

Project Journal

Anna Klaver

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Delft University of Technology
Interiors Buildings Cities
Graduation Studio 2024 - 2025

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Looking Carefully

Archiving Architecture

2024-25 MSc3 AR3A100



PREPARATION

Brief 1: Thinking and doing

The opening weeks of the Graduation Studio engage in a collective period of design research, as preparation for the main project. This will establish 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, as students, will oscillate between these two spaces, with each informing the other. This is emphasised through the shared teaching and in group work, from which individual projects will emerge.

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 graduation project. Previous examples of each will be available for consultation and discussion. The period up to the P1 will be arranged in two parts within both the research seminar and design studio respectively. These will overlap and inter-relate.

LOOKING CAREFULLY: Weeks 1-4

The archive extends far beyond a mere repository of buildings: It gives access to ideas, positions, education, knowledge and images, and that across generations. It gives insight into the social context in which designs were created. At the same time, the archive shows alternatives. Archives are not repositories of truths but places of research. They are incubators of new ideas, breeding grounds for speculation about the future. ... Without research or interpretation, the archive has little meaning.

Sofie de Caigny, former director, Flemish Architecture Institute | VAI

Through this brief, we will begin to unpack the archive, not the archive, for the VAI in Antwerp, the development of which will be the subject of this graduation study, but the idea of an archive both historically and in its contemporary, public form. Archives, as an architectural type, have developed as a means to document, store and protect records and precious things. Access to them has

typically been restricted. What was their historical form and as they reshape themselves, as more open, public institutions, what can we imagine an archive is now, what is its purpose and who is it for? Your focus will be the development of a particular type of archive, the architectural archive. In the next four weeks you will start to define your first thoughts about this, through two parallel studies:

The idea of an archive for architecture

The Research Seminars will encompass a series of lectures and readings through which the architectural archive will be addressed as an idea, within social, political, cultural, theoretical, historical and practical contexts. Together, you will study a series of significant references that address the development of archives for architecture the architecture of archives, indeed one is an archive building by an architect, Robbrecht en Daem, whose work is also present in the VAI archive. These references engage different contexts, both in place and time, while also addressing the different aspects of what an archive does, encompassing preservation, documentation, storage, study and reference, display and education.

Alongside these documentary studies we intend to visit two important, relevant local archives, that of the NAI and MVRDV's recently completed Depot in Rotterdam. Visiting these will offer you a different kind of experience, of visiting an archive, seeing its collections, talking to its archivists and understanding its functionality, prior to your visit to Antwerp.

Through this research, you will not only consider what the conditions, concerns and limitations of the various studied archives might be but also the motivations of those who establish and make them, investigating the ways in which they are translated into spatial, organisational and functional strategies.

Through reflective discussion, writing and drawing, you will develop your own understandings of how such concerns have defined the history, development and current conditions of archives; what and who they are for and their relation to the institutions they are housed within. The concerns raised here will form the basis for your individual research plan.

Archiving Architecture

2024-25 MSc3 AR3A100

Model Archives

In parallel, the Design Studio will research and document eight reference projects that embody aspects of the themes addressed in the seminar, in built form and space. The chosen projects are:

- John Soane Museum, London, 1808-1812, Sir John Soane;
- Belnicke rare books and manuscripts library, Yale University, New Haven, Connecticut, 1963, SOM;
- Canadian Centre for Architecture, Montreal, 1989, Peter Rose;
- Ungers House extension, 1990, OM Ungers;
- Drawing Matter Archive, Somerset, UK 2014, Hugh Strange;
- Herzog de Meuron Kabinett, Basel, 2014, HdM;
- City Archive, Bordeaux, 2015, Robbrecht en Daem;
- Ark Des, Stockholm, 2024, Rafael Moneo (conversion), Arhvo Frick (redesign).

Seen together, these range between the intimate and the institutional, between past and present, between the archive as machine and as space of representation. Working in groups of four, the history, provenance and architecture of each project will be carefully analysed and set into context. Each of the chosen situations will be redrawn at a range of appropriate scales and in ways which allow their comparability while also expressing their individual character or concerns.

The scope of these drawings will be defined collectively by the studio. Alongside the drawings, the groups will each make a spatial model, carefully analysing and recreating a representative image of different aspects of an archive, found within each of the precedents. Made primarily of paper and card, these models will be designed to be photographed, reproducing the image, atmosphere and detail of the original view as closely as possible.

Their purpose is to address different scales of attention, considering in detail the material character and atmosphere of the space, the ways in which artefacts are placed within it, its furnishing and the presence of the technical installations, required for it to operate. Alongside the drawings and models, groups will develop analytical diagrams which will allow each precedent to be understood and compared in terms of its scale, spatial order, programmatic function and process. By the end of this you should understand the impulses and motivations which inform the various reference projects studied, but also, when seen collectively, the wider possibilities of an architectural archive and the ways and means through which they operate.

In both studio and seminar you will in effect become an archival researcher, or indeed an archivist. The archive is a less well documented architectural type than many others we have studied in the past. Undertaking these exercises might require invention in terms of how you procure information. You might need to become investigators or negotiators, piecing things together rather than finding them in a monograph. You should therefore record the processes of acquisition alongside what you acquire. The ways in which you choose to carefully document the references can be understood as a fragment of other archives – that of the studio project, which is itself part of the larger archive of Interiors Buildings Cities.

FIRST THOUGHTS: Weeks 5-9

Building Ensembles

In the second period, the research seminars will address the context of the de Singel, the modernist culture campus in the context of which we propose to work. Inspired by monastic precedents, the abstract white volumes of the building ensemble are connected by glazed cloisters. Now set against the Antwerp Ring, the composition of buildings and spaces were originally proposed as overlooking a pastoral landscape, set away from the fabric of the 19th Century extension to the existing historic centre. Intended as primarily a performing arts venue, de Singel was extended in the 1990's by Stéphane Beel, to include accommodation and exhibition spaces for the Flemish Architecture Institute, the VAI. The Seminar will explore de Singel in the context of other modernist building ensembles, exploring their architecture and relationship to the city, as a precursor to exploring it as a potential site for an intervention.

Archival Ensembles

The second period of the design studio will involve the study of a series of significant ensembles of material, held in the collection of the Flemish Architecture Archive. Researching these, and the buildings or architects to which they pertain, you will individually design a setting for one of them. This will be conceived as an accessible archive, somewhere between storage and display. Through this introductory design project, which will be presented primarily through a detailed model, supported by drawings and photographs, you will begin to consider how an archive might be conceived in relation to some form of public engagement. Questions of scale, light and material, view, spatial sequence and furnishing may be explored, while the technical questions and parameters that underpin the effective performance of an archive will also be introduced. This intense, introductory design project offers students opportunities to consider themselves as, at once, archivist, curator, architect and audience, drawing together their reflections, observations and developing understanding in a first act of proposition.

Project Journal

Finally the research seminar will introduce the Project Journal, a document made by each student individually. The purpose of this is to record their 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 on an ongoing basis, 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 reflection and critique of the work being made and the issues that define it. Material from the Project Journal can be used to inform the research plan to be submitted at the conclusion of the research seminar.

Interiors
Buildings
Cities

Palace

Interiors
Buildings
Cities

Palace

Week 1.1

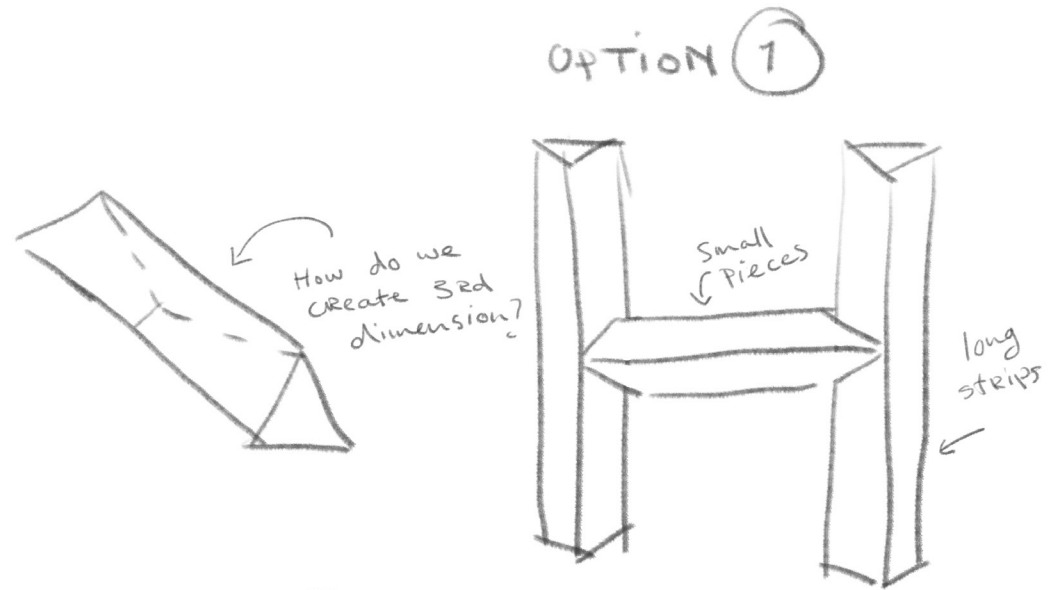
Before the studio began, I was excited but also apprehensive about starting a year-long project focused on a single topic.

Prior to the studio meeting on Thursday, I was unsure about the studio's structure, which made the first meeting especially informative. Which is why I knew that re-viewing the material at home would clarify things for me. Although I would have enjoyed working on the research and writing individually, it made sense to collaborate on the research plan as a group. Our combined research on reference projects would be more extensive, and it would ultimately benefit us in creating the framework for our individual graduation designs.

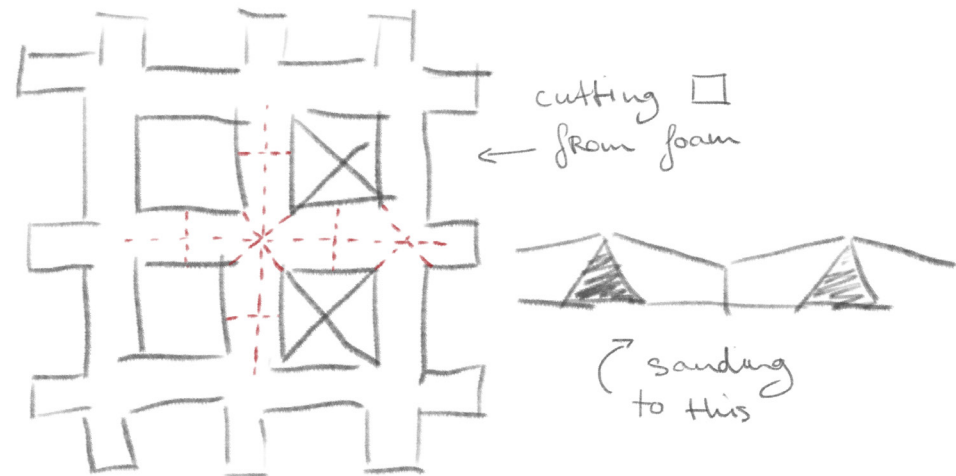
After our first meeting, I felt excited about working on the model of the Beinecke Library. Although my experience with model-making is limited, I've always enjoyed the few models I have created in the past, so I was eager to dive in. We received a black-and-white image of the Beinecke Library as a reference, which made the task seem slightly more manageable. But to make things more challenging, we chose to make a coloured model, which

required us to match each object's shade of grey to a certain colour. Besides dealing with the library's architecture which presents a unique challenge. Its walls are not typical, flat surfaces; they feature a diamond-shaped framework that holds panels of translucent marble.

We began brainstorming with the group on how we could replicate these distinctive marble panels. One idea was to use Illustrator to create an abstraction of the marble's individual patterns and achieve transparency by printing these designs on sketching paper. The only downside to this approach is that it would involve digital production, whereas I would prefer a handmade method to keep the entire model cohesive and in line with its handcrafted aesthetic. To be continued...



OPTION 2



sketches of the grid wall structure and
how to replicate it in our model

Week 1.2

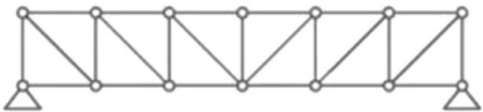
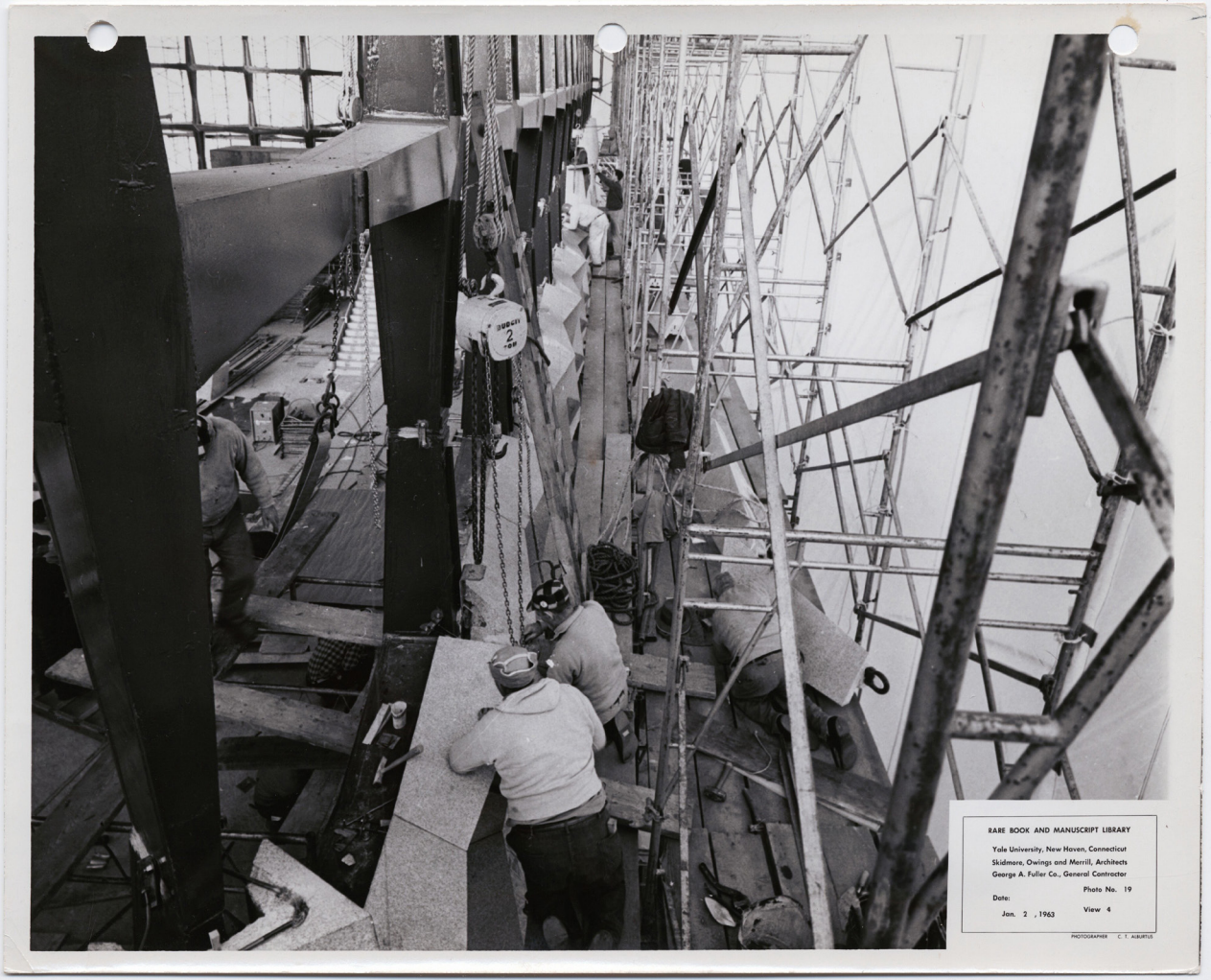
This week primarily focused on initiating the project and getting to know my teammates. The first few days were particularly challenging for me. I hadn't anticipated the difficulties of collaborating with people I was unfamiliar with. Everyone was still trying to establish their roles and figure out how to work effectively with one another. Simultaneously, we had to discuss and make decisions about how to approach the project and construct the model.

