHORU POLLUTE PRECIOUS WATERS
CEREMONY DANCERS FIRST MEAL SACRED CARBON	WELCOME RESTORE OUR FORESTS AND GRASS LANDS	SEEK LAND JUSTICE IN YOUR SOUL	CORN POLLEN BLESSING NOT YELLOW CAKE KILLS	URANIUM THORIUM RADIUM RADON POLONIUM LEAD	HOT SET ENSINES HIGH CARBON GARBAGE SKY	FEED LOT STRIP MINE EARTH QUAKE FRACK	PLANTS TEACH NOURISH PROTECT SHELTER HEAL
INDIO LABOR MERCURY POISON AMAZON GOLD	SHOULD TELL TYPES OF RAIN IN CLOUDS	YOU MAKE FOUR POUNDS WASTE PER DAY	ACCEPT YOUR OWN ECO TRUST RELATE	HOPI PHOTO VOLTAIC SOLAR PANELS NATIVE SUN	REDUCE MOTOR VEHICLE EXHAUST NITRATES PLASTIC TOXINS	GUIDED BY EVER GREEN TREE OF LIFE	WE LIVE IN THE SAME NEST
GOLD	CLOUDS	DĀÿ	UNITE	SUNE	TOXINS	LIFE	NEST

Hock e Aye Vi, Edgar Heap of Birds, Our Red Nations Were Always Green, 2021, primary print.

depending on the material and processes being investigated and the scale and depth of investigation will depend on the scale of your group. No two groups should look at the same thing and as a studio, you will be required to present your work collectively in a way that allows for materials to be composited and easily compared. You will therefore need to consider a format that will include a comparative table, addressing materials and processes in relation to each other, alongside detailed chapters on each individually. The resulting document will form a component of your submission at the end of the year. We strongly encourage you to engage in hands-on research - in addition to the classic online version. In previous years, some students participated in building workshops to fully understand the complexities of the investigated materials or tested the making of a small building fragment on an appropriate scale.

Alongside this material research, you will need to show how your choices are translated into the architecture of your building. You will address these both strategically, through diagrams and drawings describing the orders and processes of construction and deconstruction, and in detail, through the production of a detailed three-dimensional fragment of the building, which will include part of the façade. You should explore the former through digital and/or physical modelling alongside detailed plans and sections through the building envelope at a large scale. Both will require input from both design tutors and your architectural engineering and technology tutor.

Interiors Buildings Cities

### Palace

## Research.

**Reading** Brand, S. (1994). *How Buildings Learn: What Happens After They're Built.* New York, NY: Viking.

Due to the different rates of change of its components, a building is always tearing itself apart. Steven Brand adapted Duffy's 'four S's', which are oriented toward interior work in commercial buildings, into a revised general-purpose 'six S's'. Or in other words a building its shearing layers of change.

**Site** The site is eternal (although subject to alternation). Environment in which buildings are situated, which can be altered.

**Structure** 30 to 300 years. Primary structural systems of buildings.

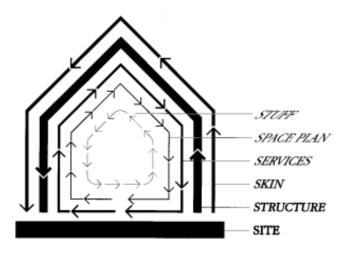
**Skin** 25 to 50 years. Building's enclosure. If properly designed, repairs will be minimized.

**Services** 15 to 25 years. Various systems in buildings, including mechanical, electrical, and plumbing.

**Space plan** 5 to 15 years. Interior space alternations including walls, flooring, and ceilings.

**Stuff** 0 to 5 years. Various furniture, supplies, and storage place in buildings.

Since the shearing layers of a building differ in their longevity the design will focus on their temporarity/ flexibility. The permanence of the façade, the skin, is reflected in the rigid frame, which consists of a firm stone/concrete base, which carries the filigree brick shape that is on top of it. This framework will be filledin with lightweight panels, which will be made out of carbon responsible materials. The load-bearing structure will consist of a hybrid concrete and timber construction. Typical for a warehouse, this structure will be presented in the form of an open plan. Thus enabling a level of flexibility to change the interior and spatial plan.



The shearing layers of change.

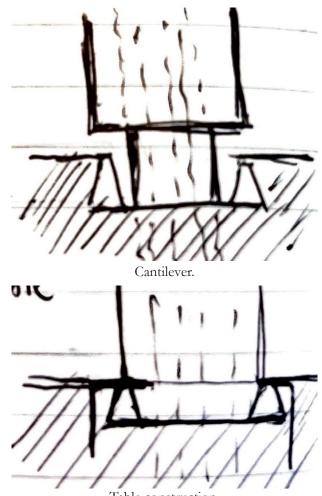
# Lock discussion.

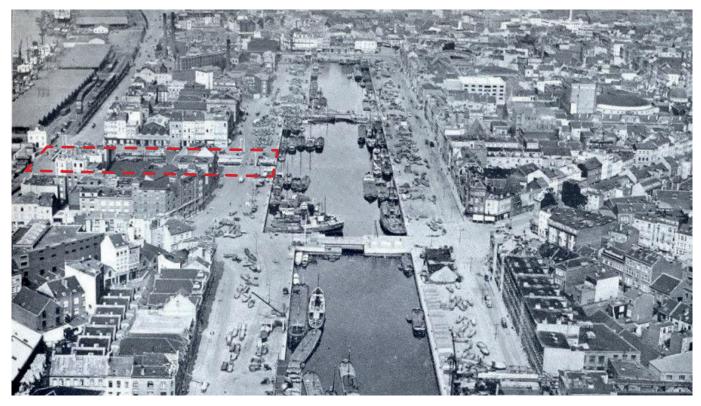


Photo of the class discussion about the lock underneath the project site and archival drawings.

The first class discussion about the lock took place with our building engineering teachers, Mauro Parravicini and Matthijs Klooster. After this discussion, a detailed digital version of the lock was drawn, based on archive drawings. During the second discussion, an assistent professor of structural design at our faculty, dr. Stijn Brancart, participated.

One of the main structural issues we encountered during our research on the site, was the discovery of the former lock that is undernearth it. As it connects the former dock to the river, and was part of the former harbour labour it might has some heritage value. It was also untouched during the construction of the Court of Appeal, and will be very difficult to dig out of the ground as well. A possible structural solution to avoid building on top of the lock is to design a cantilever hanging above the wall of the lock, or a table construction that carries the outer load bearing structure. It is possible to drill a new pile foundation through the concrete slab of the lock.





The former lock, and current location of the Court of Appeal, source: Dok54.

Later on it was also confirmed by Stijn Brancart, that it is possible to make cuts into the lock (likewise to the parking garage built inside the former dock), as long as the new structure will bear the forces. Meaning that it will require a thicker dimension.





Openings in the parking dock, source: Lucid.

**Reading** Marriage, G. (2020). *Tall: The design and construction of high-rise architecture*. London: Routledge.

### Structural design.

#### Structural systems

6.1 Interior structures

#### **Rigid frames**

The structural system of steel or concrete rigid frames represents the simplest approach when designing a high-rise building. It consists of a load-resisting skeleton, composed of columns and beams connected by rigid connections allowing the transfer of bending moment forces between the vertical and horizontal members. The structure, thanks to the bending stiffness of its components, can therefore resist both vertical and lateral loads. The structure is organised along a planar grid, repeating itself on each floor, thus facilitating the transfer of forces generated by the gravity and lateral loads (Figure 6.1). The gravity loads shape the sizes of the vertical members, resulting in progressively larger columns towards the bottom of the building. Regarding the beams, it is the need to resist the increasing lateral forces and to ensure the stiffness of the frames that increases their sizes. A concrete rigid frame system can reach up to 20 storeys in height, where a steel structure has a maximum height of 30 storeys. A greater height implies a risk of excessive horizontal sway.

The grid layout provides some freedom regarding the location of the structure. The structural system can, for instance, take the role of the building core and be placed at the centre of the interior plan, potentially requiring gravity-only columns around. It could also be positioned over the entire interior of the building, thus relating to the 'free-plan' spatial organisation initially recommended by Le Corbusier. This approach provides great freedom to the designers regarding the design of the facade, independent of the main structure, as the columns are retreated from the building's perimeter. Maximisation of the amount of natural light and outside views can then be achieved. This configuration also intends to give greater planning flexibility in comparison to the use of load-bearing walls which are more constraining in regard to circulation and usability of space. However, the footprint of the rigid frames is not negligible and does hinder the usable area around it. Careful reflection must therefore be given to this structural system in regard to the intended function of the building.

Shear wall/Shear truss – frame interaction system In order to reach greater heights, the rigid frame skeleton can be combined with other structural systems; namely, the braced frame and the shear wall.

Most commonly made from steel, the first system consists of beams and columns creating a frame and diagonal members constituting a bracing system, thus ensuring lateral resistance. Cantilevering from the foundation, the braced frames create a shear truss system, with the diagonal braces generating a web of trusses and the columns performing as vertical chords. The braced frame



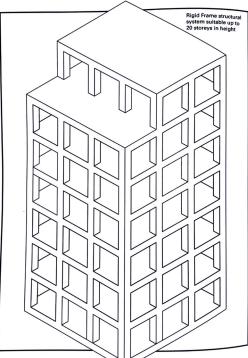
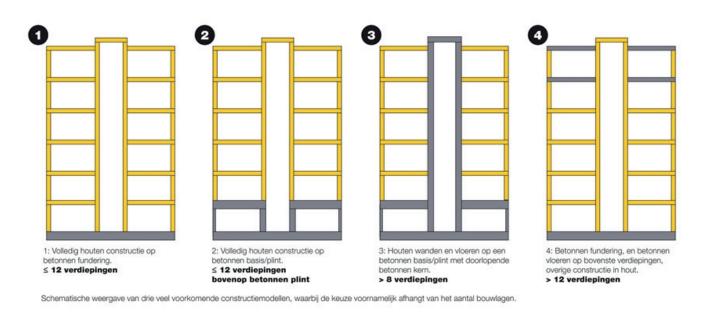
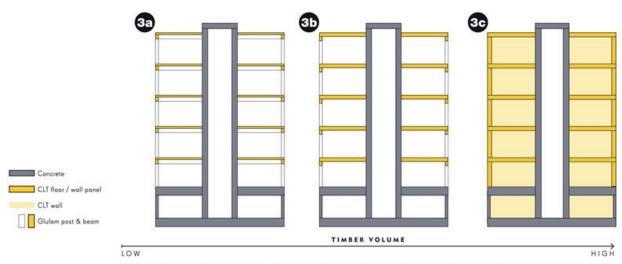


Figure 6.1 Rigid frame system arranged on a planar grid



**Reading** Urban Climate Architects, Vermeend, T., Hauer, D. (2021). *Bouwen met CLT – zes lessen uit de praktijk* van Urban Climate Architects. Architectenweb. Retrieved from https://architectenweb.nl/nieuws/artikel. aspx?ID=47803 A hybrid structure is often more suitable, as a mainly timber structure is not always economically possible and, likewise to high trees, a tall timber structure moves with the wind. Stability walls and crosses will be possible for a height of circa forty metres, but above that a concrete core simply works better. The concrete core can be combined with solid timber floors, walls, columns and beams. Often seen is a timber structure, combined with a concrete core and concrete plinth and/or basement. This often saves about seventy percent of concrete and steel usage.