We discovered that the Beinecke Library prominently features a grid structure in almost every feature of the building. The grid is visible on the walls, in the diamond-shaped framework that supports the marble, as well as on the floor tiles and ceiling. The grid structure simplifies the understanding of the building's design. Our biggest challenge was figuring out how to recreate the diamond-shaped wall structure. Although this detail is subtle in the photograph, it plays a key role in how the light interacts with the space.

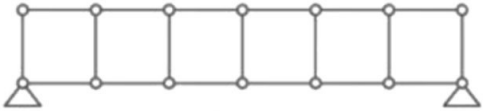
We explored several methods for constructing the library's structure, including sanding foam, CNC-milling it from wood, casting it in gypsum, folding paper, or

using light and dark paper to mimic shadows for a more abstract representation. Given our limited time, casting seemed too risky; although it would have produced an accurate result.

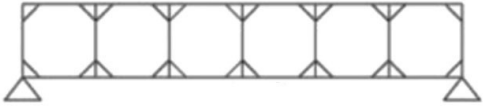
This left us with techniques we could feasibly experiment with. Folding paper was appealing, especially if we created a laser-cut folding pattern. However, sanding foam into the shape seemed to capture the look and texture of granite more effectively. After weighing these options, we decided that foam would give the model the most authentic appearance, so we moved forward with that approach.



Traditional truss(triangle)



Traditional truss without diagonal web member(unsafe)



Vierendeel truss with rigid joint(unsafe)

archival picture of the Beinecke Library facade under construction. Exposing the steel vierendeel trusses.

diagram showing a 'traditional' vs 'vierendeel' truss

Week 1.3

I began the week by sanding the wall structure of the model, which was a time-consuming task. However, the effort was worthwhile, as the final result was quite convincing as we hoped.

My group - consisting of Maksik, Stas, and myself - met to discuss our individual research on the Beinecke Library and how to consolidate it. I found it rewarding to sit together and share what we had learned. This collaborative approach helped deepen our understanding of the building, and I realized how valuable these meetings are. Hearing their perspectives, such as how the building echoes the mystery of secret societies, was particularly intriguing. Yale's campus features several buildings without windows, concealing what goes on inside - a design approach that the Beinecke Library seems to share.

Gathering information for our upcoming presentation also highlighted the building's symbolism. For instance, we examined the wall's origami-like structure, initially thinking it was purely decorative. However, as a Modernist design, of course every element has a purpose. The wall structure is composed of Vierendeel trusses that expand and contract to support

areas of higher stress. These trusses actually mirror the diamond shapes of the library's façade, as shown in the diagram, with Bunshaft essentially adding a third dimension to this structural form.

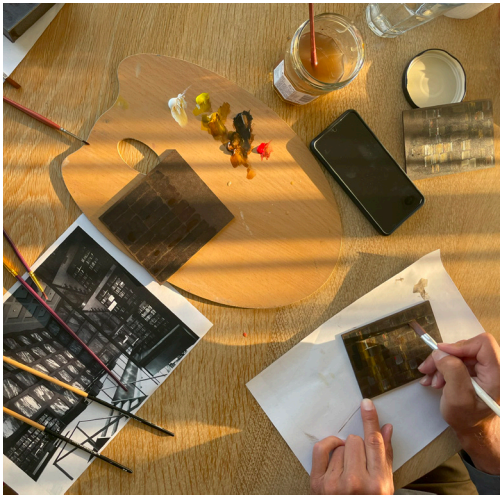
Aside from our own presentation, I greatly enjoyed the lecture by Catja Edens on gender and the archive. It highlighted the challenges women faced in the field of architecture and how they would overcome adversity. This also made me reflect on the Beinecke Library, where Gordon Bunshaft positioned himself as the lead architect while working for SOM. I now wonder who else might have contributed to the building's design. This could be something to investigate for our Research Plan.



painting the grid



setting up the booktower



painting the bookcases



painting the marble



finished marble



photostudio

Week 1.4

This last week working on the model of the Beinecke Library was stressful while we still had a lot of work left, and we had not yet tested the model in the photo studio. Maks was responsible for painting the marble, a task that took him two full days, with assistance from Stas. My focus was primarily on finishing the furniture and the book tower, including painting the books inside the bookcases.

We visited the photo studio on Wednesday, and the experience was somewhat overwhelming. We spent a significant amount of time trying to align the camera to achieve the correct perspective, and then focused on adjusting the lighting. Although I felt like we hadn't fully achieved the exact image during our session, I underestimated the effect of turning our image into black and white. To my surprise, the photo looked quite convincing. While we still needed to return to the photo studio, I felt reassured knowing that not much needed to be changed with the model itself.

On Thursday, we were introduced to a new assignment. I am excited to conduct research on Jul de Rover and curious about what his archive ensemble will look like.

Although starting the design process feels intimidating, I am also eager to begin this assignment. It serves as a helpful introduction to designing for archival material and eases me into the design process, possibly creating a context from which I can develop my final design for the VAI.



Stas assembling the model





photostudio attempt 1



photostudio attempt 2



Beinecke Library, by Ezra Stoller

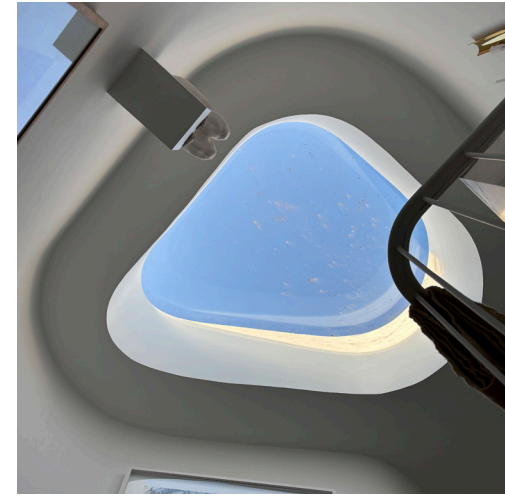


Beinecke Library, final attempt, model 1a25

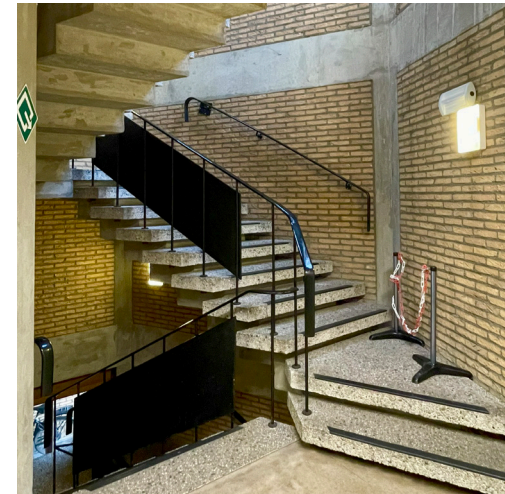
Archival Ensemble



house by Jul de Roover



library by Jul de Roover



Week 1.5

This week began with the introduction of a new brief: to design an environment that stores, protects, and presents selected works from the Flemish architect Jul de Roover. These works are currently housed in the architectural archive of the VAI in Antwerp.

Exploring Jul de Roover

I began by researching Jul de Roover's life, career, and body of work. In preparation for our visit to Antwerp later in the week, I created a list of his projects located in the city that we could explore. Together with Romain and Jur, we reached out to a few locations. One notable visit was to a private house designed by de Roover, which is now home to an architectural couple. Tine de Meester, one of the current owners, gave us an insightful tour of the house, explaining Jul's original vision and the modifications they had made.

We also visited two other sites: the Couwelaar Library and the Daycare Melkweg, originally designed as an event space. Viewing the interiors was particularly revealing, as de Roover's background in interior architecture became evident. While the exteriors did not leave a strong impression on me, the interiors showcased his

meticulous attention to detail, particularly in his staircase designs, which often featured roof lights and unconventional forms. Another striking feature was his use of slats to cover radiators, integrating them with display or storage spaces. He employed a similar slat system on the ceiling of the Couwelaar Library, rotating it 45 degrees to complement the floor plan.

Archival Ensembles

Later, we had the opportunity to visit the architectural archive and view the Jul de Roover ensembles we would be working with for the upcoming assignment. I was particularly excited to find two colored interior drawings of the Kanoclub in my folder. The angled walls depicted in the drawings echoed those in the Couwelaar Library. Along with these drawings, I share artifacts with Romain and Jur, including two models of villas, photographs of interiors and exteriors, plans and elevations, and documents related to articles de Roover wrote for architectural magazines and his correspondence with organizations such as CIAM. This diverse collection of materials provides a rich foundation for developing a comprehensive archival ensemble for our future design project.



fig. drawings of the Kanoclub by Jul de Roover

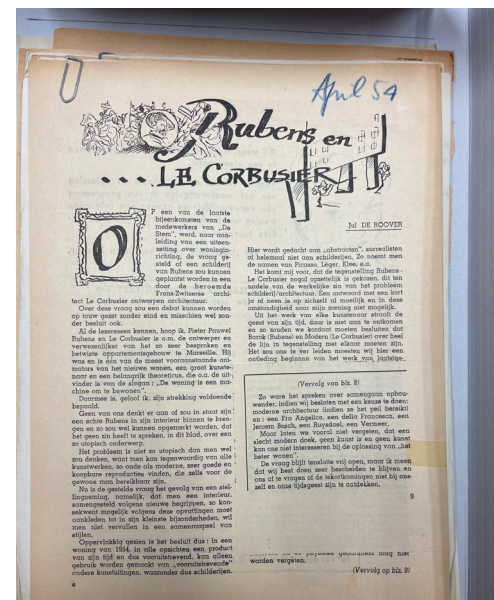
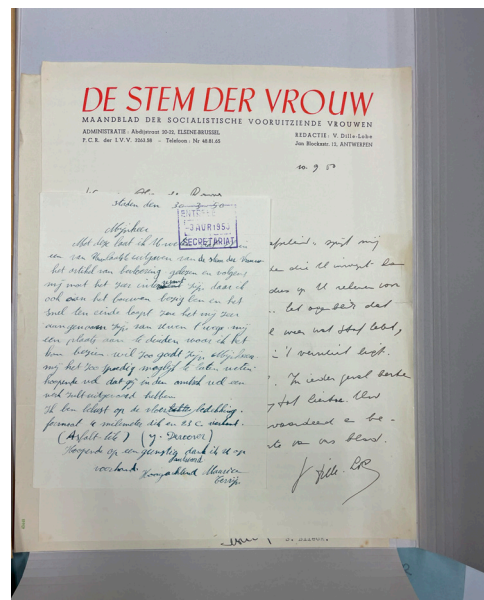


fig. documents from the archive of Jul de Roover



exterior



interior



Visiting the Archive and De Singel

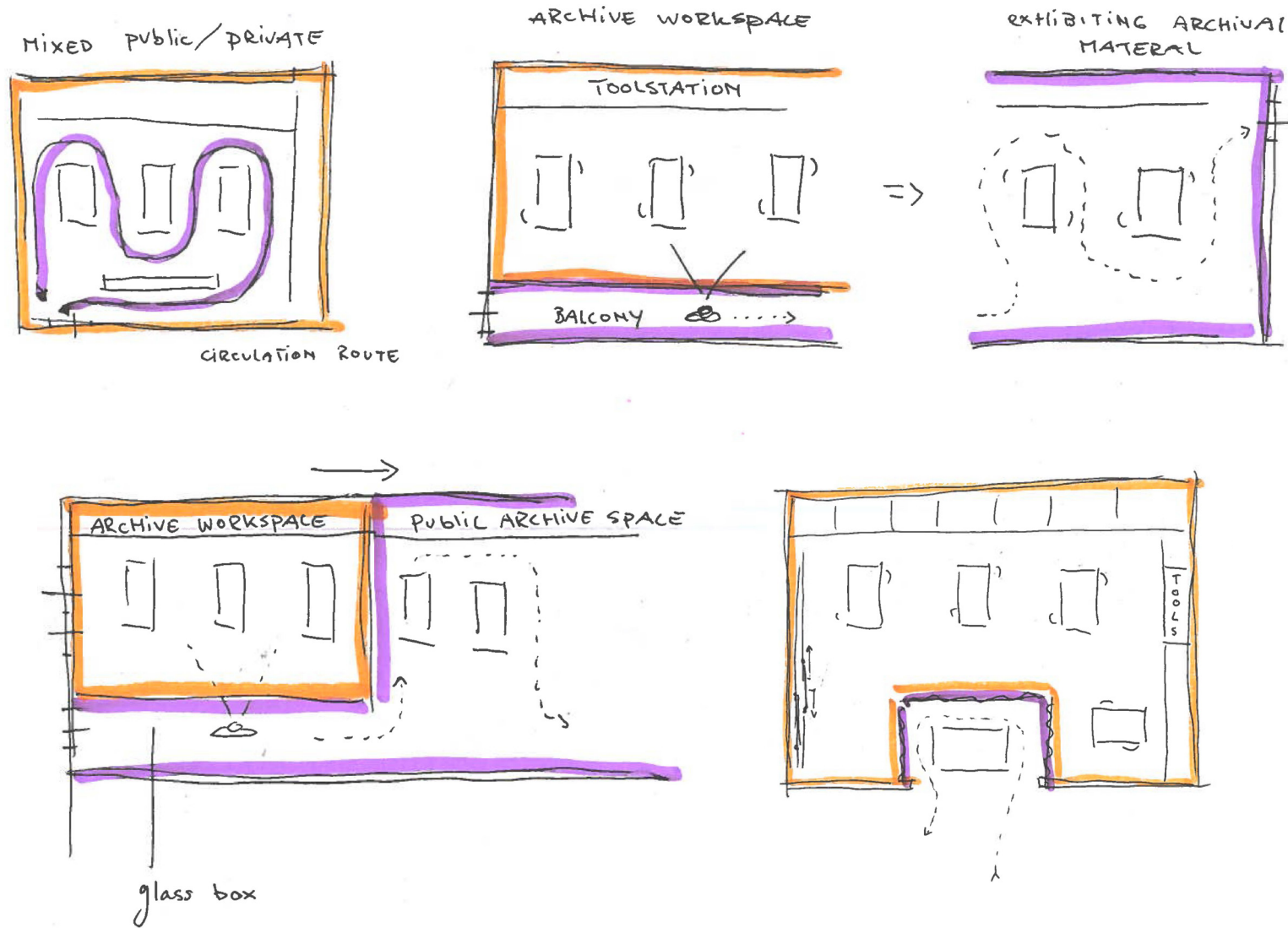
Our excursion started with an exploration of the exterior of De Singel and its surrounding environment. While I had done little prior research on the building and the final graduation brief had yet to be released, I could experience De Singel as it is. My initial impression was not very positive. The building is located next to highways, making the area noisy and overstimulating. However, visiting surrounding buildings gave me a better understanding of its urban context. For example, the nearby BP building by Léon Stynen, positioned next to a park, seemed better integrated into its surroundings, with its roof referencing the form of oil pumps. Despite being located just as close to the highway, the location felt much more serene.