Schematische weergave van drie varianten op de hybride constructie met beton en hout. Van links naar rechts van weinig naar veel houtmassa. (Bron: Waugh Thistleton Architects (2019), 'MET feasibility')

Different methods used for a hybrid strucuture of timber and concrete.

**References** UBC Brock Commons Tallwood House, designed by Acton Ostry Architects (2017).

Haut, designed by Team V Architecture (2022).

Timber Tower Research Project, researched and designed by SOM (2013).

Three reference projects, made out of a wood and concrete hybride structure, were taken into consideration for the structural design. Two practical; UBC and Haut, as they have been constructed, and one academical; SOM's, to explore other posssibilities.

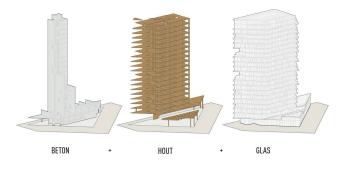
Both the UBC and Haut consist of a timber structure with a concrete base and cores. Although they have a lot of similiraties, the projects differ in their joints. UBC uses a steel joint and rather glulam beams and columns, while Haut uses a composite floor joint with more often CLT walls than columns and beams.

Different to both the UBC and Haut, SOM's Timber Tower Research Project applied its mainly wooden structure to a prototypical building based on an existing concrete benchmark for comparison. This benchmark building is the Dewitt-Chestnut Apartments; a 395 foot tall, 42 story building in Chicago designed by SOM and constructed in 1966. SOM's solution to the tall wooden building problem is the "Concrete Jointed Timber Frame," which relies on mass timber for main structural elements and supplementary reinforced concrete only at the highly stressed locations of the structure: the connecting joints.

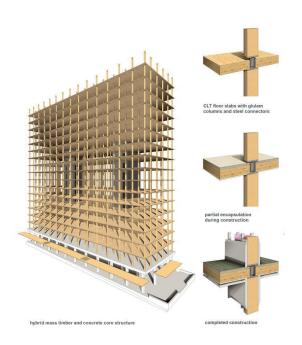
The structural system proposed by SOM is the Concrete Jointed Timber Frame. It consists of solid mass timber products for the primary members such as the floor panels, columns and shear walls, which are connected with steel reinforcing through concrete joints.

Playing to the strengths of both materials, the resulting structure could potentially compete with reinforced concrete and steel while reducing the carbon footprint by 60 - 75%. Although SOM believes the system to be feasible, additional research and physical testing would be necessary to verify the performance of the system, especially in cases of fire.

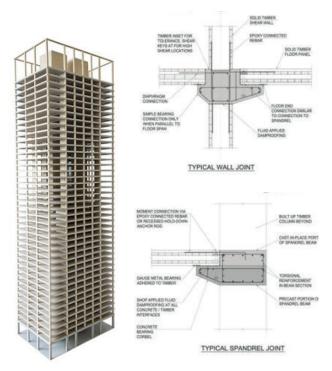
Despite the interesting solutions, in the end the more practical applied solutions of the UBC and HAUT will be used instead.



Haut structural diagram and composite joint.

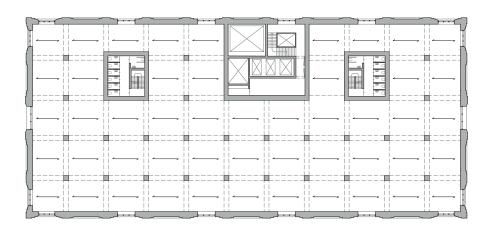


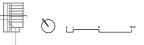
UBC structural diagram and fixed steel joint.



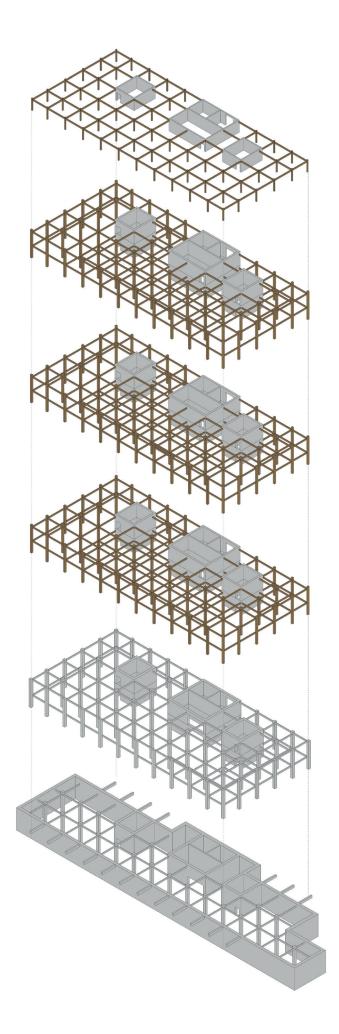
SOM's structural diagram and fixed steel joint.

In order to expose the glulam columns, they will be slightly thicker. In case of a fire, this allows the additional layer to be burned off first, before it burns the structural layer.





Structural plan.



All of this research led me to design this hybrid structure made out of a concrete basement and plinth and cores, combined with glulam beams and columns. Stijn Brancart also confirmed that the structural solution would be viable.

Structural diagram.

**References** The Weston Visitor Centre and Gallery, designed by Feilden Fowles (2019).

2226 Lustenau Office, designed by Baumschlager Eberle Architekten (2013).

Examining Feilden Fowles's details, it becomes clear that they use quite a thick layer of reinforced concrete as the finishing layer and about the same size of insulation combined with poroton blockworks. This mass reduces the necessity of heating and cooling. Thus reducing the energy. The building was almost able to match the RIBA 2030 climate goals with their approach.

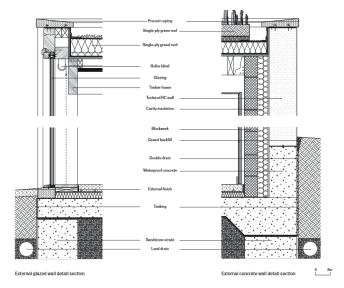
Climate design.

Looking further into the 22.26 concept, the likely origin for Feilden Fowles's reinterpretation with a thick concrete layer, you often see a meter or so thick poroton brick wall without insulation. With a thick mass like this, the temperature of the interior spaces will stay at a constant temperature of 22 to 26 degrees Celcius, with a limited ventilation requirement for temperature and oxygen. In the example of the 2226 Lustenau Office by Baumschlager Eberle Architekten, they were able to reduce its annual energy consumption to one-third, reduce the amount of square meters required for building services by eighty percent, and made the Life Cycle Costs half compared to a standard building.

The downside in both case, in terms of applicability to my own design, is that the façade are heavy as they both use bricks and concrete. But after a conversation with Ietsen Bakker, project leader and climate expert at TBE-ZA Architecten, it became clear that it is also possible to create a similar effect with using insulation such as hemp instead of heavy materials. Since the value for thermal resistance is neglected anyways, it is rather about the thickness of the façade.



Lustenau office.



Detail of the Weston Gallery.



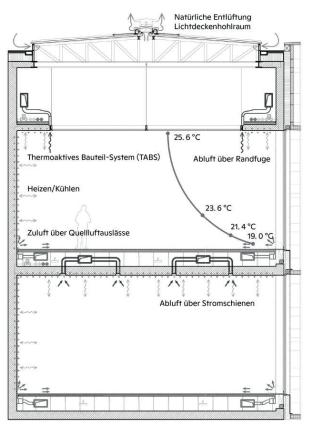
Thick exterior wall.



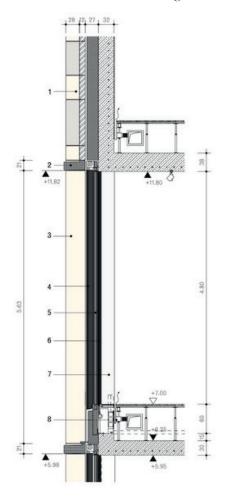
Presentation about the climate design (photos taken by Sam de Vocht).

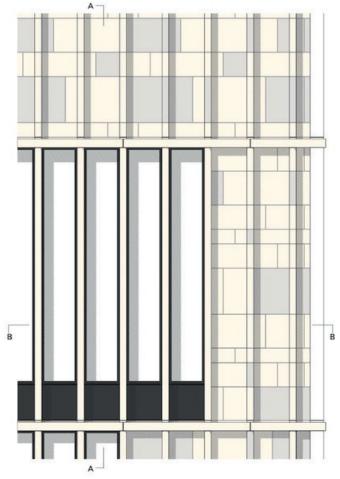
**Reference** Kunsthaus Zurich, extension designed by David Chipperfield Architects (2020).

Looking back at one of the precedents, I was inspired to use elements of their climate strategy. As shown in the diagram they make use of a bottom-to-top ventilation system, ventilating through a shadow gap in the floor at the edge of the space and extracting the air at the centre of the ceiling. Combined with floor and wall heating and cooling it results in a habitable climate within the gallery spaces.



Climate diagram.





Façade fragment.

## Climate consults.

In a consultation with Leo Gommans, assistant professor Climate Design and Sustainability at our faculty, the following notes were made:

• Floor heating can also be used for cooling.

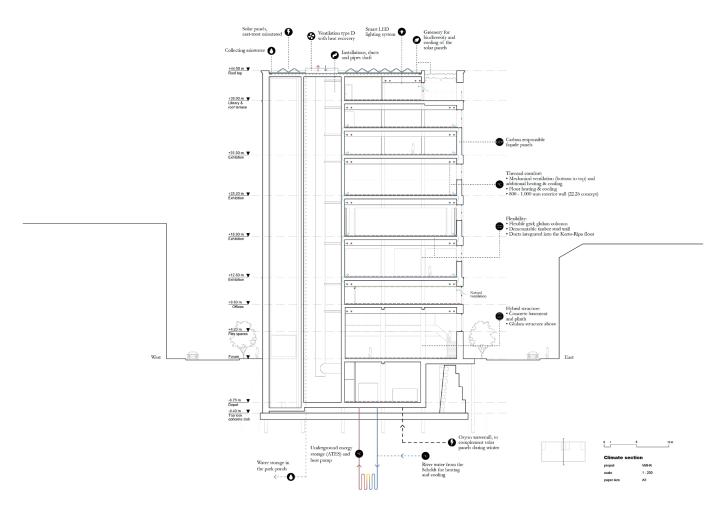
• Ventilation at the edge of a room is the most optimal, especially at the side of the façade. Ventilation from bottom to top, extracting it from the centre in the ceiling.

• The function will likely not make the energy use a netzero, and the subject of energy won't be as important as the other climate elements, so don't focus too much on figuring this out. • Floor heating and an ATES compelement eachother.

• Floor heating and cooling combined with a thick façade allows for a consistent temperature. Altough, be aware about the amount glass surface.

• A floor heating and cooling is quite slow tho, so when this temperature needs to change fast, a ventilation system will suit best.

• The concrete of the existing building can best be reused in-situ.



Climate diagram..

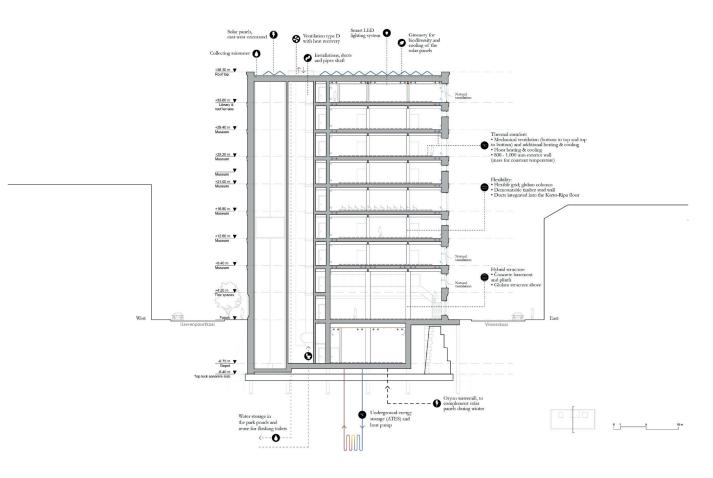
In another consultation with Laure Itard, Professor of Building Energy Epidemiology at our faculty, the following things became clear:

• Using ground temperature is more favourable than the temperature of the river. It also might add other problems due to the salt of the river water.

• She also confirmed a lot of the design approaches and stated that combining the climate design of Kunsthaus Zurich and a rather massive façade would make sense. Although it is prefered not to cool the building during the night, as this will cost more energy to heat in the following morning. • Ventilating from both the bottom and the top is more favourable, creating an optimal air conditioning, whilst also making the spaces modular due to the potentionally added secundary floor between the primary floors.

• She disadvised using decentralized ventilation, as a centralized system would make more sense for a modular system, as it would regulate the required air supply per floor. Per room, with a decentralized ventilation system, would make it too complicated, thus inconvenient.

• Floor heating (radiant heating) seems to be the most optimal for the large gallery spaces.



Climate diagram..

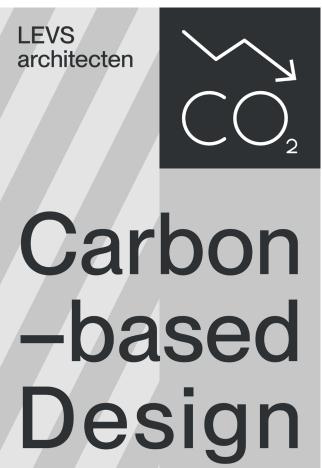
**Reading** Addis, B. (2006). Building with reclaimed components and materials : a design handbook for reuse and recycling. London: Routledge.

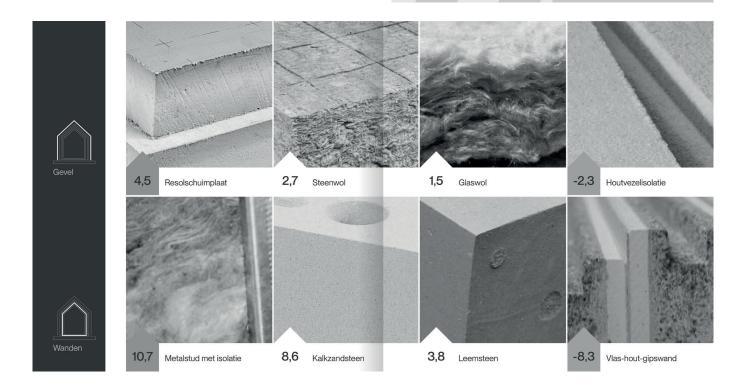
CINARK Centre for Industrialised Architecture & The Royal Danish Academy – Architecture, Design, Conservation. (2019). *The Construction Material Pyramid* [Interactive map]. Retrieved from <u>https://www.materialepyramiden.dk/</u>

Ecoright. (2022). *Eight benefits of using lime mortar in building works*. Retrieved from <u>https://www.ecoright.co.uk/</u> benefits-of-lime-mortar-in-building-works/.

LEVS architecten. (2022). Carbon-based Design. NPN drukkers.

# Technical design.





The small booklet about Carbon-based Design by LEVS architecten (2022) shows the importance and to a certain extend design choices to limit a building's carbon footprint.

Some interesting materials mentioned were wood fibre insulation (houtvezelisolatie), timber inner wall of the façade (HSB dragende binnenwand gevel), reducing concrete elements (reduceren betonelementen), flaxwood-gypsum board (vlas-hout-gipswand). As shown in the image below, these are alternatives to present day standard and common materials. These materials are also shown in the image of CINARK. Often having a carbon deficiency, which is necessary in order to lower the total carbon footprint to a possibly net zero.

Another interesting point was about the use of bricks. Its usage is often problematized, and they think that this taboo should be lifted. In large urban projects, according to LEVS architecten, the use of an exterior brick layer has a small carbon footprint. Roughly three percent of the total amount. Adjustments can of course be made in the form of a thinner layer or a different inner wall construction, but to completely write off brick as a façade material is unnecessary.

Additionally, another improvement to the brick layer could be the use of lime mortar instead of cement mortar. Despite its higher costs, it does make the entire layer circular. Since the lime mortar bonds weaker to the bricker, it makes it easier to seperate them. Making it able to carve out the bricks, and possibly reuse them 1:1 (especially in a non-load bearing wall), and reuse the limemortar to create new mortar. It also lowers the total carbon footprint of the brick, as lime mortar uses less energy in the production process compared to cement mortar (Ecoright, 2022).

CINARK (2019) created an interesting chart, useful to take design choices into consideration. Thinking about transportation, locality of materials. Thinking about the amount of material, as heavier materials require more kilograms, thus more CO<sup>2</sup> emissions. This also means that the detail is crucial, as the amount of material will rely on dimensions, how the joints connect materials, and so on. The properties of the material is important as well. What can the material be used for, and is it thus reliable for its application? And finally whether the material is reuseable or will it become waste. Something to take into consideration here is whether the materials is biobased, recycleable, downgradable, and so on.

### BUILDING MATERIAL PYRAMID THINK OF QUANTITIES



As part of the warehouse character, the façade will be built with lightweight infill panels. These will be the changing face of the façade, taken in and out by a crane (also used for maintenance and hoisting in large pieces of art), responding to the type of function that the building represents at that time. The panels will be made out of carbon responsible materials; (removable) brick slips, wood fibre insulation, timber inner walls, flax-woodgypsum board.

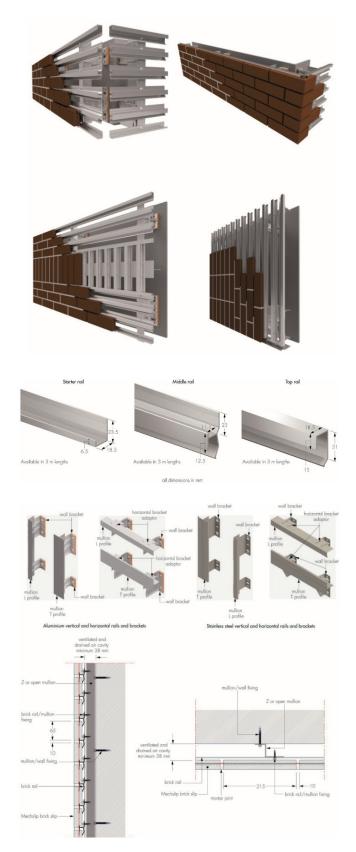
The technical implecations will later on become clear at the end of the Form and Façades chapter.



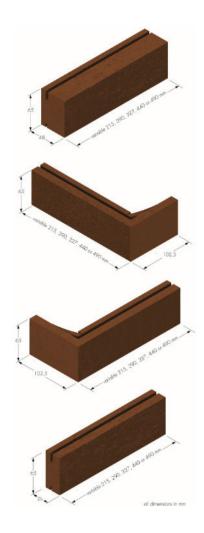
A car hoisted out of the MAS at a height of 25 meters.



Self-supporting facade panels, source: WEBO.



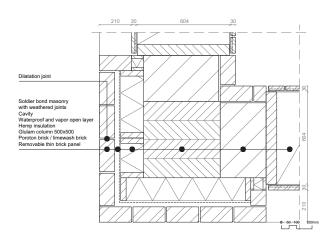
Brick slips, source: Aquarian Cladding Systems.



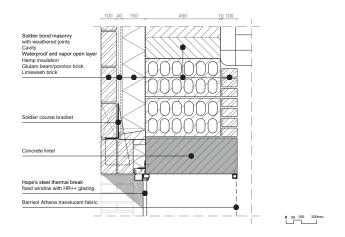


Mechanical brick slip system, source: Slipfast.

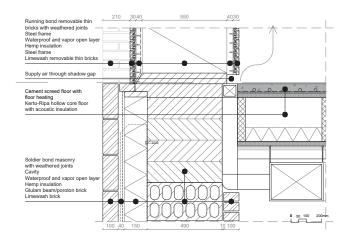
Presenting the first façade fragment led to a discussion about architectural honesty. The brick slips were perceived as kitsch, fake. The corners should instead be a tectonic representation. This critique resulted into a further development of the façade fragment and details.



Horizontal detail.



#### Window head detail.



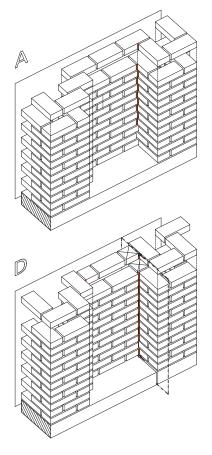
Upper floor detail.