Next, we visited the architectural archive of the VAI in the city center of Antwerp. Tucked away on a side street, the building was barely noticeable. Upon entering, the space felt cramped, with narrow hallways and all its functions divided over multiple floors that seemed disconnected from one another. The reading room was rather plain, featuring a large table and desks. It was clear that this building was not originally designed to house an architectural

archive with a public function. Despite these limitations, the visit was fascinating. Observing how the archive operates sparked an interest in archival work, as I found the process of preserving and researching architectural artifacts to be incredibly engaging.

Finally, we were given a tour of De Singel. Due to my limited prior knowledge, it was difficult to orient myself within the space. Although there is a main entrance, the interior layout makes it unclear how to navigate further. Other entrances around the building seem equally challenging to use.

In conclusion, I believe De Singel requires improvements both at the urban and interior levels. I would welcome the opportunity to make these adjustments.



functionality sketches on how to combine the more private archival functions with the more public functions

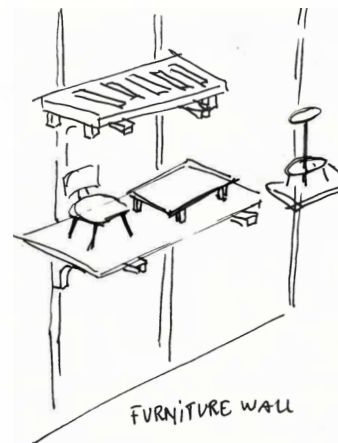
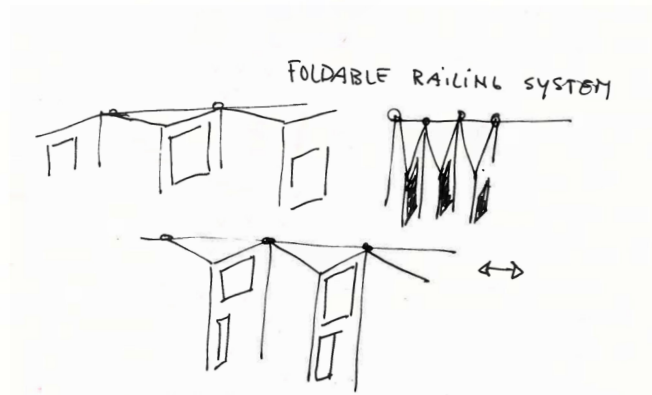
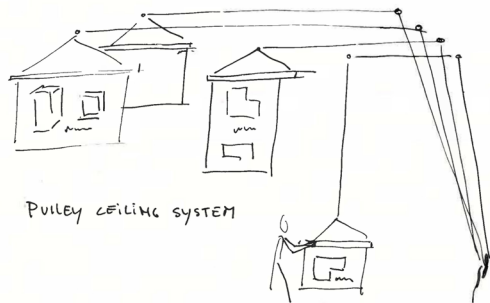
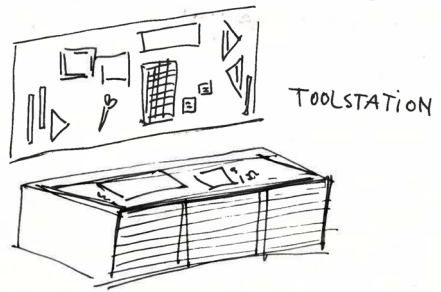
Week 1.6

I began developing ideas for the Archival Ensemble assignment. I started by analysing the ensemble I had received for a second time. Among the materials, the columns written by Jul de Roover provided the most insight into his design philosophy. Before, the information we had found about De Roover was quite general, his writings from the archive showed us more insight into what he was really like. In his writings, he openly shared his opinions on architectural and interior design, often advocating for a departure from traditional interior practices in favour of designs that better meet human needs. For example, one column that stood out to me was his discussion of the chair, where he noted the development of modern individuals prioritizing comfort, often neglecting proper posture. De Roover therefore argued that furniture, such as chairs, should be adapted to the human body to increase comfort.

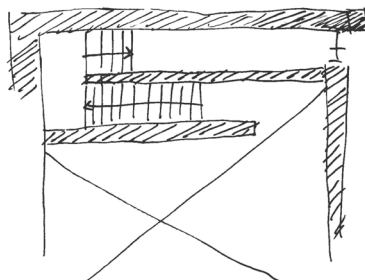
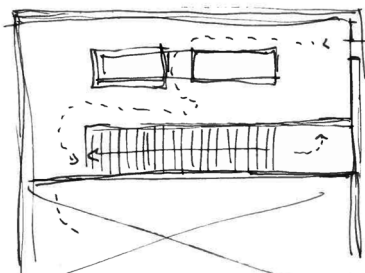
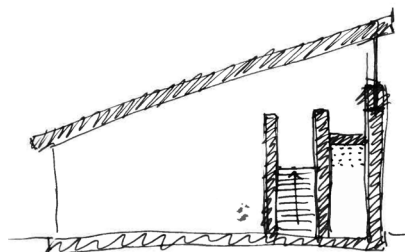
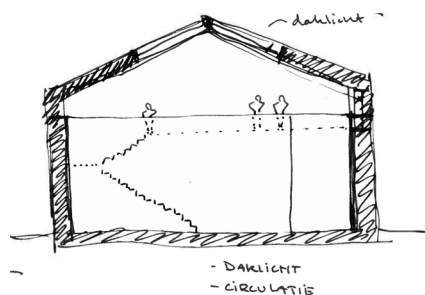
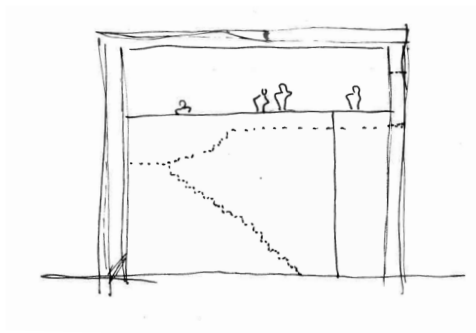
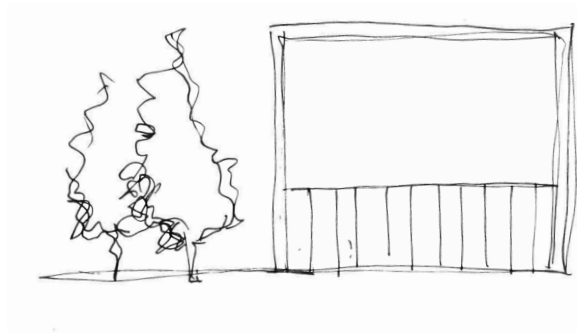
Later, Romain, Jur, and I gathered to discuss our individual ensembles and share our interpretations of De Roover's work. Through our discussions, we realized even better how the materials we were working with are not just artifacts from his career, but a reflection of his broader architectural

vision. Taken together, these objects highlight De Roover's consistent effort to connect the intimate, everyday actions of life with larger architectural concepts. What I found most inspiring was that his core design principles remained consistent throughout his career. He began with Modernist ideals, but as Modernism declined, he seamlessly adapted these principles to align with the emerging 'anti-design' movement. His approach always centered on human needs, which for him meant creating "total concepts." By this, he meant that architects, urban planners, interior designers, spatial designers, and even the general public all play a role in shaping architecture, which ultimately serves to create a "living environment for people."

From this research, I aim to incorporate De Roover's emphasis on the human scale and daily life into my design for the archival ensemble. My goal is not only to exhibit the archival materials but also to highlight the process of archiving itself. I envision creating a living and working space, where visitors can explore and engage with the materials as if they were archivists themselves. This interactive setting would allow them to appreciate both the archival artifacts and the process behind preserving



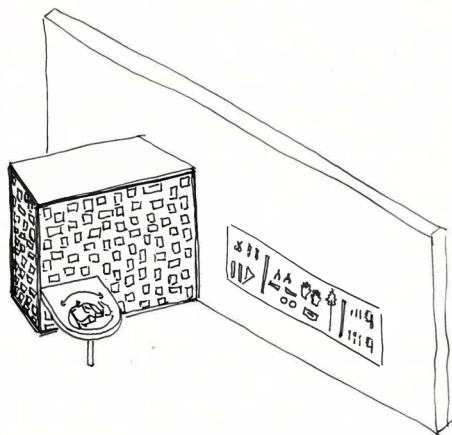
furniture sketches on how to exhibit the artifacts
while maintaining a workspace character



spatial sketches

and studying them. With this in mind I made some sketches of what kind of furniture would be in a space like this.

In addition to my furniture designs, I developed conceptual sketches exploring the interaction between the public and archivists within the space. The archival material would be exhibited in a way that invites public engagement, but I grappled with how to accommodate the archivists' active use of the materials while maintaining accessibility for visitors. I felt it would be impractical to have both groups moving freely within the same space, as this could disrupt the archivists' workflow. However, I was equally hesitant to create too much separation, as the archival work should still be available for the visitors.

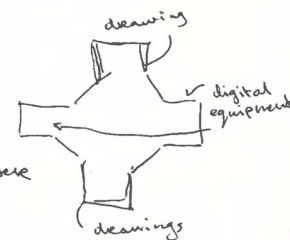


Research → physical management

1. Remove packing or containers
2. flatten or unroll drawings
 - ↳ gently held flat with weights
3. examining
 - a. materials?
 - b. size consistent or several different sizes?
 - c. files of correspondence or specifications?
 - ↳ give clue to help organize
4. conceptual organizing
 - a. are file in a coherent system? or mixed?
 - b. one single project? or several projects?
 - c. one source? or several different sources?

Equipment:

- weights
 - small steel blocks padded with cloth
 - large steel strips
 - acrylic strips (downside → static charge)
- 2H pencil
- transparent plastic & tracing paper
- soft dust brush
- soft brushes
- erasers
- tables of at least 2 m²
 - ↳ movable arm for a computer
- carts



research on archival equipment

Week 1.7

Following last week's progress, the tutors advised me to physically develop my design concept for the archive. I revisited the archival materials from Jul de Roover, hoping they might spark a starting point for the design. This led me back to the colorful drawings of the Kanoclub, which had captured my interest early on, though I had been unsure how to incorporate them into my design.

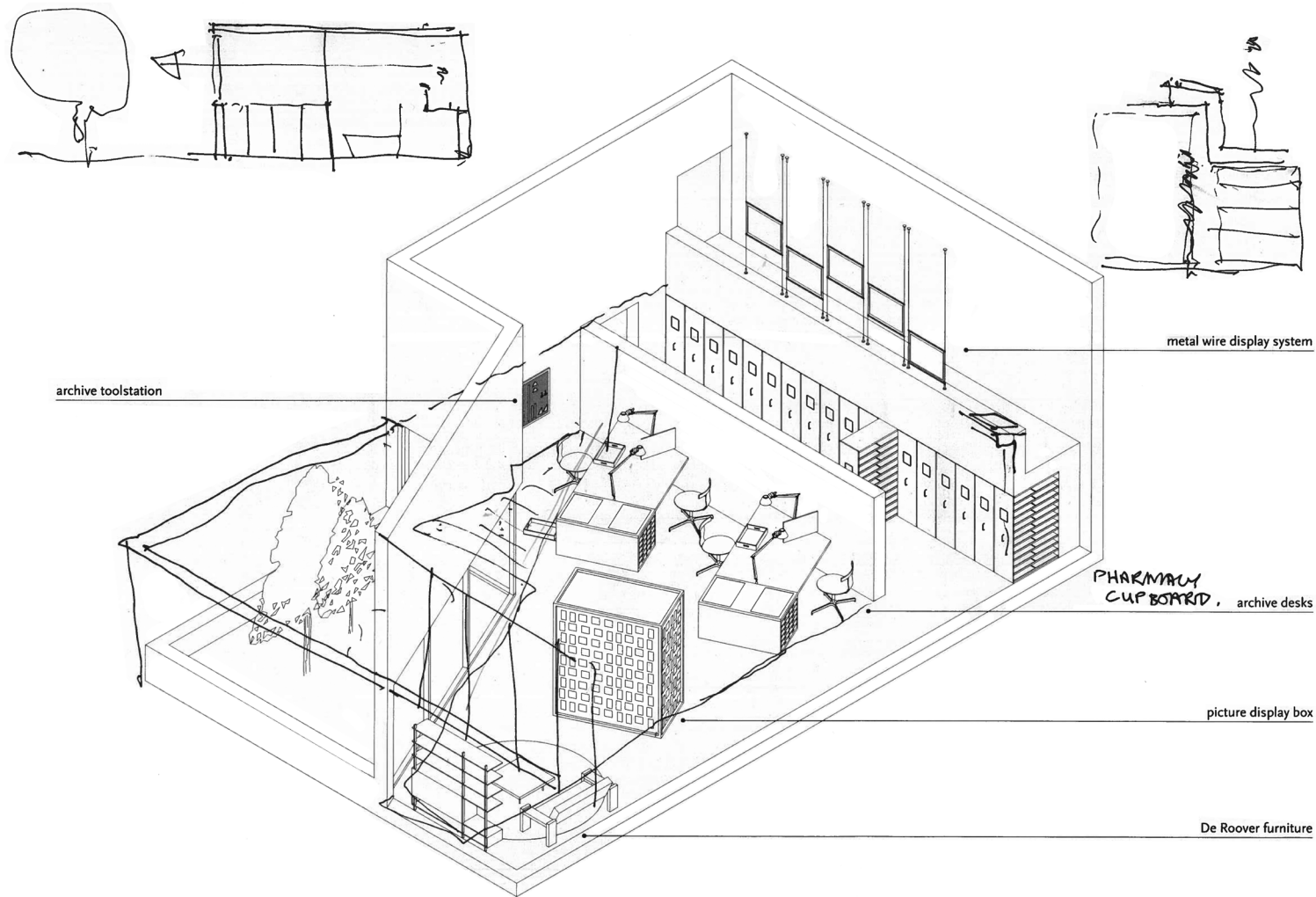
Revisiting these drawings, I recognized elements familiar from our site visits in Antwerp. De Roover's use of rotated furniture and walls to create dynamic layouts stood out, as did a tiled wall in one drawing. This wall, decorated with Delft blue tiles, projected into the room, inspiring me to display archival images similarly.

Building on these observations, I began sketching. I drew from the Kanoclub's floor plan and rotated furniture arrangements, reinterpreting them in my design. For example, I converted two tables in De Roover's plan into desks where visitors could retrieve and examine archival materials, allowing them to feel like archivists themselves. I also envisioned a tool station to display archival equipment and a sitting area with De Roover's furniture for

visitors to interact with.

Initially, my design proposed elevating the entrance to create a platform for visitors to observe archivists at work. However, I realized this approach limited direct visitor engagement with the materials. To address this, I revised the design, adding a staircase to provide visitors with direct access to the space. While this made the area more engaging for the public, it rendered it unsuitable for active archival work, transforming the space into an exhibition of archival activities.

The tutors were not entirely convinced by this revision. They recommended keeping the original separation and providing access to archival materials through organized "open days," during which the space would be open to the public with curated displays. This compromise balanced accessibility with preservation, aligning with my aim of fostering public engagement while respecting the workspace needs of archivists and researchers.



notes by tutors on my axonometrix drawing

Week 1.8

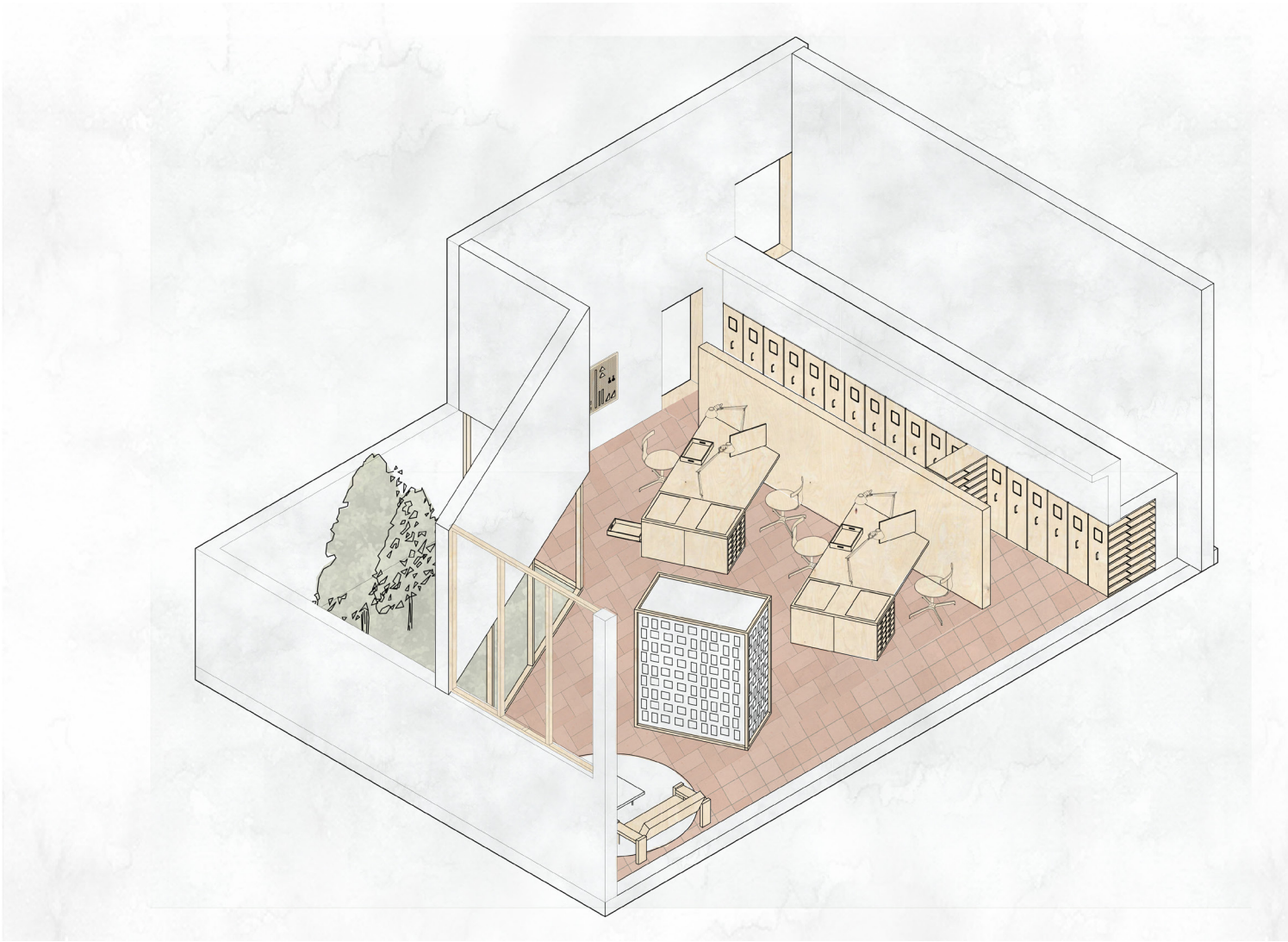
For the content of the Research Plan, a book on Bunshaft from the library proved very valuable. Offering detailed insights into the Beinecke Library's symbolism and the interconnection of its architectural elements.

The tutorial with Mark on our research plan went surprisingly well, while I also did not know what to expect. The structure was solid, with just a few details needing refinement. We were advised to simplify some of the interior descriptions, especially around references to sacredness and death, as the building's symbolism is rich enough without layering additional interpretations. For my personal statement, I was encouraged to explore my uncertainties more directly, particularly regarding balancing accessibility with archival preservation. Although I'm still determining my approach, I realize that setting a preliminary direction doesn't lock me in; my approach can evolve as my understanding deepens.

For the Pre-P1 on Thursday, I worked on integrating last week's feedback and starting a model. Focusing on the function of the space led to minor layout changes, like removing the staircase to create a distinct

archival area separate from visitors. This change created additional space for a new entrance and storage beneath the balcony. Revisiting earlier sketches, I designed a system of vertical drawers inspired by pharmaceutical cabinets to enhance storage efficiency.

During Thursday's I got a brief tutorial at the end of the day. The feedback was centered on materials and rethinking certain elements, such as the wire display system on the balcony. I was advised to make this display less prominent to streamline the space. Which I agreed with. I already had a feeling I had too many features in my space already, taking away from the focus of the space. I would have liked more time to develop the material palette before the session; however, I now plan on balancing materials De Roover used in the Kanoclub with elements that evoke a workshop feel, primarily using timber for warmth and functionality.



material application research

Week 1.9

This week, I focused on refining the material palette for my archival space design, experimenting with how to represent these materials within the model. I used an axonometric drawing of the space and applied textures, allowing me to quickly visualize how different material combinations would look and adjust them before building.

To capture the size and structure of the archival space, I chose to construct the model at a 1:25 scale. This larger scale allowed me to incorporate the size of the space, though it also made modelling the furniture intricate and time-consuming. I opted to build the entire model out of paper, representing specific materials like wood became more abstract at this scale; I used brown/beige paper to indicate wood finishes instead of attempting to replicate wood grain. Though applying paper coverings to the walls was tedious, the outcome achieved the clean, simplified look I aimed for.

I spent the latter part of the week experimenting with lighting to bring the model to life. I had initially placed two windows at one end of the space, but the front area near the balcony felt dim and disconnected

from natural light. After experimenting with foam cutouts as placeholders, I found that a ceiling slit parallel to the balcony provided a balanced source of light across the room. This design allows natural light to enter evenly.

Excursion to the Depot

In the middle of the week, I took a break from model-making to visit the Depot in Rotterdam. I never had visited the Depot on the inside. My first impression was an intense sensory experience: the extensive use of reflective glass and mirrors created a feeling of overstimulation. While visually impressive, these materials make the space feel slightly chaotic, especially in terms of light reflections and spatial continuity.

One of the most intriguing aspects of the Depot was the Lina Bo Bardi-inspired art display, which allowed viewers to see artwork from unexpected angles, including the backs of paintings. This approach re-frames how art is traditionally presented and gives a unique, almost behind-the-scenes perspective to the viewing experience.

To make model:

- check measurements current model
- picture box
 - ↳ lasercut frame
 - ↳ cardboard
- window frames
 - ↳ coloured cardboard → beige
- desks
 - ↳ printcut from coloured paper
 - ↳ lasercut front?
 - ↳ printcut from coloured paper
 - ↳ inside is foam → covered with paper
- pharmacy cupboards
 - ↳ lasercut frame 2x



printcut pictures from paper



printcut from coloured paper



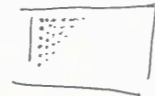
- pharmacy cupboards fronts



printcut front + description board

↳ lasercut handle?

- Toolboard



printcut coloured paper



→ sandpaper perspec
↳ put light inside?

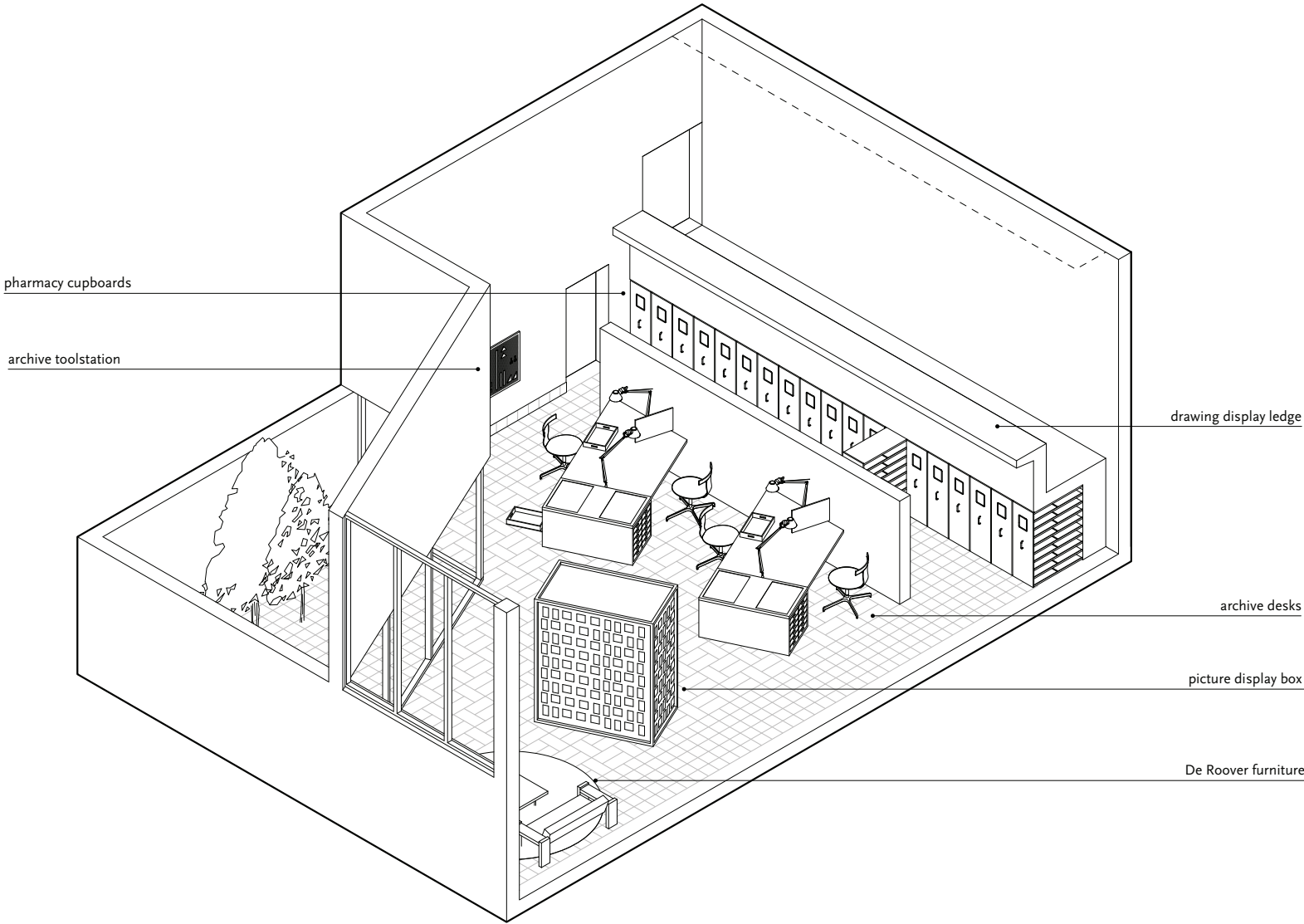
fig. modelmaking approach

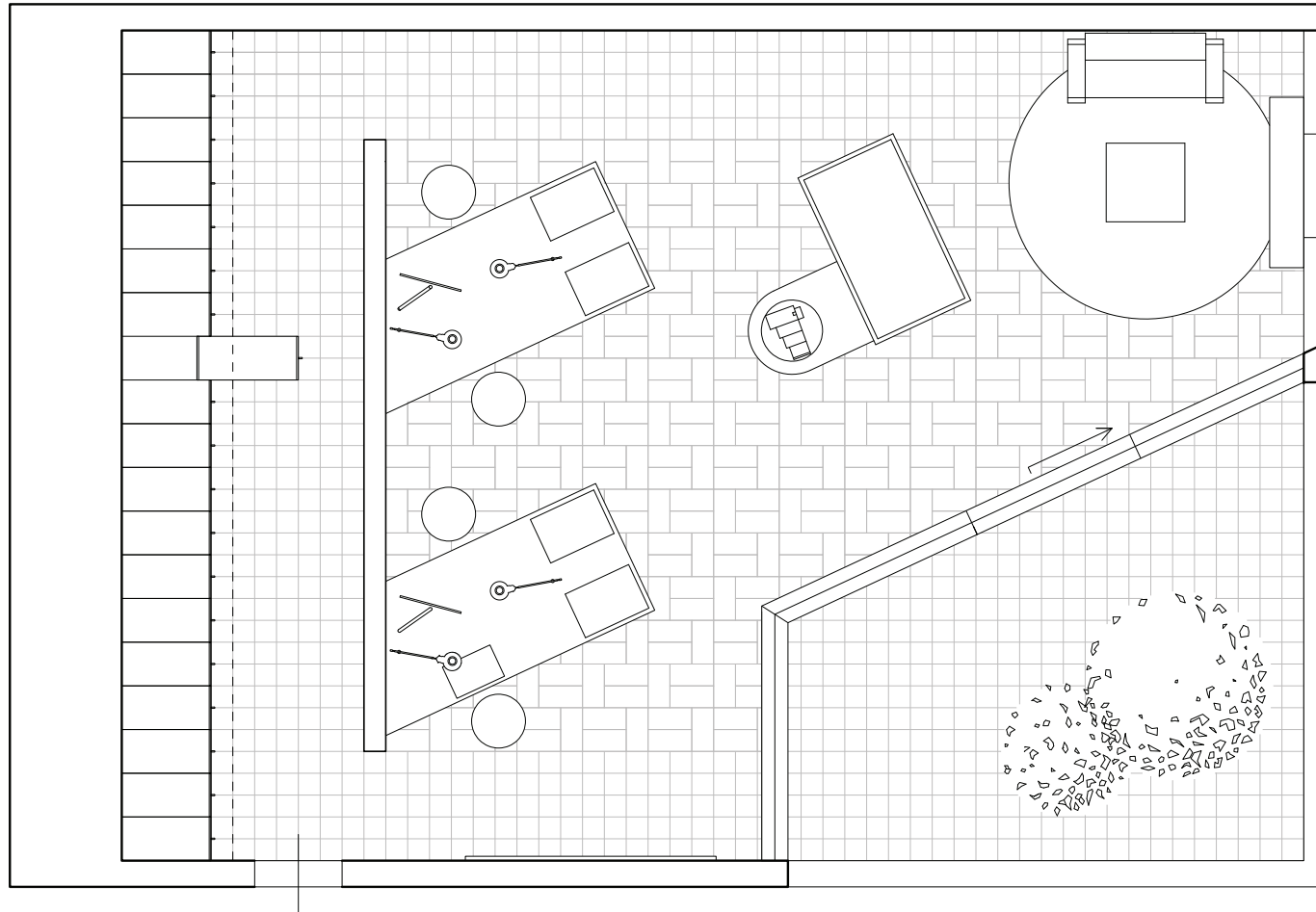
Exploring the archival storage room in the Depot highlighted essential aspects of archival preservation in real-life settings. This room was outfitted with advanced systems, such as a hand scanner for secure access, sticky mats to remove dirt from shoes, and automated movable storage on rails. An interesting detail was the use of aerated concrete blocks on one wall, which absorb excess moisture, helping to control humidity.