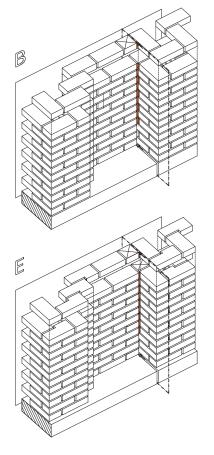


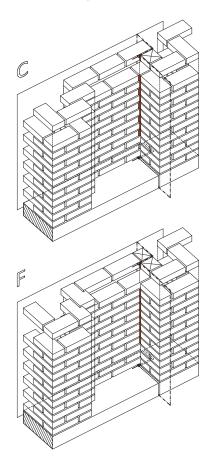
**Reading** Mulder, K. (2016). *Het Zinderend Oppervlak: metselwerkverband als patroonkunst en compositiegereedschap.* Delft: Koen Mulder architect & bouwtechnoloog.

Wingender, J.P. (2016). Brick: an extracting material. Amsterdam: Architectura & Natura Press Since the brick slips were perceived as kitsch, I looked further into the design of a brick building. Reading both *Het Zinderend Oppervlak* and *Brick*, I came along quite some interesting theories and details about brick architecture. Jan Peter Wingender and Hans Kollhoff often talk about the permanence of the façade and in the current time and age it is described as the three layer façade; interior wall/structure, insulation layer, and exterior wall/finish, and how this exterior layer is 'liberated' from the internal expression. The exterior wall is disconnected from the interior wall, as the façades are often self-supporting. This brings an architectural freedom to the expression of the exterior layer.

One in particular interesting detail is the joint between two self-supporting façade elements. Using masonry piers not only layers the façade, it also makes it able to hide the dilatation joint. This way of layering inspired me in the design of the elevations and façade details. Als de hoek in halfsteensverband wordt doorgemetseld, levert dit in de binnenhoek een zigzag van stootvoegen op. Een ambachtelijke wiebellijn voor de liefhebber. Een dilatatie oogt dan als een harde snede, een beetje afhankelijk of deze in licht of schaduw gelegen is. Bij de Kollhoff-dilatatie wordt deze snijlijn in het minder zichtbare zijvlak gelegd - de betonnen geveldrager moet deze vorm dan wel volgen.







Voor het echt doormetselen van de hoeken zou er dan een speciale binnenhoekvormsteen gebakken moeten worden. Bij deze variant waabij de stenen alleen kleiner gemaakt worden krijgt de gevel kleinere koppenmaat dwars op de gevel: op doe hoek vormt dat een probleem.

Voor de systematiek van de Kollhoff-dilatatie in het zijvlak moeten veel extra grote en L-vormige stenen gebakken worden om deze in het grid te houden. Zie voor meer uitleg en 2D tekeningen www.zinderendoppervlak.nl

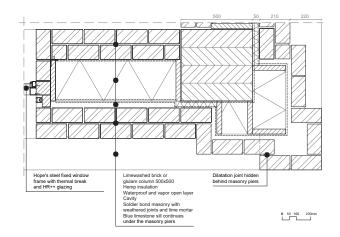
Hiding a dilatation joint with the use masonry piers.

Het binnenvlak kan natuurlijk ook naar voren geschoven worden. De dilatatie verschilt dan slechts als een doorgaande lijn van de stippellijn van de doorgemetselde binnenhoek.

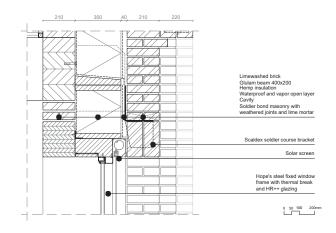
With the critiques on the first façade fragment, I went back to the precedent study on the FRAC. Looking again at there modest approach of doing a minimum of designing the space, creating some sort of hyper flexibility. With this in my mind it resulted in the further development of the technical design and façade fragment. The building needed to become more functional, more flexible. But thinking of doing a minimum in designing, led to designing even the smallest details.

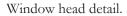
The installations would be integrated into the wooden hollow core floor. Allowing for more flexibility and free height. Additionally, the climate approach of the Kunsthaus Zurich also had an interesting approach in terms of their ceiling design. Alsongside extracting the air at the centre of the ceiling, it contains a 3-phase railing system. This architectural expression of long lines offers a lot of flexibility and makes it able to add and remove a variety of lighting fixtures and install smoke alarms.

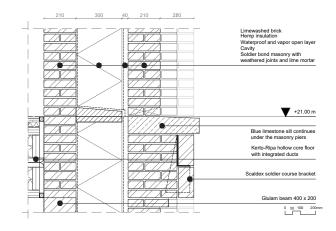
In a consultation and conversation with André van Zelderen, electrician and owner of Van Zelderen Techniek, it became clear that these interventions would be the most suitable solution to offer flexibility. Flexibility in the practical sense of installations, ventilations, electrical and lighting fixtures that can be found in the design of a ceiling.



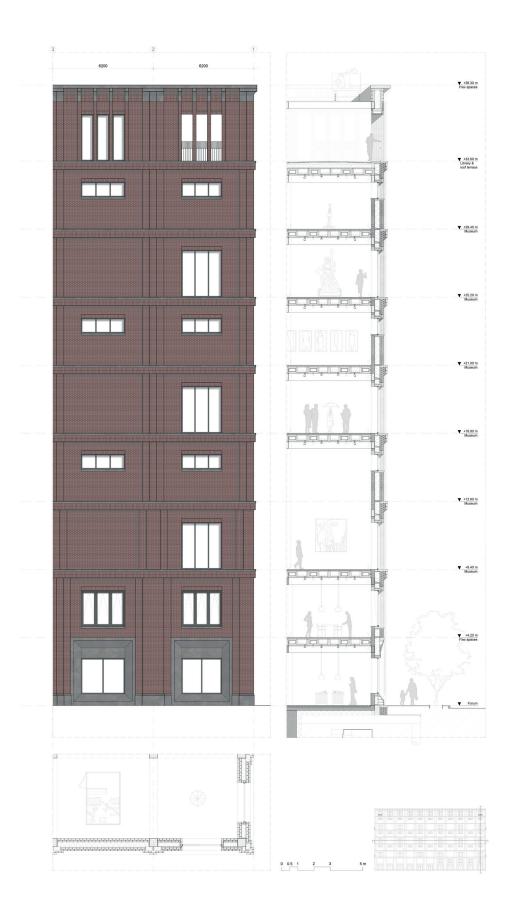
Horizontal detail.







Upper floor detail.

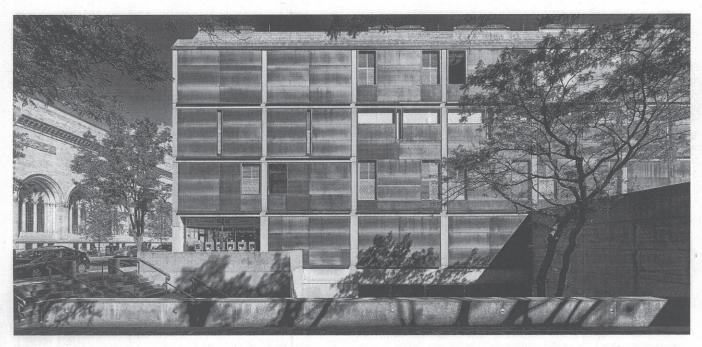


Façade fragment.

# Form and façades.

### **An Architecture For Art**

## Studio brief 5.



Yale Centre for British Art, New Haven, 1977. Architect Louis Kahn. Photograph Cemal Emden

#### **Form and Façades**

'The Museum is the colossal mirror in which man contemplates himself finally in all his faces, finds himself literally admirable, and abandons himself to the ecstasies expressed in all the art journals.'

Georges Bataille

'Face was never a preoccupation for modern architecture.' Colin Rowe

Both quotes in the essay 'Losing Face' by Anthony Vidler, in: *The Architectural Uncanny, Essays in Modern Unhomely*. Cambridge: the MIT Press, 1992, pp. 85-99

'The Elevation rhymes with the surrounding high rises, voids and objects to point out that they are not mistakes or by-products, but part of an unconscious project that has to be acknowledged... shining a light on a continual process which requires more than architecture to happen.'

Tony Fretton, writing on the Lisson Gallery in 1992

Quote in the essay 'Civil Architecture' by Mark Cousins, in: the book Architecture, Experience and Thought: Projects by Tony Fretton Architects. London: AA Publications, 1998 This brief follows a lecture of the same title by Tony Fretton, Emeritus Professor of the Chair. It focuses on the importance and the dilemmas in defining the image of a new museum for contemporary art, given the history of both the institution and the site, the scale of the proposed building and its representative role for the city. It situates and elaborates upon the themes and concerns established by the last brief, Material Matters.

The relationship between form and façade is not a simple one. As alluded to by Colin Rowe's observation, the idea of a clarified form, freed from the concerns of its context and expressing the functional characteristics of its internal arrangements, usurped the façade as the primary means by which the architecture of the last century represented its relationship with both city and society. This stripping away of representative concerns is immediately evidenced in the repetitive, systemised character of the law court's public building, which currently occupies the proposed site and which many of you are re-using. The existing museum takes an opposing position. Here the form of an existing silo inspired a series of abstract volumes, fictive industrial forms that do not correspond to the desires of the interior to be a single, open-plan space but nonetheless impact upon its identity and use as a gallery space.

The scale of the new proposed museum means that it will not only establish possibly contested relationships with its immediate

Interiors Buildings Cities

#### Palace

### **An Architecture For Art**

neighbours but will also need to take its place on the skyline and river frontage of the city as a whole. It does so in a culture where we have a renewed sense of value for the inheritance of the past and in dialogue with Antwerp's new residential scale, the industrial artefacts of its recent past and the proud relics of its illustrious history.

How do you position your project in response? We have already discussed the project's genesis in the social, political discourse that contemporary art sought to represent in the latter half of the Twentieth Century and its immediate relation to the 'anarchitecture' of the American artist Gordon Matta-Clark. How might you reconcile the physicality of a large building - dedicated to the presentation of contemporary art and welcoming of a broad public - in response to these beginnings and the civic aspirations of the current brief that the new museum should be representative and a celebration of contemporary artistic culture in Flanders. As the critic and theorist Mark Cousins wrote in a discussion on Fretton's work, 'civic architecture usually entails the imposition of a social ideology upon the urban fabric', whereas what he describes as 'civil architecture is an architecture that bridges two worlds through a gesture of inclusion.' How does such an ambition address the relationship of the public to the museum? Such an aspiration might mean different things at different scales, from how your building takes its place as a figure within the urban scene to how it addresses the more immediate scale of the neighbourhood, to the human scale, as it touches the street or addresses the passer-by; to the scale of a piece of material or a junction. How you form or shape your building will affect its understanding at each scale. Is this process to be understood primarily from the inside out, as functionalist modernism proposed, do the demands of the context shape the form and structure of the museum, or is the process of developing your building's form one of negotiation between these two competing impulses?