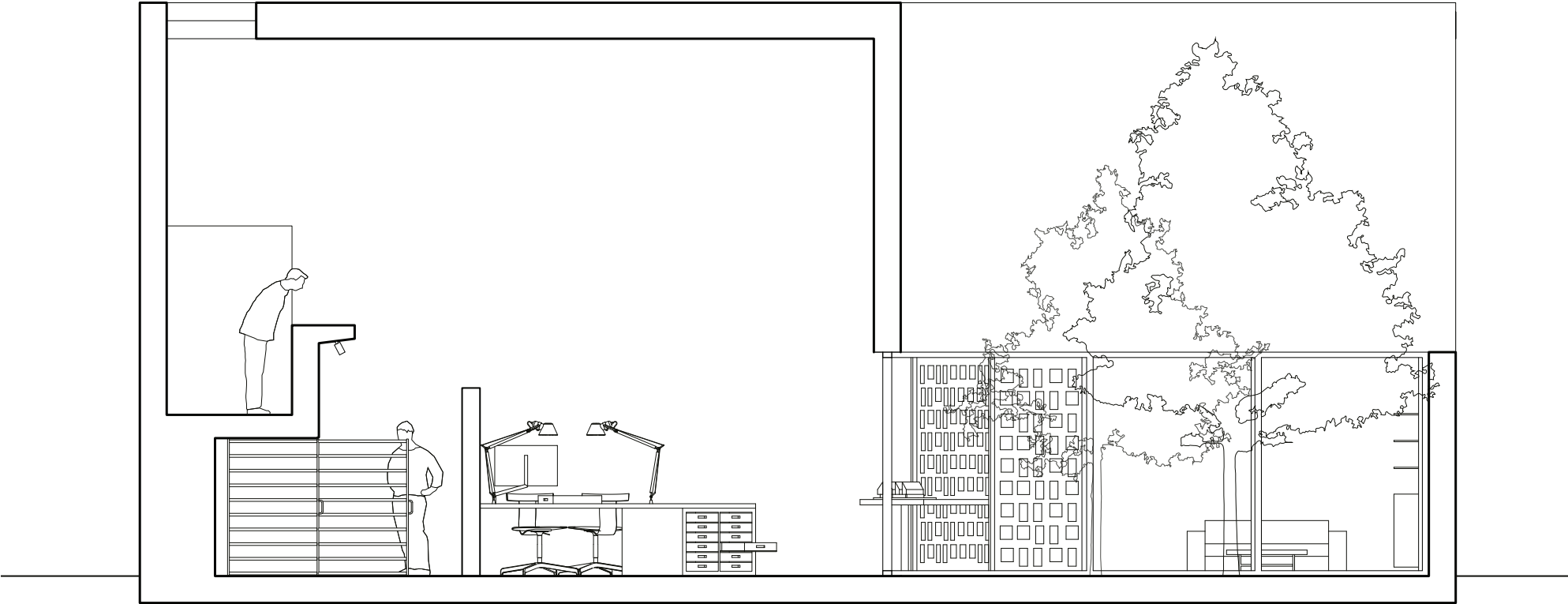
Observing these elements firsthand brought a new appreciation for the functional demands of archival storage. The Depot's support systems, like the truck dock, thermal energy storage system, and climate control, were impressive in their scope and intricacy. Given the building's size, it felt as though the infrastructure dedicated to preservation occupied a significant portion of the space, reflecting the building's intense focus on protecting its valuable contents.

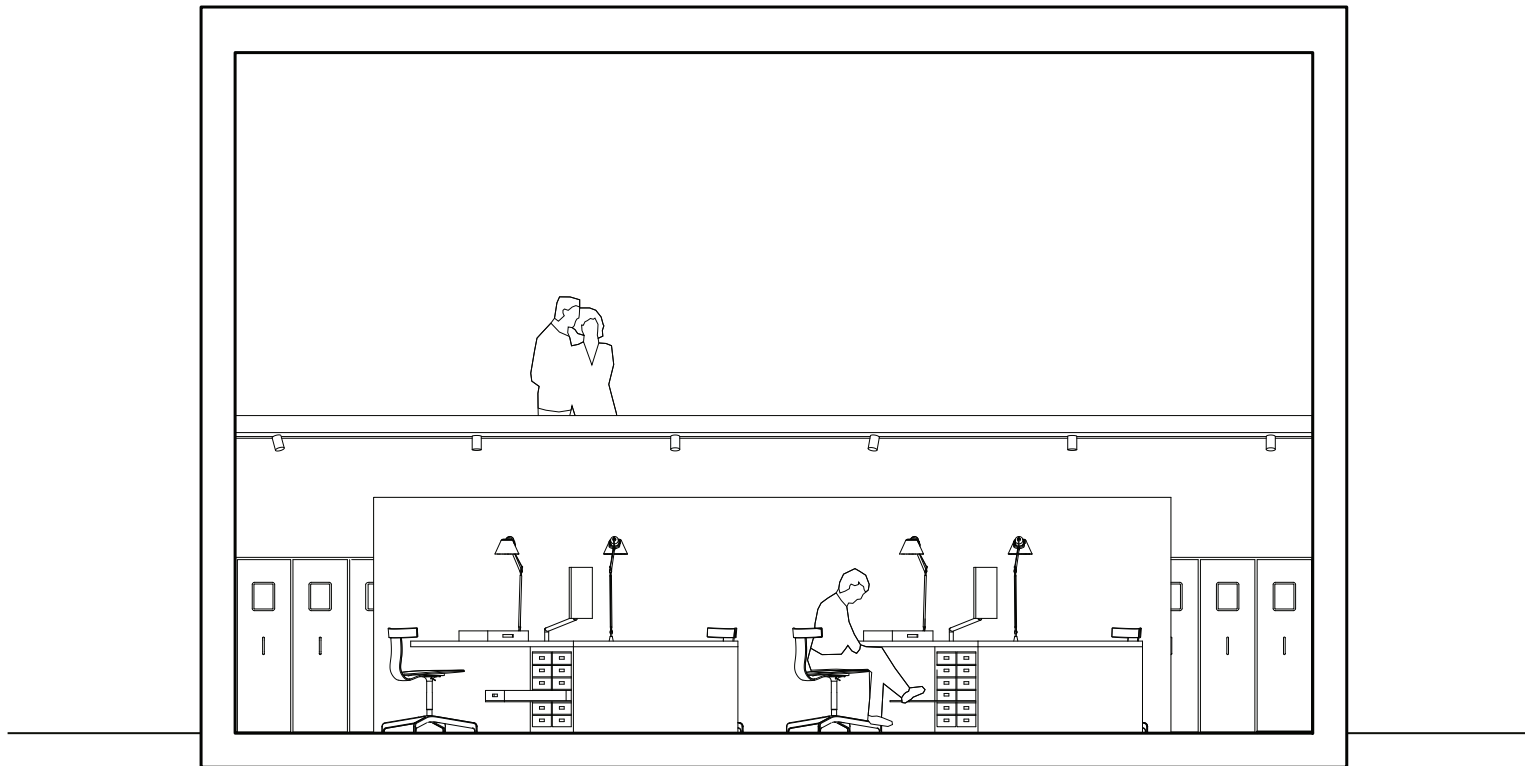
Being able to watch the archivists at work was one of the most engaging parts of the visit. The transparent setup allows visitors to observe restoration and cataloging processes, which encourages public awareness of the archival profession

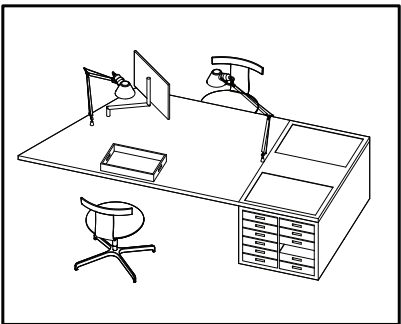
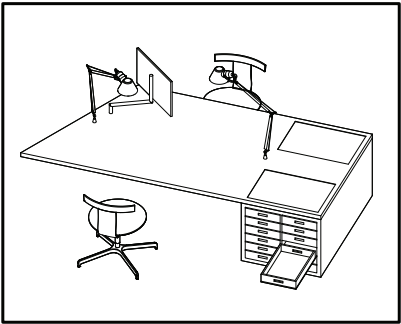
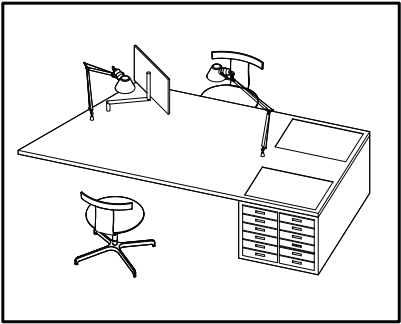
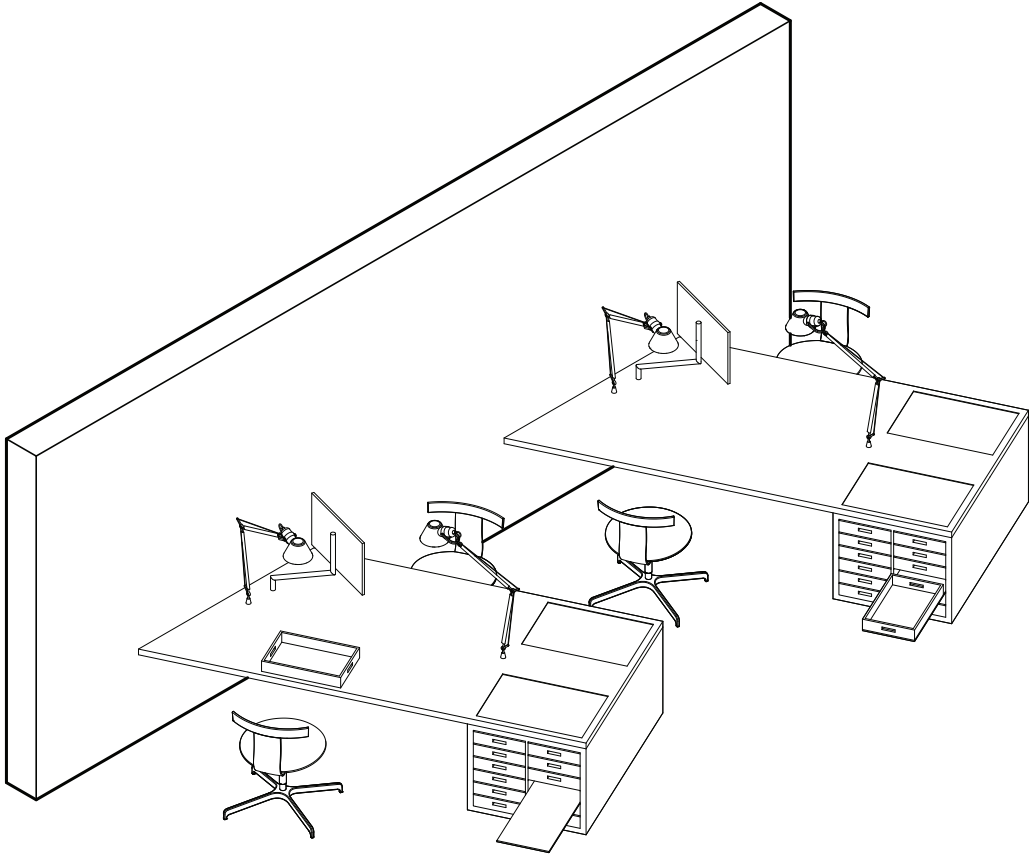
and the care that goes into maintaining collections. However, I did wonder about the experience of the archivists; with visitors observing their daily work through glass walls, it may feel somewhat invasive, almost as if they are part of an exhibit themselves. Still, displaying current projects and the ongoing restoration work just beyond the glass is an effective way to educate the public on the complexities of archival preservation.

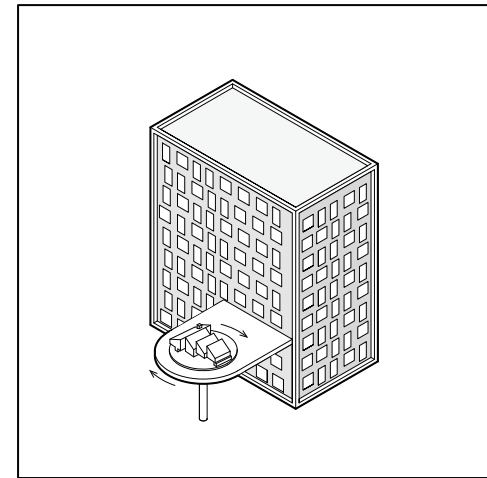
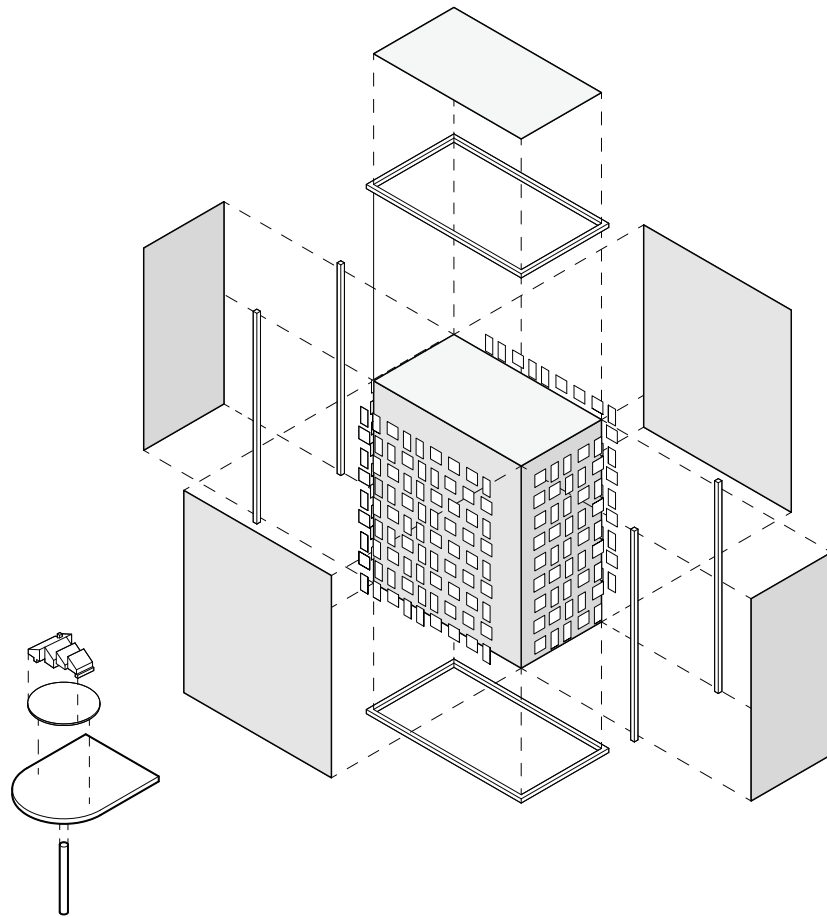