A façade can be understood as a negotiating structure or a threshold between the concerns of the interior and those of the city beyond. It can also be considered one that might be inhabited in its own right. How the façades of the museum might address its situation is made all the more difficult by the programme, which in its demands for contemporary gallery space, might easily lead to a rather introverted architecture of predominantly blank faces. How do you respond to this? To what extent does your façade reflect the structures of the interior? Is it conceived as a kind of mask, or can the distribution of elements in the plan, the spaces for people rather than art, help you to scale, order and animate the façade? Might it lead to a questioning of the nature, or hierarchies of the galleries themselves, moving away from current concerns of contemporary art space and opening themselves up to the city?

For those working with part or all of the existing building, other questions emerge. To what extent is the result composition a didactic one, defined through the relation between new and old or, conversely, is the old entirely subsumed within re-reading the new.

Interiors Buildings Cities Any such exploration into the duties and responsibilities of any contemporary public architecture and its translation into physical form and fabric must engage the question of its sustainability in material and temporal terms. How will the form and façade engage with the demands of the present and future in a robust and adaptable way, ultimately conceiving of a future where it might no longer exist or be substantially transformed? This again raises the question of whether and to what extent it registers the traces or forms of previous conditions in its articulation.

The process of refining form and façade happens across various scales, from the urban to the tectonic. It is inevitably an iterative one, with refinement achieved through an intense and open process of repetition, observation and adjustment, founded upon the making of things. It requires you to test it in different ways: through analysis of precedents; through the ordering, structuring and composing of elements; through the resulting experience of the eye and the body, considered at different moments; through the understanding of its materialisation. It will require your attention to oscillate between inside and outside, each pushing, pulling and reshaping the other. It might well be messy and will probably require many versions. This is normal, and you must find working techniques, probably across different media. Ultimately its resolution might be found somewhere between your intellect and your intuition. You need to look, as well as think about it.

Your work in defining the form and façade of your building up to P3 will translate the more abstract, material concerns of Material Matters in definite terms. It should result in a physical model of the building as a whole within the site model so that its effects can be understood in context and through their impact on neighbouring buildings and spaces. The elaboration of a significant element of your façade as a detailed digital model, appropriately rendered or translated into a physical fragment, should be considered as part of a material and constructional build-up of the envelope that considers vital relationships with the wider building fabric. This might result in its conception as an extension to the larger fragment of building fabric requested in Material Matters. Its representation should include the collated process of development: through sketches, sketch models and iterative versions, recorded in your project journal.

#### Palace

## Research.

**Lecture** Fretton, T. (1 March, 2023). *Form and Façades*. Technische Universiteit Delft.

Tony Fretton, renowned British architect, educator, and Professor Emeritus of the Chair Interiors Buildings Cities gave a lecture on 1 March entitled: Form and Façades.

Some notes on the interesting points that were said during his lecture and meeting in our studio afterwards.

Windows in the façade, wrapped around art spaces. This doesn't always work, but since art needs explaining, the explaining could be done in the spaces with windows and the art be put into the enclosed boxes.

Large building shaping, as a figure, and dealing with the absurdity of the human scale (on ground floor level).

Whatever route you take, it is about making an argument. Show similar projects, or show precedents.

Test form making.

The building could be approach from exterior to interior, or from interior to exterior (the latter a functionalist approach).

North façade for gallery light, other façades perhaps more depth.

Try to understand what will remain, and some things might be demolished later on. Or in other words, don't contextualize too much, as the context might disappear.

Civic monument of Flanders that is the temple of art, but what is civic? Flemish Contemporary Art Museum, or does really good architecture represent Flanders best?

Carefully test, sketch, redraw and maybe change things to get the correct façade.

Think about colour and proportion.

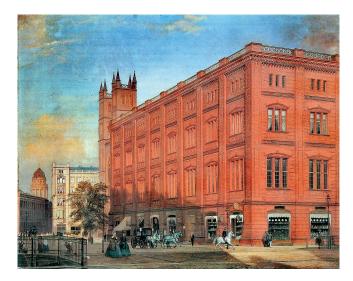
What is your position towards representing the function? Does it look like a museum, or like a public building?

What about the fifth façade, the roof?
Classical three partition.
Sloped roof.
Flat roof.
Cornice.
Just a roof terrace with installations, does not make a good roof.

**Reading** Schinkel, K. F., Riemann, G., & Bindman, D. (1986). *Reise nach England, Schottland und Paris, im Jahre 1826*. Berlin: Henschelverlag Kunst und Gesellschaft.

Schinkel, K. F., & Peschken, G. (1979). *Das Architektonische Lehrbuch*. München: Deutscher Kunstverlag

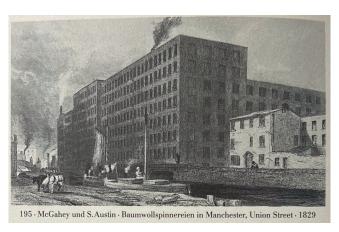
**Reference** Berliner Bauakademie, designed by Karl Friedrich Schinkel (1836, demolished in 1962 due to World War II damages but currently reconstructed). Schinkel's journey to England inspired him for his design of the Berliner Bauakademie. He combined the industrial characteristics of England's factories and warehouses with classical principles and translated it into a palazzo style institution, with refinements according to a tectonic logic. Simultaneously, Schinkel developed and sketched his architectural theory that is different from the Renaissance tractate. In this theory, he does not want to tell someone how thick and high the columns should be. Instead he would ask, based on his sketches, whether you would think that it is rather heavy or too filigree. Thus liberating architecture from rules and giving the authority of judging and developing architecture freely, as shown in his design of the Bauakademie.



Bauakademie, painted by Eduard Gaertner (1868).



Bauakademie, painted by Carl Daniel Freydanck (1838).



wollspinnereien in Manchester · 1826 196 · K.F.Schinkel · Bau

Notes from Schinkel's journey to England in 1826.

Cagad 22. Über architektonische Cha zum Klassizis nus, gegen 1820. H. IV 40. 325 x 205 mm. D S. 45

Notes from Schinkel's Architektonische Lehrbuch.

**References** Guaranty Building, designed by Louis Henry Sullivan & Dankmar Adler (1896).

Monadnock building, the northern half designed by Birdman & Root and the southern half by Holabird & Roche (1893).

Images Taken from Adam Caruso's ETH Zürich website.

In the search of designing a building with a strong verticality, yet something that would align to the idea of a warehouse, I looked into the high-rise brick buildings of the Chicago School and Sullivan. Recognizable by their classical three partition with a rustica or highly ornamented base followed by a continuous columnlike projection and alternation rising to a large cornice often with a gently outward flare at the top. Or in other words, the concept of a palazzo translated into a highrise building.

Referring back to Rossi's theory of collective memory, the brick artworks of Kirkeby, and aligning those with Schinkel's inspiration and the buildings of the Chicago Style, some of these characteristics and principles were implied in the design for the façades of the museum. But rather with less of a focus on the (somewhat extreme) verticality of the column-like brick pilasters of Sullivan and the bay windows of the Monadnock building.

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North elevation of the Monadnock building.

Elevation	of	the	Guaranty	Building.
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East elevation of the Monadnock building, left part designed by Holabird & Roche, and right part by Burnham & Root.

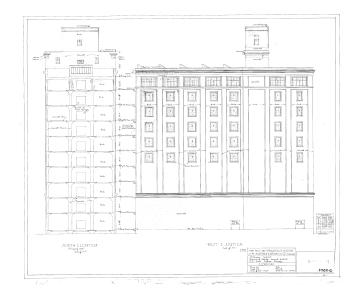
**Reference** Paper mache artworks, designed by Jan Schoonhoven (1914 - 1994).

Another inspiration for the façade design are the paper mache artworks of Jan Schoonhoven, of which some are also part of M HKA's current collection. The works are often named with meaningless titles like 'R71-36' and have repetitive forms and strict schemes, free of any subject matter or highlights. The timeless and abstract reliefs have an elegant shadow play. Sometimes there is a stronger plasticity due to its depth and texture.

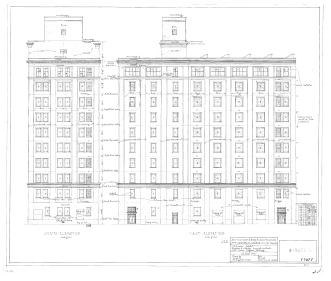
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Some of Schoonhoven's paper mache artworks.

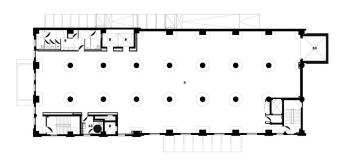
**References** MOCA Toronto, designed by John W. Woodman & Claude Allen Porter Turner (1920), reconstructed by ERA Architects & architectsAlliance (2018). Images and archive drawings received from Janice Quieta, senior associate at ERA Architects. As the façade reflects the idea of a warehouse, yet looked morelike a residential building and some of the proportions felt slightly off, I searched for some warehouses. One particular warehouse that deals with extreme verticality, is the MOCA Toronto. A former warehouse, currently hosting the Museum of Contemporary Art Toronto. It has a height of about 43/45 meters (excluding the concrete block on the roof), with floors of about 4.26 meters on average. The plot size is circa 48 by 20 meters, which means that it is smaller than VMHK's future site. Similar to the Chicago Style buildings, it has a classical tripartite, with a column-like middle part.







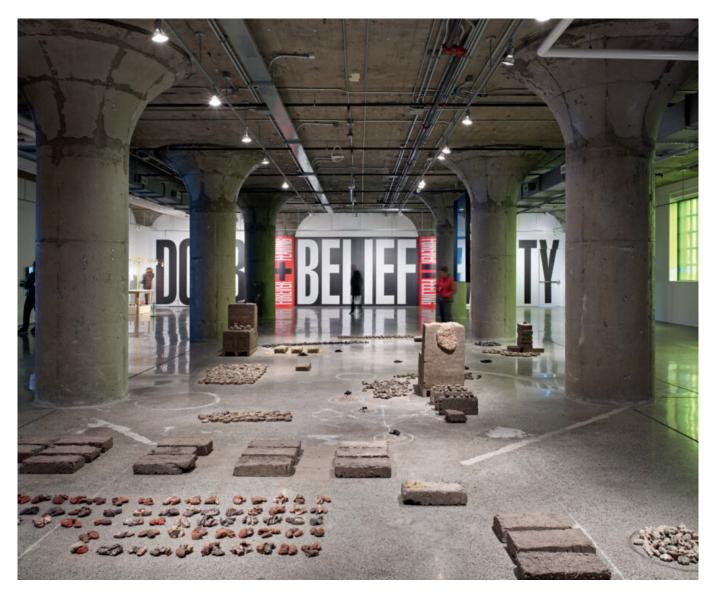
Archival drawings.