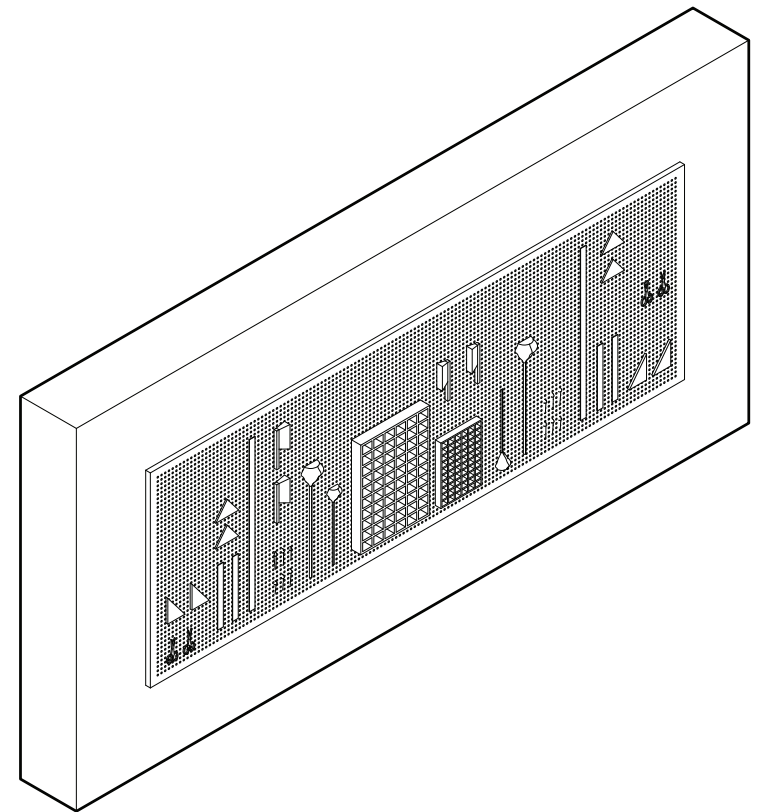


















Developing an Archive



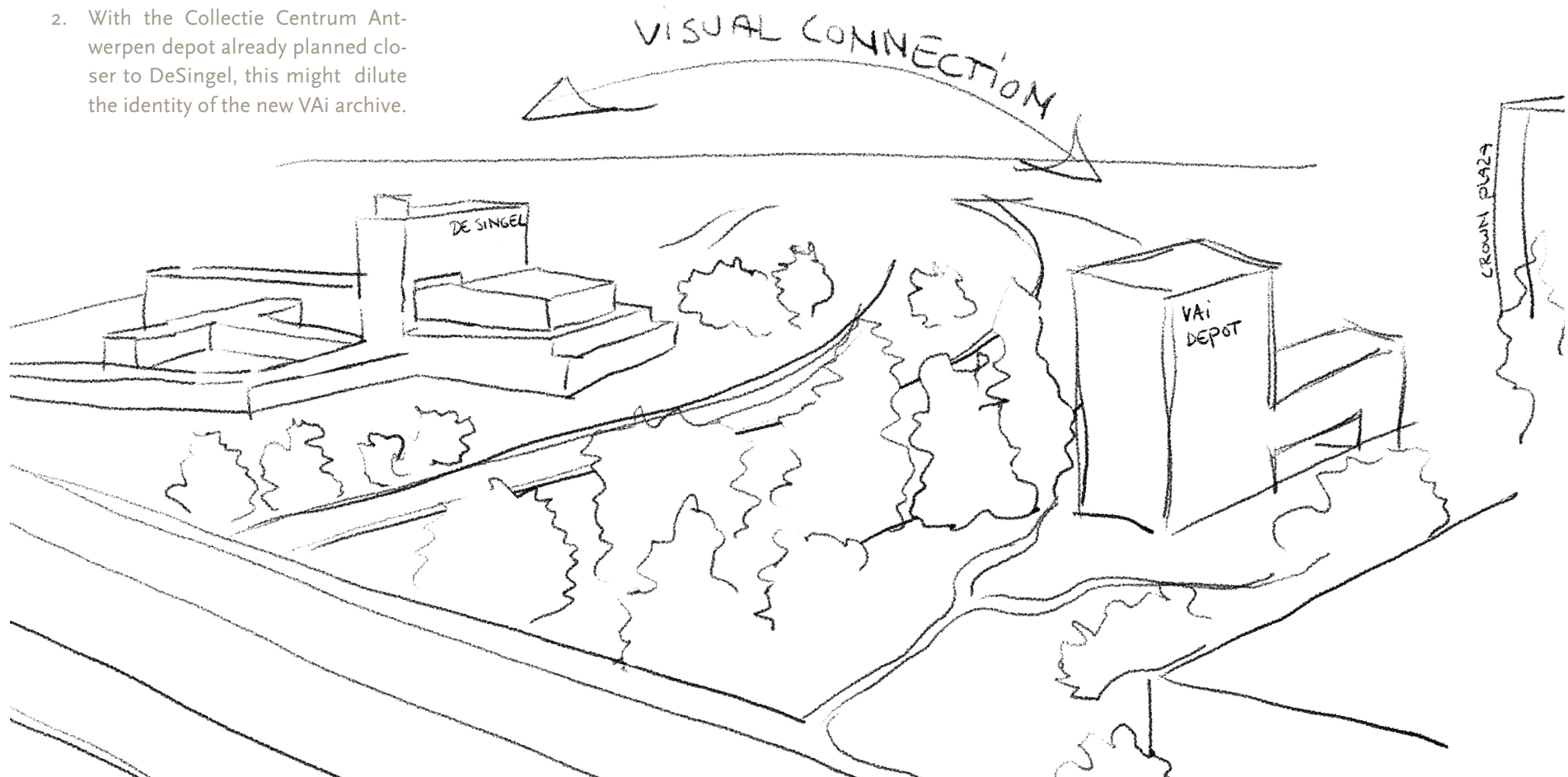
my adaptation on the Syntehsis map

Urban Research

I began by looking into the possibility of locating a VAI extension inside the “Cultuurpark” city project, which DeSingel is a part of. This project aims to densify the area to strengthen its cultural identity.

This approach presents challenges:

1. Maintaining a strong connection between the new depot and the VAI within DeSingel would be difficult.
2. With the Collectie Centrum Antwerpen depot already planned closer to DeSingel, this might dilute the identity of the new VAI archive.



Exploration of DeSingel's potential

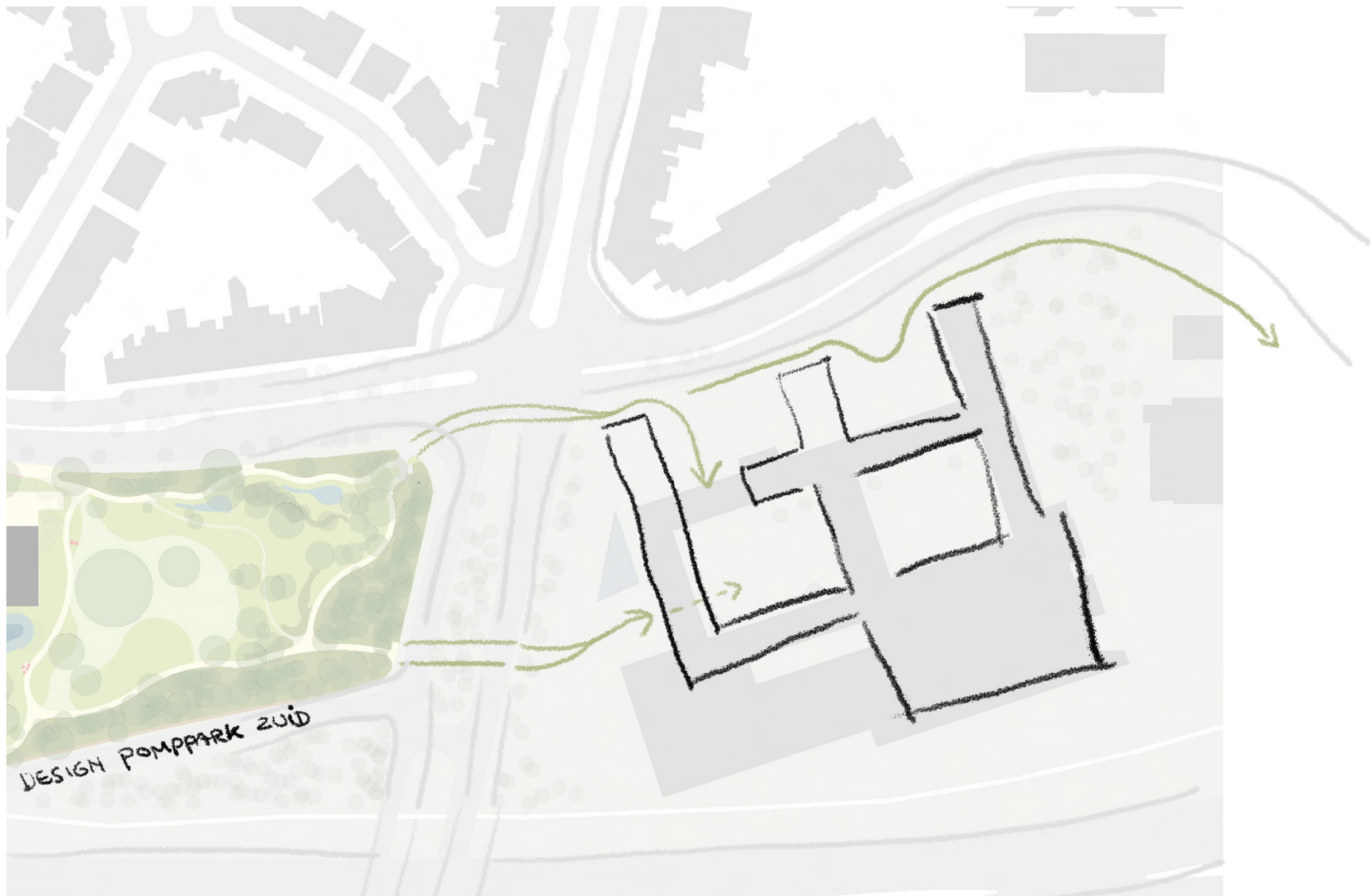
Feeling intimidated by the complexity of DeSingel, I was motivated to embrace the challenge and explore its potential to accommodate the needs of the VAI. My attention was drawn to the courtyards, which, while grand, seemed disconnected from the building, possibly due to the circulation being primarily on the first floor.

First attempt : I explored on an urban scale how to connect the courtyards of DeSingel with the city.

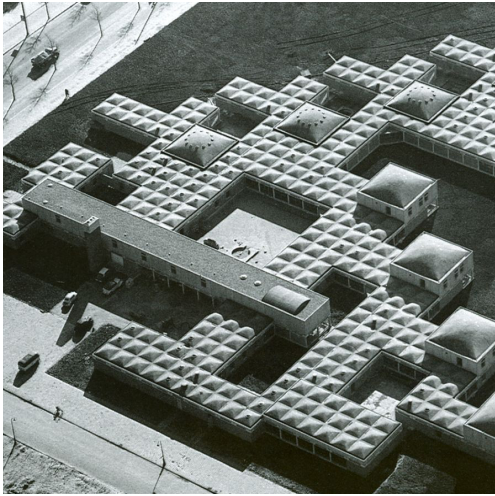


NEW CONCEPT

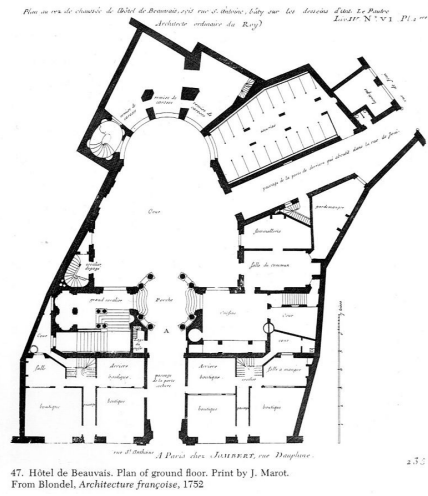
Research Question: How can the courtyards of DeSingel be transformed into spaces that foster interaction between the building and its users?



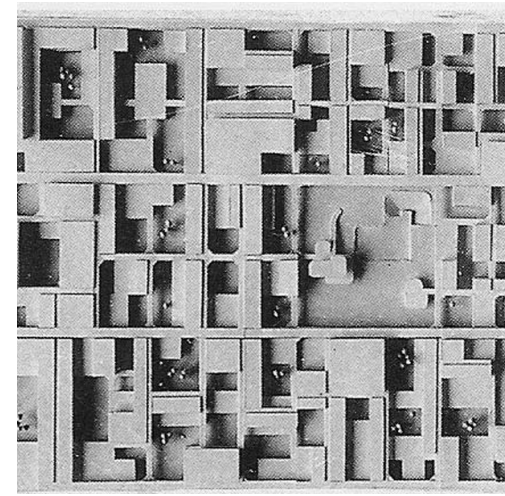
connecting to Pomppark Zuid



Municipal Orphanage, Amsterdam



Hotel Beauvais, Paris



Free University, Berlin



References for intimate courtyards

1. Municipal Orphanage

This project demonstrated how courtyards can be tailored to specific users - children, in this case. It showed me how the courtyards are tailored to children, with dimensions that encourage exploration and play while maintaining intimacy and security. The courtyards seem to seamlessly blend with the interior, allowing children to experience a continuity between inside and outside.

2. Hotel Beauvais

Here, the courtyard serves as a grand focal point. It serves as a transitional space between the public street and the private interiors of the hotel. This layering enhances privacy for residents while maintaining accessibility.

3. Free University of Berlin

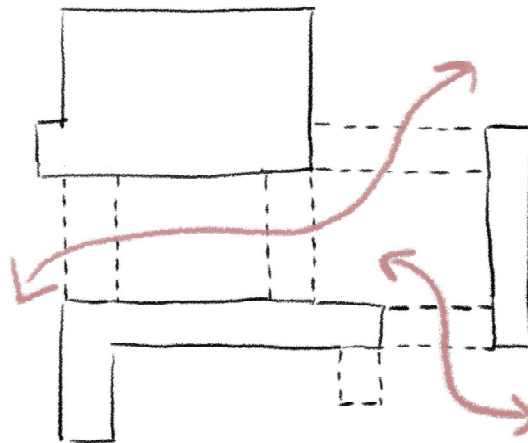
This building exemplifies the concept of a "mat-building," with its grid-like, low-rise horizontal layout. The courtyards bring natural light deep into the interiors, counteracting the dense grid of the mat structure. These spaces encourage informal interaction among students and faculty, enhancing the usability of interior spaces.

Research Question: What defines a Matt-building, and how can this principle inform the design of intimate, human-centered courtyards at DeSingel?

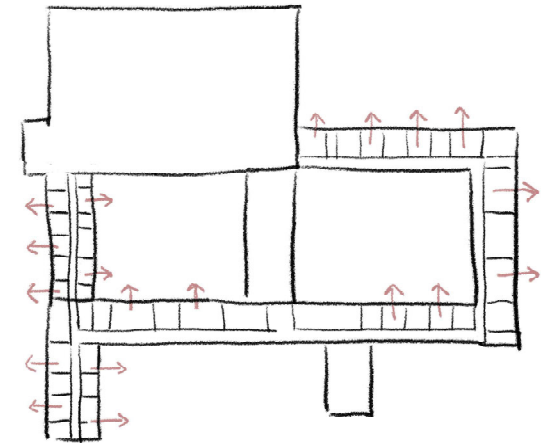
Analysing DeSingel's functionality

Léon Stynen's initial design concentrated all circulation on the first floor. This level serves as the building's core, with ground-floor spaces directly connected to it.

Subsequently the courtyards feel underutilized, probably because of this lack of engagement with the ground floor. The courtyards are architecturally significant, but expansive in scale. Introducing smaller, more intimate courtyards to the building could add a deeper connection between the green spaces and its users.



GF



1F

Reflecting on these design options:

The east courtyard is less present and utilizing it could prevent the west courtyard from losing its focal point.



option 1

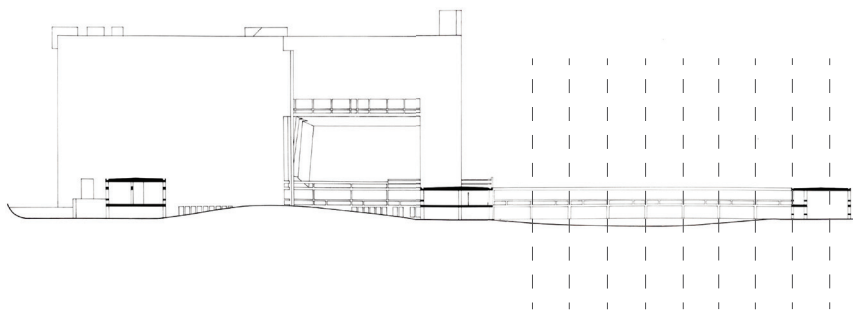
It seems the addition of the VAI is smaller than what i draw here.

Is it a good idea to take away both courtyards? Maybe just focus on one.

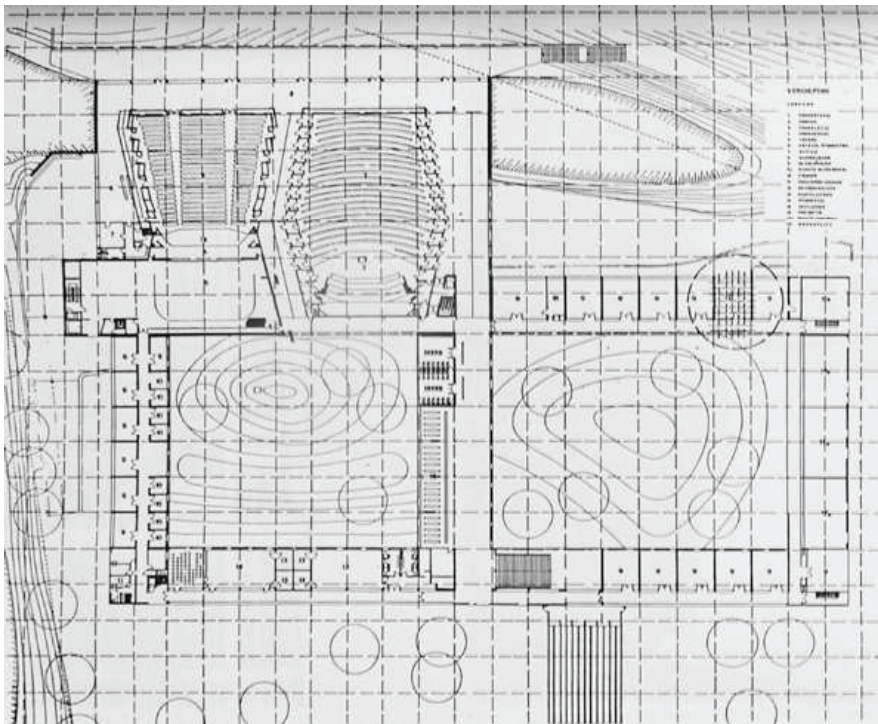
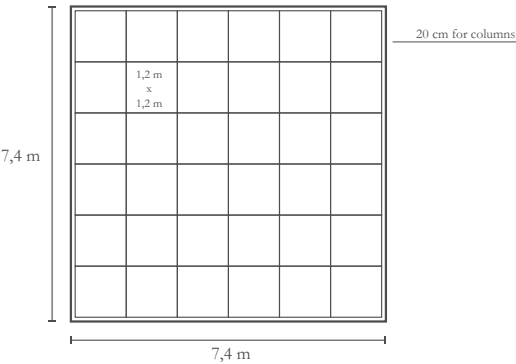


option 2

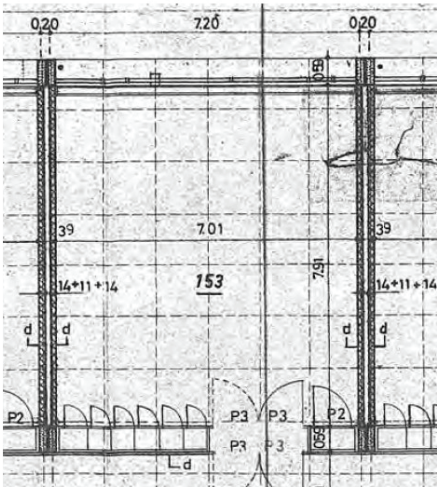
Try and connect with the axes of the existing building. Can those new axes define the shape of the addition? Just like the Free University of Berlin



Stynen's grid system

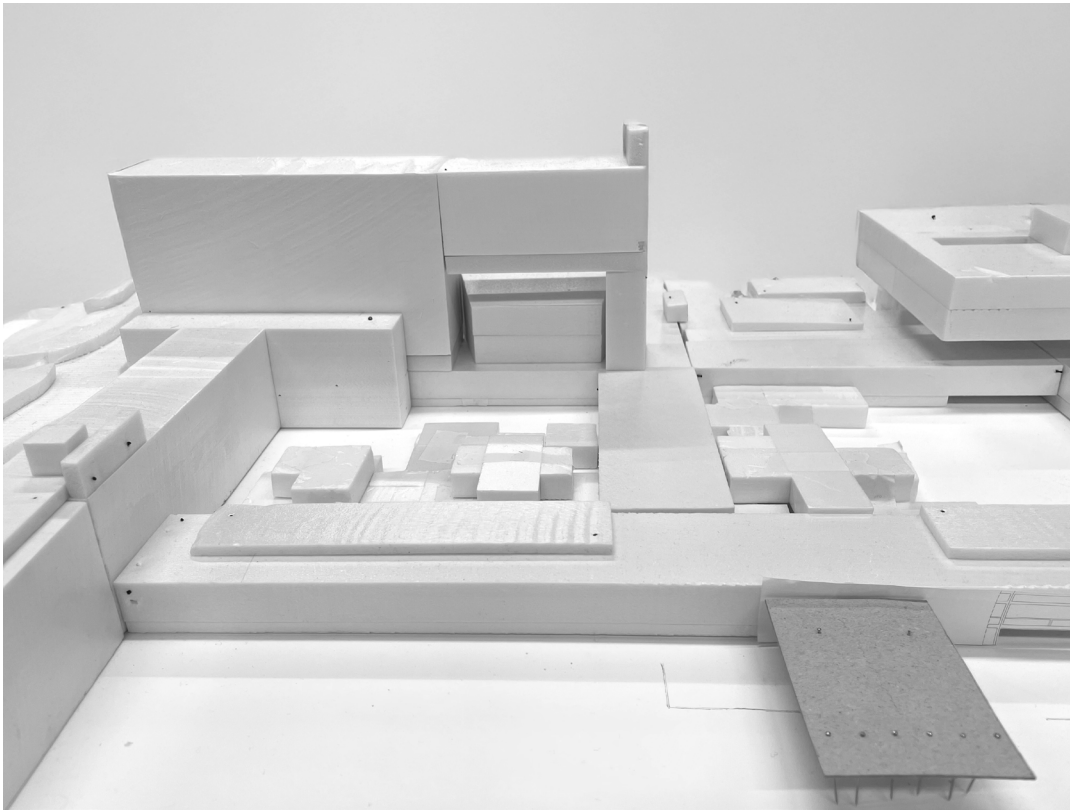


Classrooms modules



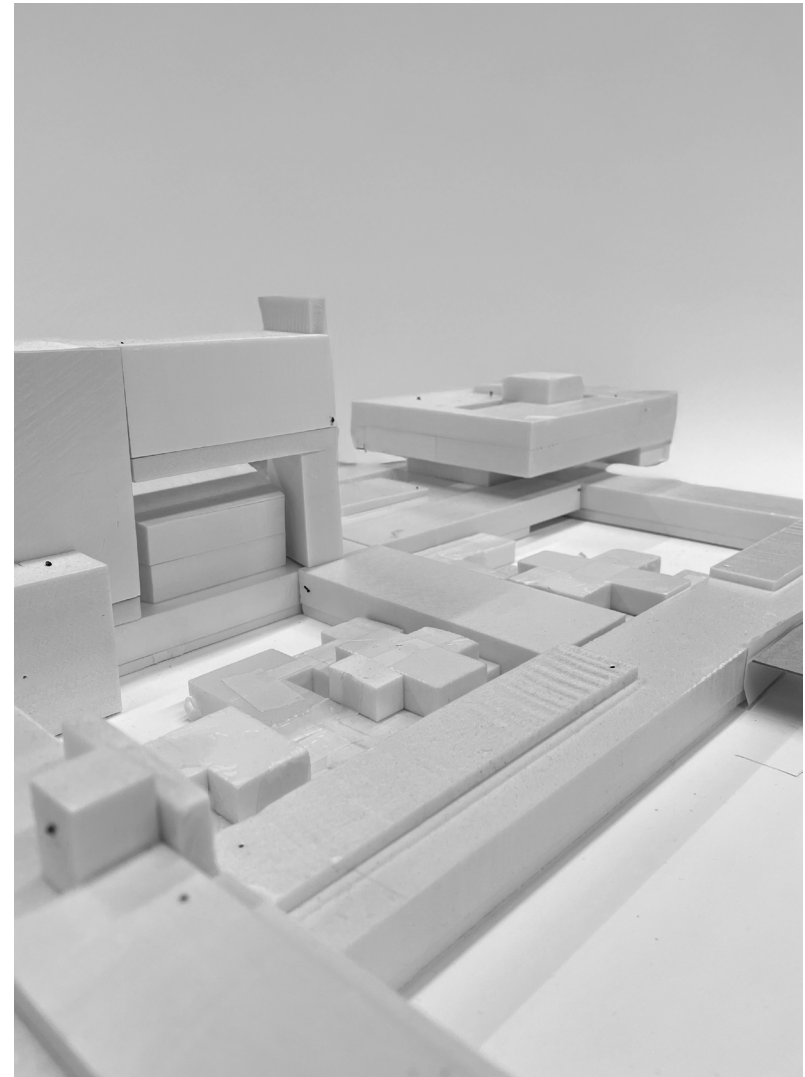
Modular Grid System

Stynen used a modular grid system in phases one and two of DeSingel's construction. The design is based on a 7.40m x 7.40m grid, further subdivided into smaller 1.20m x 1.20m squares. This modularity governs the proportions of the classrooms and other spaces, where larger rooms are multiples of the module. Reflecting on my architectural references, particularly the Municipal Orphanage and the Free University of Berlin, I see the potential to base my design within this existing grid, integrating new and existing elements.



Pictures of model

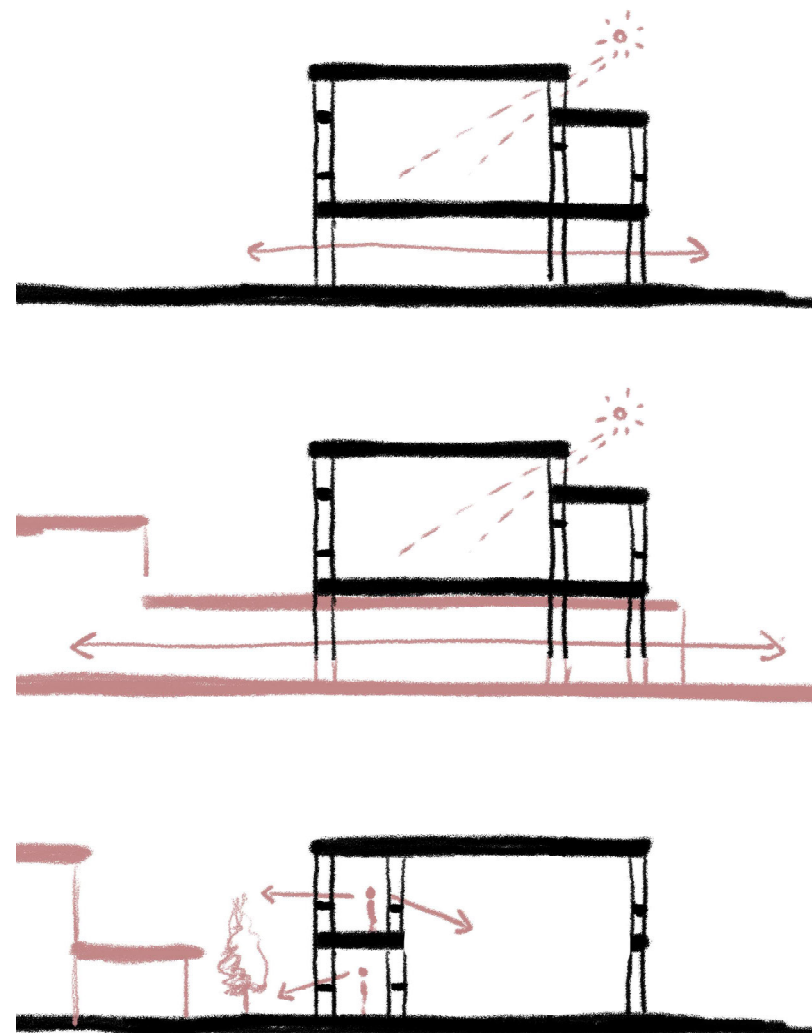
I created a working model featuring several cubes matching the grid's dimensions. This setup allowed me to experiment with creating an addition in the courtyards.



Scaled Model

To better understand DeSingel, I constructed a scaled model, allowing me to explore spatial interventions. Using blocks based on Stynen's grid system, I experimented with configurations to develop forms aligned with my sketches. While preliminary, these explorations allowed me to assess whether my ideas could integrate with DeSingel's structure. I recognize, however, the need to delve deeper into functional requirements before finalizing shapes. My goal is to develop a circulation system inspired by the Free University of Berlin, where axes connect spaces seamlessly.

What happens to the inbetween space of the existing and the new. As you can see in the model, I am not sure how they should interact. This creates awkward green spaces between the existing building and the new. And i want to create the opposite, where the green spaces are adding an intimate space to the building.



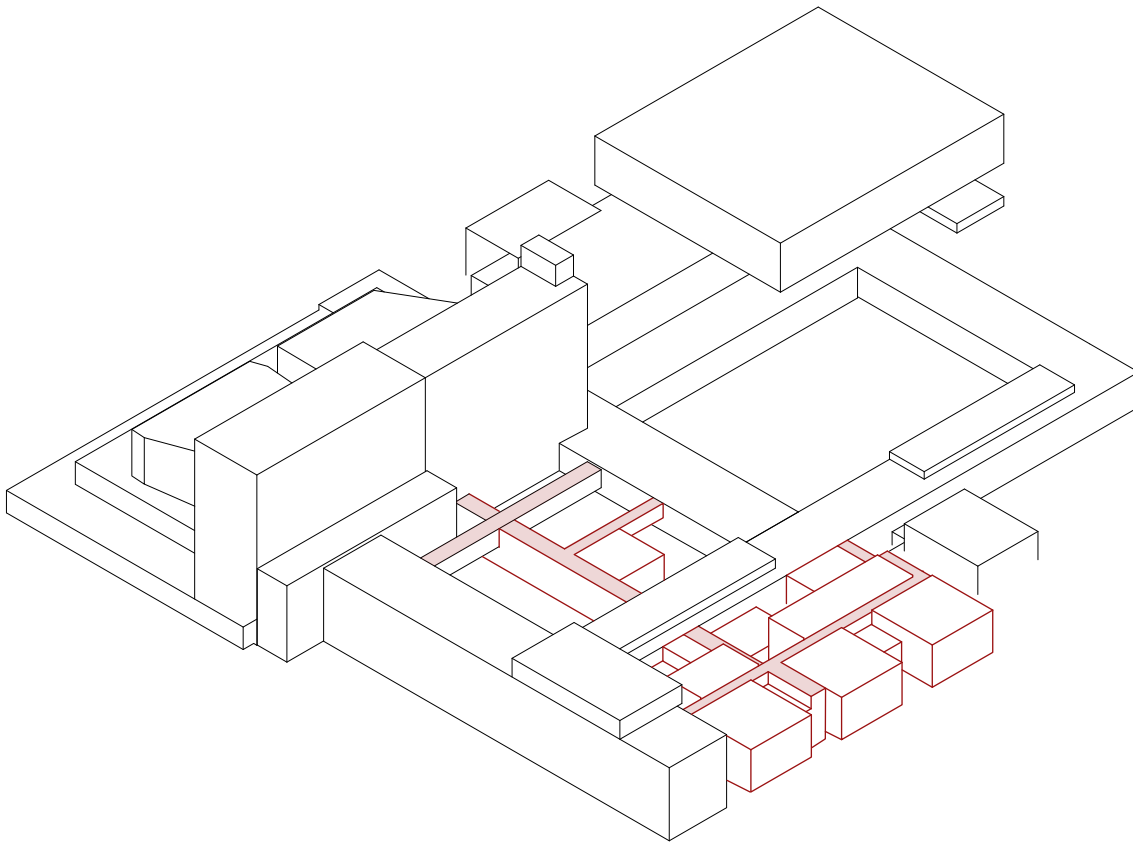


Guided tour at the Municipal Orphanage

A recent visit to the Municipal Orphanage offered valuable insights into the functionality of the building. Though I couldn't take photographs, I borrowed some images from the internet.