Archival drawings.



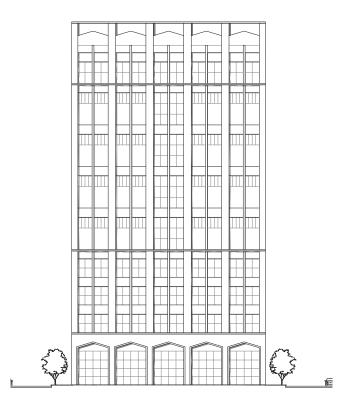
Archive and recent image of the building.



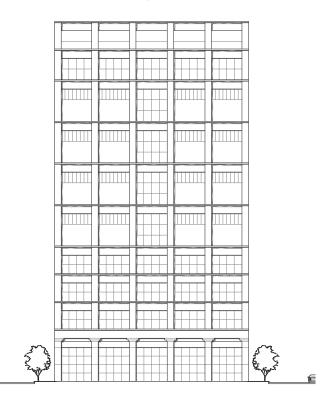
Exhibition space.

## Design.

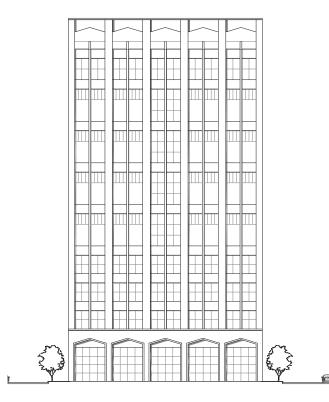
The first couple of façade design, as seen on the next page, focused on the vertical and horizontal orientation of the stacked floors. Since the vertically orientated façades made the building unnecessarily longer than it already is, and looked more hotel-like.



Horizontally cut verticals.

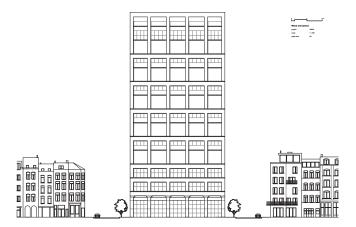






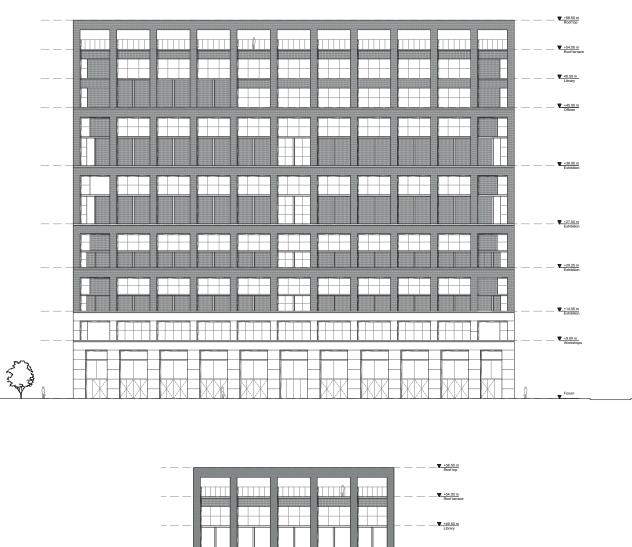
Long verticals.

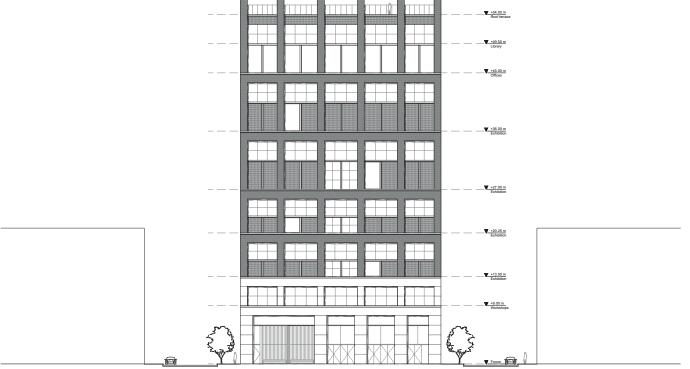
As the first version included a 2:3 partition in floors, which was not very helpful in making a logical construction and façade composition, it changed. I tried to play with different heights that would create both a viable exhibition space and a viable office space in the split part. The latter was also of importance, in order to change the function, after its life cycle, into smaller compartments like apartments. After playing with the play of lines, depths, compositions, figures, and different dimensions, eventually I ended up with the version on the right.



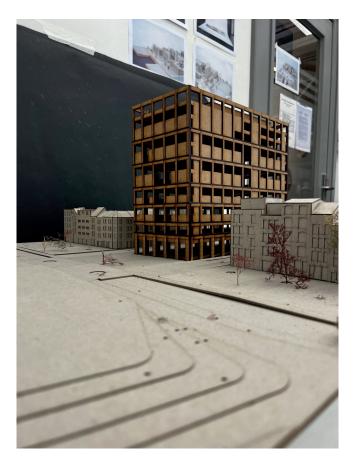
Series of façade studies.

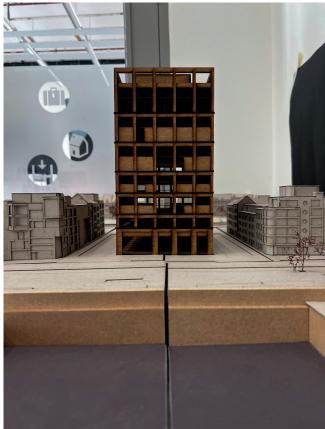
Further developping the façade resulted in the following elevations. A model was made for P3 to see what the building would feel and look like within its urban context.



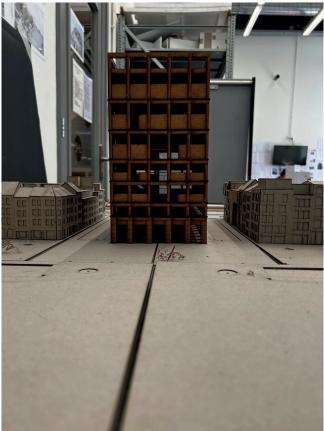


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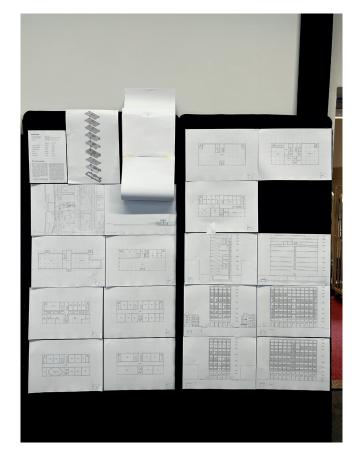


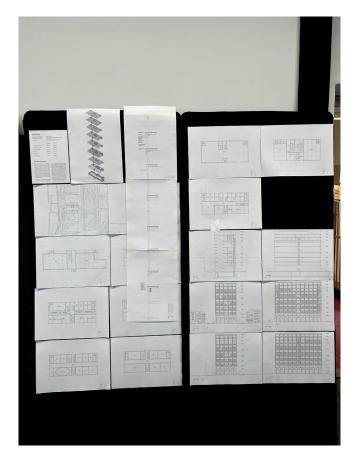






Some of the remarks from P3 were about monumentalism of the floor plans, which do not suit a warehouse and the total height of the building. It was too tall, which made the composition and scale do no justice to the appearance of a warehouse. As a solution, the spatial design would be optimized in order to reduce the total height of the building. With some minor adjustments it was also possible to even further reduce it. These final improvements led to the final design of the façade. This resulted in lowering the height from 58.50m to 44.50m and eventually even below 40 meters (38.30m).





P3 presentation setup.



P3 classroom exhibition of the models.

## Research.

**References** Stapelhuis Sint-Felix, designed by Felix Pauwels (1863).

United Warehouse Company, architect and year of construction unknown.

Walker Warehouse, designed by Adler & Sullivan (1889).

Marshall Field's Wholesale Store, designed by Henry Hobson Richardson (1887).

Looking further into some Chicago warehouses from the twentieth century, it became clear that this three partition was quite common. But instead of embracing the verticality in its middle part, they would often focus more on the monolithic brick façade with perforations for windows and doors. Often with deeper niches, thus a stronger plasticity, in the plinth. The plinth in some cases engages with the street, and in others not. But for my own design it is likely to have a rather transparent plinth to expresses the public character of the building.



United Warehouse Company.



Stapelhuis Sint-Felix.



Walker Warehouse.



Marshall Field's Wholesale Store.

## Design.

Some of the remarks from P4 were that the building appeared too literally as a warehouse and solution created out of the reference projects. Instead it should aspire to be something unique and appear as contemporary architecture, instead of pursuing something nostalgic. The clerestory windows also needed some more attention, as a visitor would also like to orientate itself within the building and look outside.



Elevations.







Model images.

## Research.

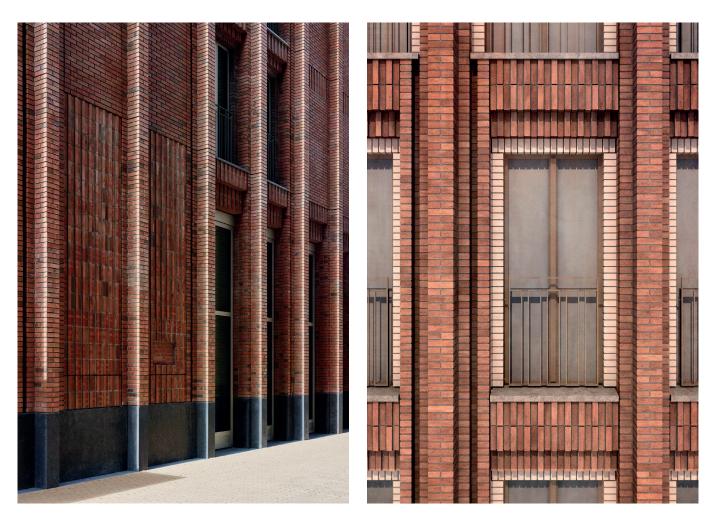
**References** Cadix, designed by Happel Cornelisse Verhoeven Architecten & Stephen Taylor Architects (2018).

Hotel Grote Markt, designed by Müller Reimann Architekten (2021).

Kanonnenplein Den Helder, designed by Geurt & Schulze Architecten (2020).

Christelijk Lyceum Delft, designed by Geurt & Schulze Architecten (2016).

With the remarks from P4 in mind, I looked back at the earlier research conducted, contemporary examples and the surrounding buildings of the project in order to create something that is more unique and related to its context, rather than striving to be something else or nostalgic. Instead the focus shifted to the details, materiality and material expression, and overall appearance.



Hotel Grote Markt, Müller Reimann Architekten.



Horizontality found in the surrounding buildings.





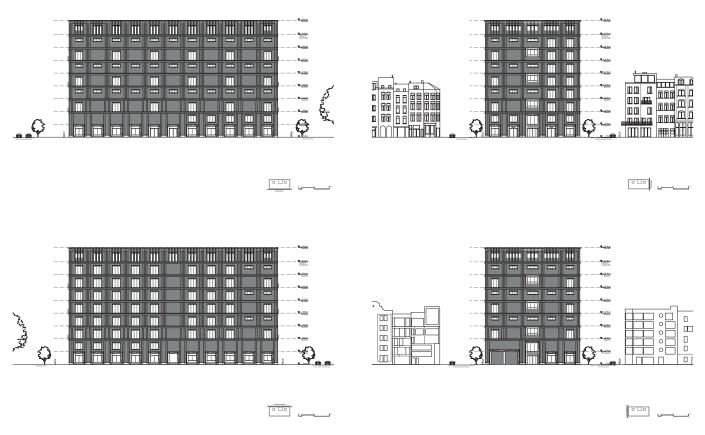
Cadix, Happel Cornelisse Verhoeven.



Kanonnenplein Den Helder & Christelijk Lyceum Delft, Geurst & Schulze Architecten.

## Design.

This redesign of the façade led to the following outcome. Additionally a balcony on the park and quay façades were added to engage and perhaps interact with the outdoor public artworks from within the building.



Elevations.







Model images.

# Curating the museum.

### An Architecture For Art

## Studio brief 6.



View of Forum, competition entry TV MJVHa-WGa, 2018. Visualisation Frederik Desmedt

#### **Curating the Museum**

What is the role of a museum of contemporary art?

It is, self-evident to expose and frame the work of contemporary artists in conducive and technically proficient environments, which can-purpert the appropriate aura through which to contemplate it. It is also much more than that. As we have discovered through our collective research into other references and the history of M HKA itself, the contemporary art museum can also be understood as a space within which to shape and critique questions, relevant to contemporary culture. A place of study and discourse. A place that can offer the possibility of a kind of freedom within which one is able to express oneself. Such freedoms might be especially felt by those whom society has traditionally marginalised.

On the other hand, the museum has also become a space where a more general and generic kind of leisure can be enacted, where browsing the bookshop, drinking a coffee, or amusing one's children might seem more immediately important than confronting works of art.

#### Forum

The brief for M HKA's replacement recognises the central importance of this broader inhabitation in its idea of a Forum as an environment at the threshold between museum and city and

which is capable of accommodating different scales and kinds of activity. Your own developing projects have often thought more broadly still, questioning what type or scale of space such a Forum might require, disaggregating it into different fora, or even placing parts of it beyond the building, back into the city.

What generally remains unsaid is what such a space or spaces are like. How are they materialised, inhabited and used? What are their qualities?

This brief, which considers how to curate the spaces of your museum, begins with an investigation of the Forum: spatially, materially and temporally. Work through modelling, whether physical, digital or a combination of both; we would like each of you to interrogate your Forum, or at least a crucial part of it. What happens there throughout the day? Who uses it or occupies it? How is it furnished? What are its relations to the museum's other spaces and the world beyond it? We propose that you think about the Forum from before the doors open to the public until they are closed again at night. We would ask you to frame it in relation to an exhibition of the work of one or more artists.

The outcome of this investigation should be a stop frame animation, no more than 1 minute in length. The final version of this animation should form part of your Pre-4 and P4 presentation.

Interiors Buildings Cities

### Palace

### **An Architecture For Art**



View of gallery, competition entry TV MJVHa-WGa, 2018. Visualisation Frederik Desmedt

#### Gallery

During the MSc3, the design research project, Ensembles, asked you to create a gallery or small sequence of gallery spaces through which you could present the work of one of M HKA's artist ensembles. The second part of this brief asks you to reiterate that idea within the context of the museum you have now designed. Taking the idea of the exhibition already developed through investigations into the nature of the Forum, we would like you, once again, to create models of the sequence of gallery interiors within which the works that form all, or part, of your proposed exhibition, would be presented. This piece of work should be delivered through larger scale plans and section drawings, which also might form part of your technical and constructional study, alongside a series of photographs of the model interiors. You will present this work at the P5.

#### Section

In a vertical museum, the section and how one moves through it, whether as an employee or a member of the public, often measures its success functionally and in terms of experience. Curating the experience of different building users through a complex section composed of spaces of many different scales, heights and levels of publicity, has been a central question that most of you have grappled with from the outset. One often made

Interiors Buildings Cities more complex by the interfaces between new and existing, as well as inside and outside. For P4, we would ask each of you to present a carefully scaled model, which can be opened up to explore a critical section while also being able to be placed into and photographed within the collective site model. These models should have a consistent basement level and be self-standing and supporting, allowing them to be shown independently and in comparison with one another.

### Palace

## Research.

**Reading** Auguste Perret, "Contribution à une théorie de l'architecture." First published in *Das Werk 34-35* (February 1947). As quoted in Frampton, K. (1995). *Studies in Tectonic Culture: The Poetics of Construction in Nineteenth and Twentieth Century Architecture.* MIT Press, Cambridge, Mass. and London, pp. 153–154.

**Reference** Palais d'Iéna, desgined by Auguste Perret (1946).

Auguste Perret's famous ethical credo became the moral attitude of the constructivists: "Construction is the mother tongue of the architect. The architect is a poet who thinks and speaks in terms of construction. The larger buildings of our time presuppose a framework... The framework is to a building what a skeleton is to an animal... He who hides any part of the framework not only deprives architecture of its sole legitimacy but also deprives from it its most beautiful ornament. **He who hides a column makes a blunder, he who makes a false column commits a crime.**"



Interior spaces of Palais d'Iéna, revealing the columns.

**Reference** Stadhuis Den Helder, designed by Office Winhov & Van Hoogevest Architecten (2021, under construction). In the search of designing interior spaces that are related to the typology of the warehouse, I looked into a variety of (former) warehouses. Allowing to design according to a logic that the characteristics of the typology needs. One of these projects is the former sail manufacturer in Den Helder. The design is based on the characteristic concrete structure, whereas the space in-between the column and beams are either empty or filled in with a different material expression. This expression seperates the structure from the interior, making the interior appear more temporary. The originally pragmatic composition of the façades are replaced by a transparent interpretation that instead expresses the public character of the building.







Building before (left) and after (right).









**References** Dia Chelsea, reconstructed by ARO Architecture Research Office (2021).

Dia Beacon, reconstructed by Rice+Lipka Architects (2003).

Both the Dia Chelsea and Dia Beacon are located in a former industrial building. The atmosphere and materialization were elements that led to the inspiration and design of both the forum and gallery space. The visible structure, interior brick walls and steel or aluminium window frames. Although both are formerly used buildings, the design of the forum and gallery spaces will of course be new, thus more neat and clean rather than used and unfinished.



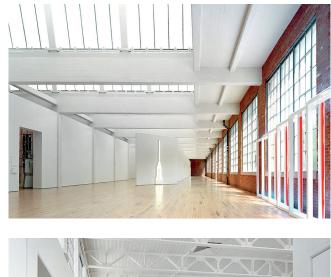




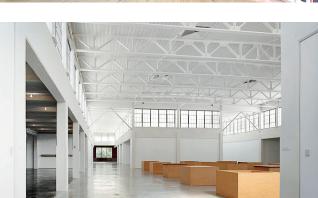


Images of the Dia Chelsea.





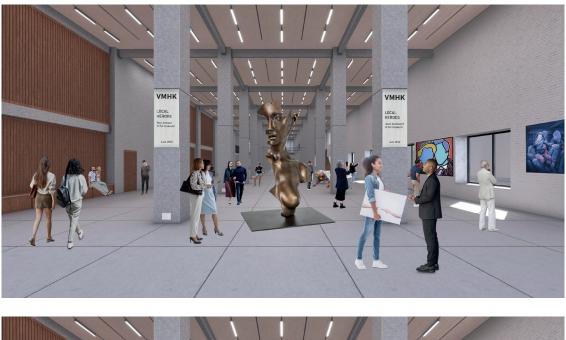




Images of the Dia Beacon.

# Design.







Different configurations of the forum main space; displaying public art, local amateurs art and a public event.







Alongside the forum main space, the forum also contains a space for ticketing, cloakroom, museum shop and a cafe.

## Research.

**References** FRAC Dunkirk, designed by Lacaton & Vassal (2013).

Museum de Pont, reconstructed by Benthem Crouwel Architekten (1992).

Art Scence Warehouse, designer and year of completion unknown.

KANAL, designed by Sergison Bates, noAarchitecten, and EM2N (2018, under construction).

Dia Chelsea, reconstructed by ARO Architecture Research Office (2021).

Not only do the spaces found in the warehouse typology show that a column and beam structure allows for ultimate flexibility, it also offers a variety of configurations. As shown in the references, the walls can be placed inbetween columns and beams, wrapped around them or can even be seperated and positioned completely free of any structural element. Depending on the goal of the curator, the gallery space of the museum cannot be interpreted in one way or the other. Instead it should show that this space is flexible. This often results in a present structure within the gallery spaces.



Gallery space of the FRAC.



Gallery space of Museum de Pont.



Gallery space of the Art Scene Warehouse.



Gallery space of the KANAL.





Gallery space of the Dia Chelsea.

**Reference** Kunsthaus Zurich, extension designed by David Chipperfield Architects (2020).

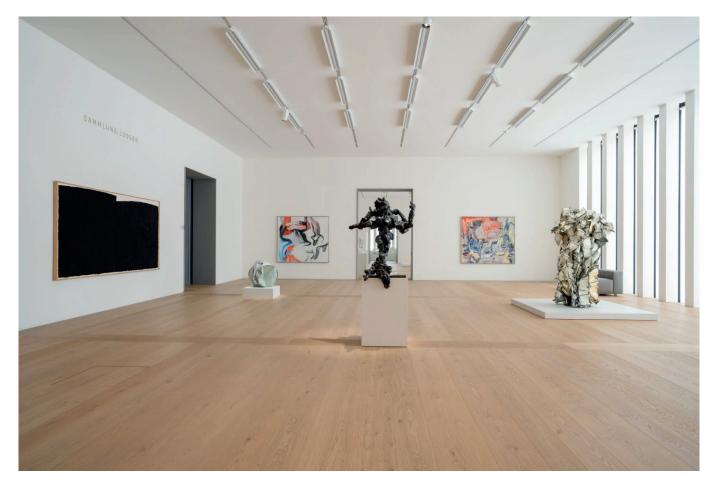
FRAC Dunkirk, designed by Lacaton & Vassal (2013).

Besides the climate approach, the Kunsthaus Zurich also had an interesting approach in terms of their ceiling design. Alsongside extracting the air at the centre of the ceiling, it contains a 3-phase railing system. This architectural expression of long lines offers a lot of flexibility and makes it able to add and remove a variety of lighting fixtures and install smoke alarms. The railing can either be integrated into the surface of the ceiling, like the Kunsthaus Zurich does. Or it be attached at the bottom, making it more present, like in the gallery space of the FRAC.

In a consultation and conversation with André van Zelderen, electrician and owner of Van Zelderen Techniek, it became clear that these interventions would be the most suitable solution to offer flexibility. Flexibility in the practical sense of installations, ventilations, electrical and lighting fixtures that can be found in the design of a ceiling.



Gallery space render showing the integration of the railing system.



Gallery space of Kunsthaus Zurich's extension.



Gallery space of the FRAC.

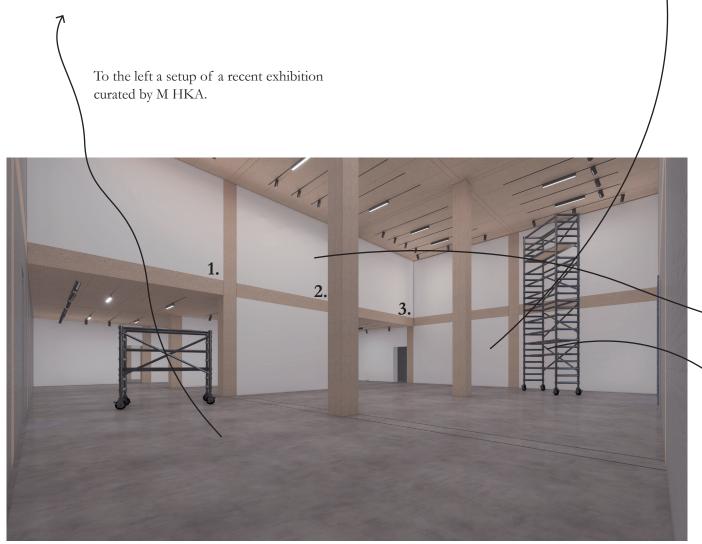


Non-u-mental M HKA 2021

Temporary exhibition of M HKA's archive that shows the history of the museum.



To the right with the setup of a new exhibition by Allan Sekula, adding a window frame to show the "awkwardness of labour" and Sekula is known for addressing the question of class and conditions of labour.

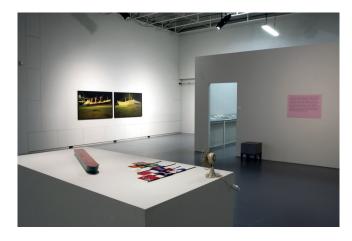


First rendering of the gallery space.

Ships of fools Allan Sekula 2010

"Ship of Fools continues Allan Sekula's investigation into the sea as a forgotten space that binds together shifting sites of production with markets and consumers around the world. It features the voyage of the Global Mariner, a ship that circumnavigated the globe between 1998 and 2000, carrying an exhibition detailing the conditions of workers in the shipping industry. Sekula documented this journey with portraits of seafarers, dock workers and port cities, which register the affects of globalisation on people's lives. With these works, the artist counters the myth that underpins neoliberal ideology of painless flows of goods and capital that constitute international trade."

#### Source: M HKA



Allan Sekula 1951 - 2013

"Principally working with photography, Allan Sekula is also widely recognised as a filmmaker, writer, teacher and activist. Coming from a background in conceptual art, and like many of his generation politicised by the Vietnam War, he has gone on to substantially extend the repertoire of documentary photography. In his practice Sekula has consistently addressed questions of class and the conditions of labour, in tandem with a spirited and rigorous critique of contemporary capitalism. His work avoids the heroic, favouring instead sequences of images which plot complex economic and social processes. During his career, Sekula has repeatedly returned to the theme of maritime space, through a number of interrelated books, films and exhibitions including Fish Story, TITANIC's wake and Lottery of the Sea."



Different configurations of wall setups to show the temporarity of the space: 1. The constructiono of a timber stud wall.

- 2. Large wall wrapped around the columns.
- 3. Staircase and baluster.

Scaffolds and workers to show the construction scene.

As the forum space showed how the typical plan can be spatially organized, the final image of the gallery space shows how the warehouse and its ultimate flexibility operates. It shows a scenario as if the gallery space is under construction. Lighting fixtures are positioned, new wall are built and others demolished. Simulatenously, it displays two different exhibitions, which require different curatoral elements. Such as the window to show labour as part of Allan Sekula's exhibition, a baluster and staircase to see are from different angles and elevations, and different configurations of wall positionings.

Alongside showing the potential of the warehouse typology, the visualisation also brings together the different interior elements architectural, climate, technical, and structural design; shadow gaps for ventilation, materialization, glulam structure, 3-phase railings and lighting fixtures, floor sockets, and so on.



Render before editing.



Render after editing.

### Conclusion.

This year's graduation project of the Interiors Buildings Cities chair focused on designing a modern and contemporary art museum in Antwerp, currently known as M HKA. As the future Flemish Museum of Contemporary Art (VMHK), M HKA aims to expand into a larger museum, comparable in size to KMSKA and MAS. Through a series of precedent studies and research on the museum's collection at the outset of the graduation studio, the question arose regarding the significance of a museum in this era, aiming to grasp the intricate nature of a contemporary art museum beyond mere technical resolutions and situating the institution within a wider socio-political and economic framework. It is conceivable that it may even assume some form of an anti-museum. Hence, the research question emerged: "What does a museum of contemporary art look like in the twentyfirst century?".

The answer that this project endeavoured to provide to the aforementioned question is a contemporary interpretation of the nineteenth and twentieth century warehouse architecture, translated into a contemporary art museum. The warehouse symbolizes its role as a repository for the museum's knowledge and art, while at the same time identifying with the genius loci of the former port identity found along the Scheldt and its surrounding brick buildings. This industrial character is neutral, but not as aseptic as a characterless white cube and does not lose itself in architectural caprices. Moreover, the design creates spaces within the indoor and outdoor public spaces to integrate freely accessible public art among other public programming. These public artworks, claiming unused and empty spaces next to the side, include a floating artwork in the Zuidersluis, sculptures in the Zuiderdokkenpark, and public events, local or community art works or selected pieces from the collection in the forum main space of the building.

Furthermore, in the contemporary context it is imperative to conscientiously acknowledge the influence of a building on its immediate surroundings, the environment and its resources. In this regard, the hybrid wood and concrete structure offers immense opportunities with its flexibility. Making the building adaptable for its upcoming function as a museum and the ones after, thus future-proof. Consequently, this results in a timeless architecture. Simultaneously, the design questions the conventional notion of a contemporary museum, aiming to transcend its exclusive institutional character and function as a public building instead. Within this pursuit of an "anti-museum," the warehouse exemplifies a departure from the typical museum typology. Instead it represents a typology that contemporary art museums have discovered in industrial heritage and can fit into newly constructed buildings of the twenty-first century as well.

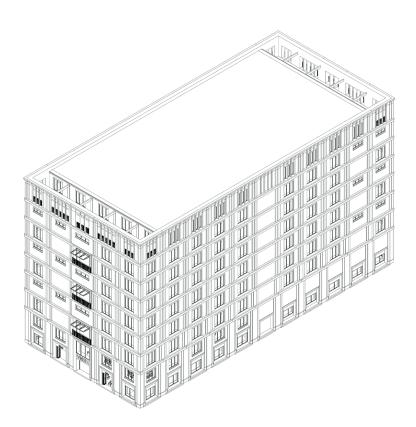
### Reflection.

As seen throughout the project journal, this year's graduation studio encompassed six distinct briefs provided by our tutors, each offering guidance on various research and design aspects. It all began with the first brief, which entailed engaging in a series of reading responses and conducting a precedent study. For the precedent study, we were tasked with recreating a physical model, using paper, of the FRAC designed by Lacaton & Vassal. This exercise allowed us to grasp the intricacies and nuances involved in designing exhibition spaces, as we meticulously reconstructed the details and sought to understand the original designers' intentions. Moving on to the second brief, we embarked on a spatial ensemble project. This particular endeavour proved valuable in two significant ways. Firstly, it acquainted us with the M HKA's collection, providing insights into the artworks and their display requirements. Secondly, it afforded us the opportunity to experiment with our initial foray into designing an exhibition space, applying our newfound knowledge and skills.

The third brief brought us to the point of the P2 presentation, where we delved into researching and analysing the project's site and the surrounding city. Concurrently, we undertook our own independent research and embarked on the initial conceptual design of the museum. In addition to the research materials provided by our tutors, I personally conducted supplementary research and visited other museums throughout the design process. These endeavours proved invaluable in acquiring a deeper understanding of the fundamental and intricate elements that constitute a museum. Upon successfully completing the P2 presentation, we received the fourth brief, which centred on material matters. Throughout this phase, we explored ways to make conscientious and responsible choices regarding the building materials for our contemporary museum design. Additionally, we delved into structural and climate design considerations.

While I initially presented a concept involving the redistribution of the program's demands across the site, I eventually realized that this approach rendered the project overly complex and unwieldy. It was during the subsequent design of the façades, as part of the fifth brief, that the concept of a warehouse emerged as a more suitable design approach for a contemporary art museum. Initially, accepting this shift was challenging, but it proved to be an invaluable lesson as a designer. Sometimes, one must acknowledge when something isn't working and be willing to "kill your darlings." Feedback regarding the design of the warehouse primarily focused on its height and proportion, as they did not conform to the typical dimensions of a warehouse. Additionally, there were concerns about the interpretation of the typology and the translation into a contemporary design. Regrettably, the conceptualization occurred shortly prior to P3, resulting in a relatively condensed timeline for the project's comprehensive development. This temporal constraint is indeed lamentable.

Currently, we are immersed in the final brief, which involves designing the interior spaces, specifically the gallery and forum main space. With the feedback received during P4 and as I approach the forthcoming P5 presentation, I am currently addressing several design modifications stemming from the belated conceptualization phase. Nonetheless, I take immense contentment and appreciation in the overall outcome, and I express profound gratitude towards my mentors, peers, friends, and family for their invaluable assistance and support. Despite its inherent challenges, this moment signifies the pinnacle of my graduation journey, as I am integrating all of the knowledge, valuable feedbacks, and experiences received throughout the year into a final comprehensive design proposal.



Flemish Museum of Contemporary Art.