Some details that caught my attention:

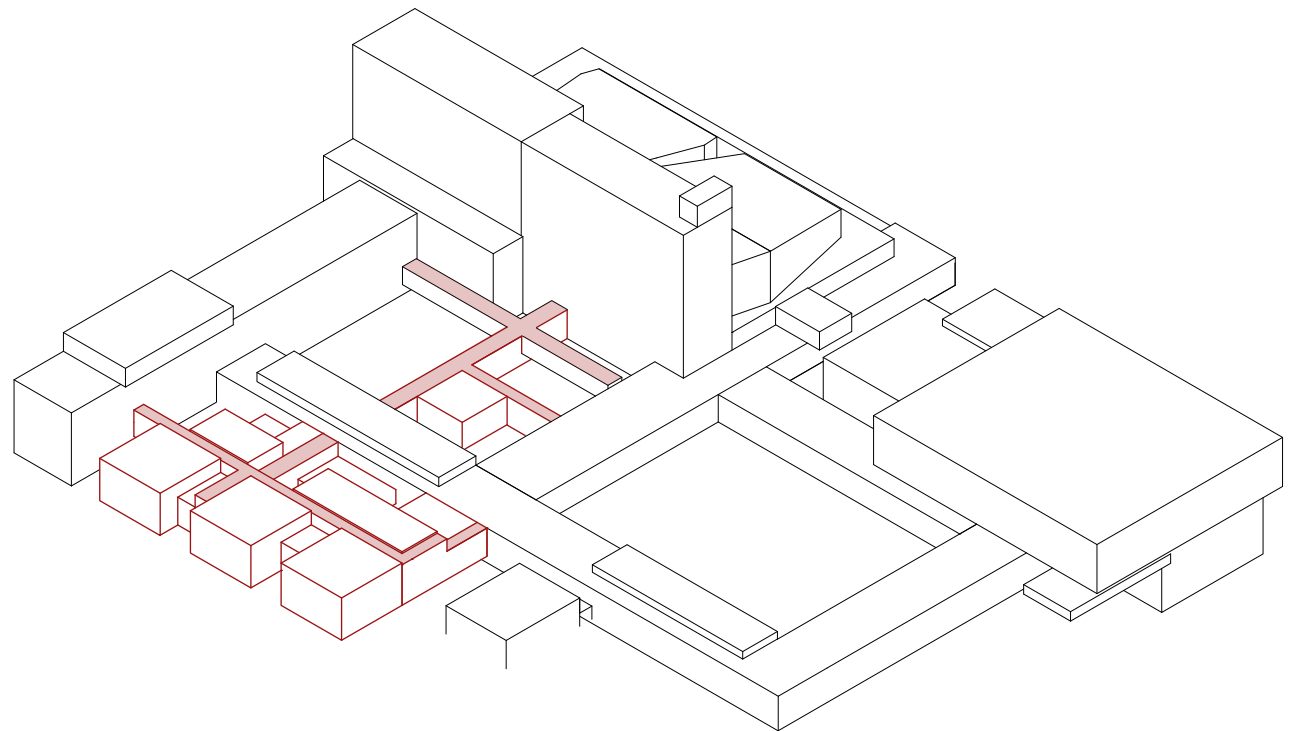
- The facade design seamlessly continues indoors and outdoors, with columns and horizontal slits creating a unified module. This consistent language makes the transition between inside to outside almost not noticable.
- Hallway corners are cut at 45-degree angles, accommodating natural movement patterns, such as children running through the corridors. This detail could inspire solutions for my design, facilitating easier maneuvering of archive carts.
- Circular elements contrast with the rigid modules, appearing in courtyard centers and as curved doorsteps following the swing of the door.
- Van Eyck's integrated childrens play features in the architecture of the building. They add aesthetic and functional value, but at the same time limit the building's adaptability. Something to keep in mind when designing a building to last.



Continuity of Axes

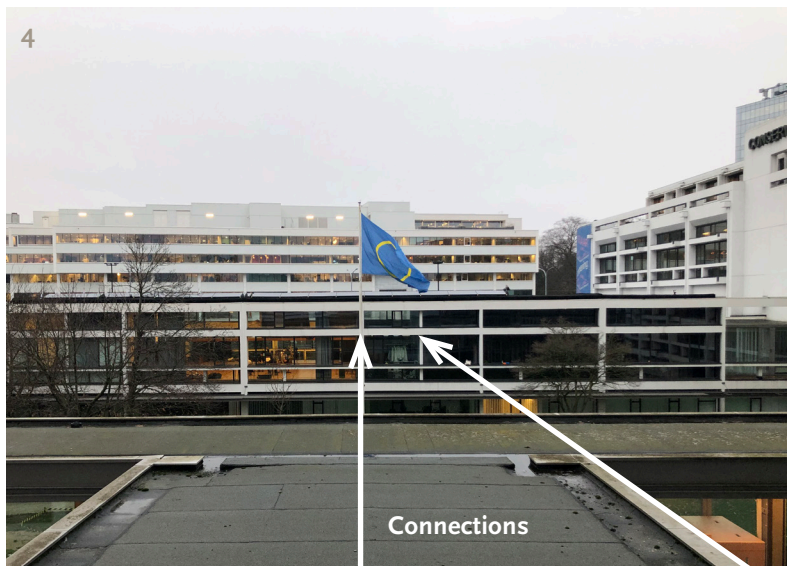
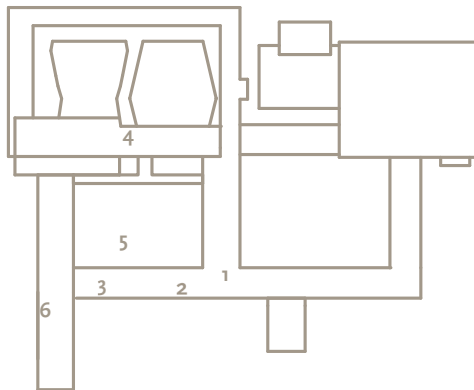
With this interim design the central part of the concept is the continuity of axes between the new design and the existing building.

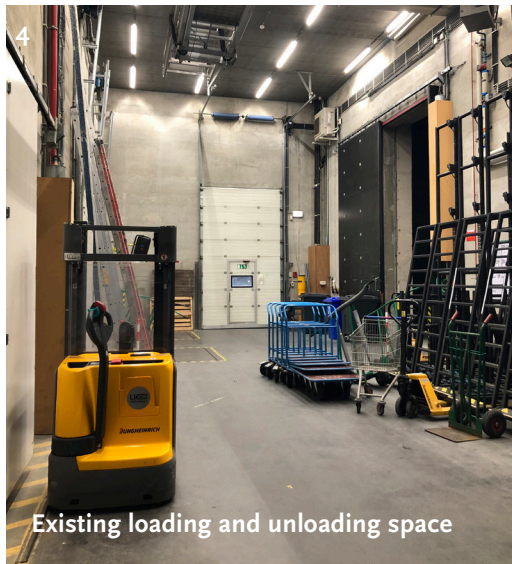
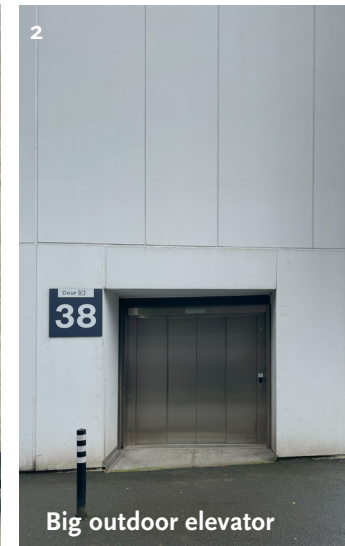
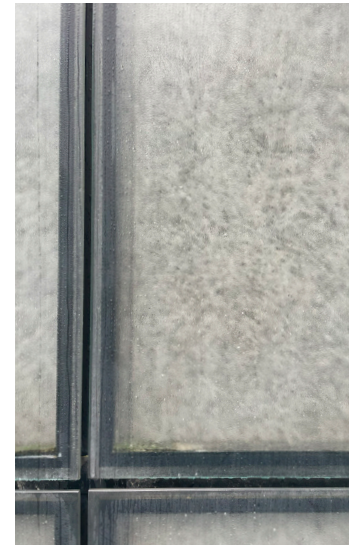
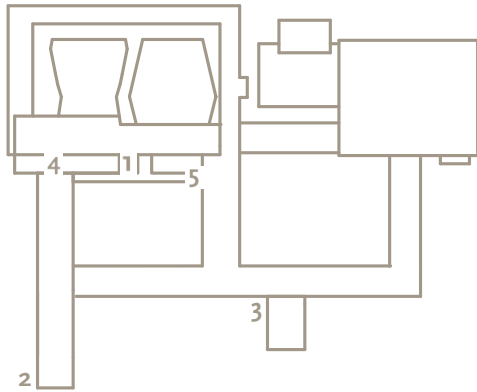
The east courtyard becomes a critical node, housing the view depot, while also maintaining its connection to the Beel glass bridge and the larger grid system of Stynen's design. This alignment ensures that the intervention is not only an addition but also a makes it easier to align the extension with the existing building, architecturally and functionally.



Excursion to DeSingel

I revisited DeSingel to further explore the site and evaluate how my proposed interventions would impact the existing structure. I focused specifically on the influence of the axes I aim to establish and what kind of spaces they would influence.

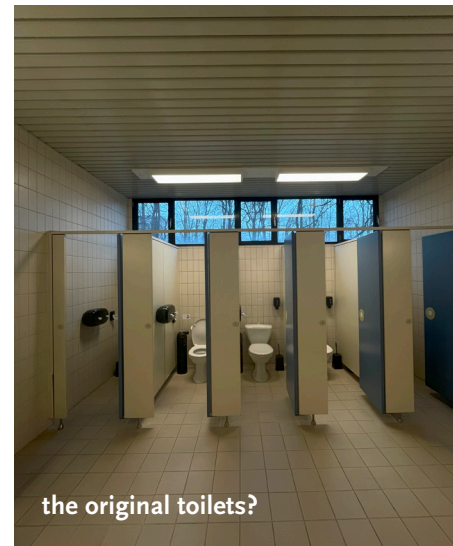






Toilet situation

I documented the toilets in the Stynen part of DeSingel because their design often feels quite poor. Many are outdated, poorly connected to the building's facade structure, or suffer from an awkward placement. For instance, most toilets are positioned adjacent to windows, which are then frosted to maintain privacy - which I feel is a pity.





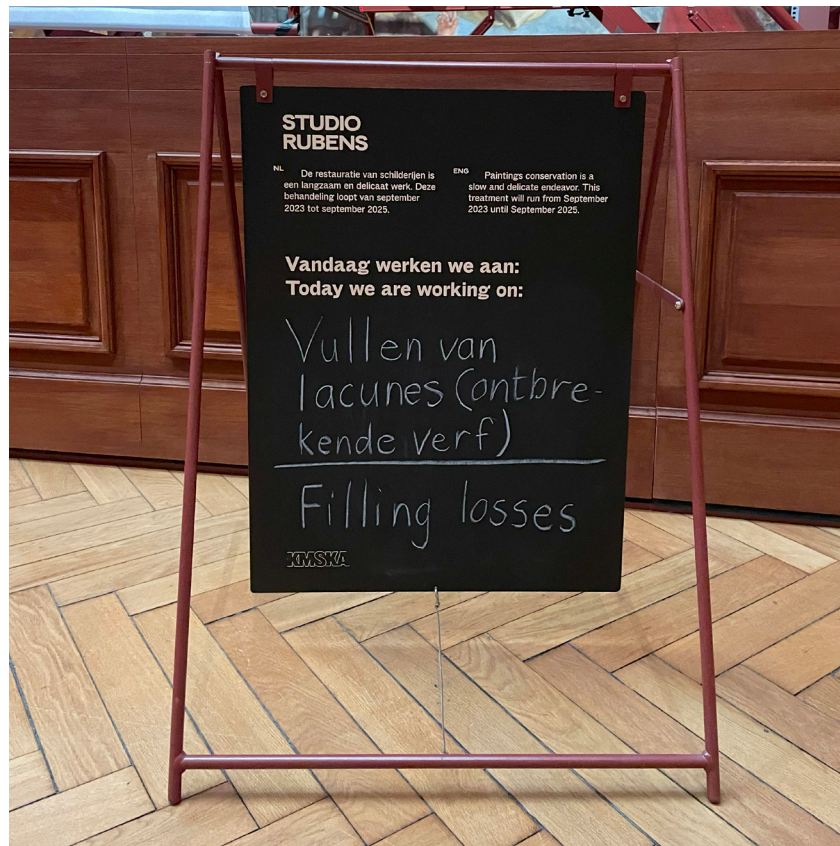
Antwerp visit

I happened to stumble onto two museums in Antwerp that displayed archival material in distinct ways.

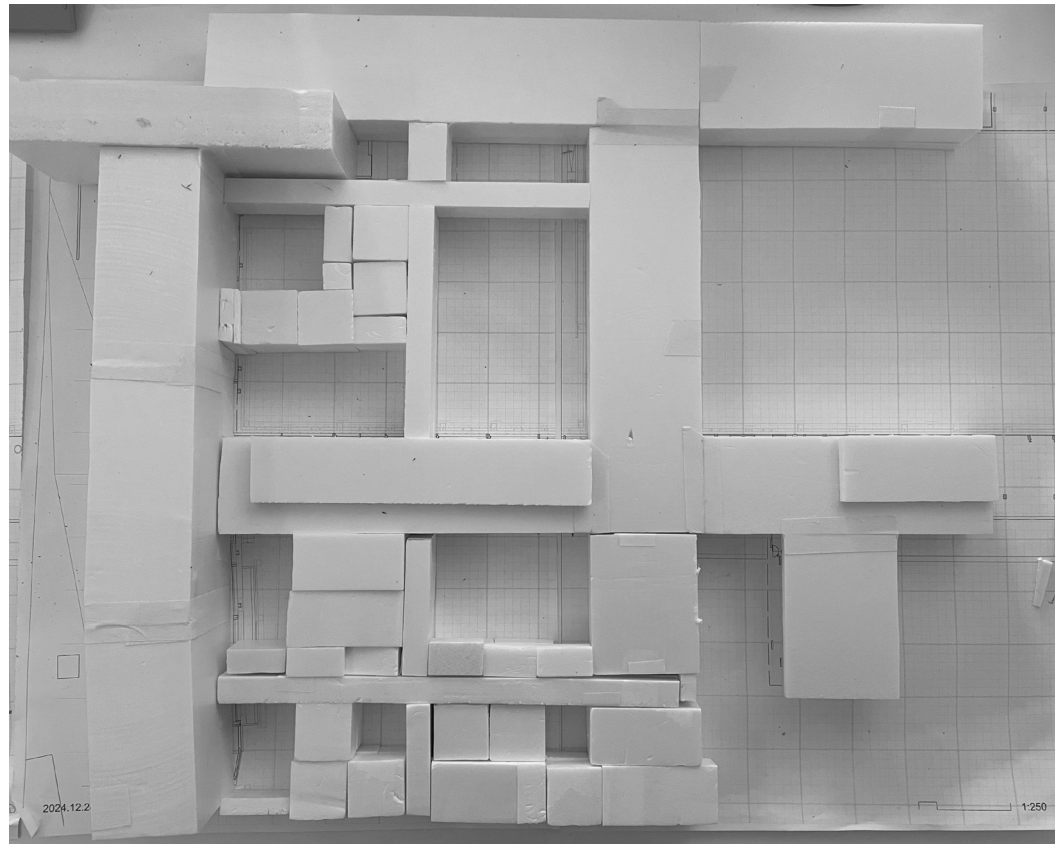
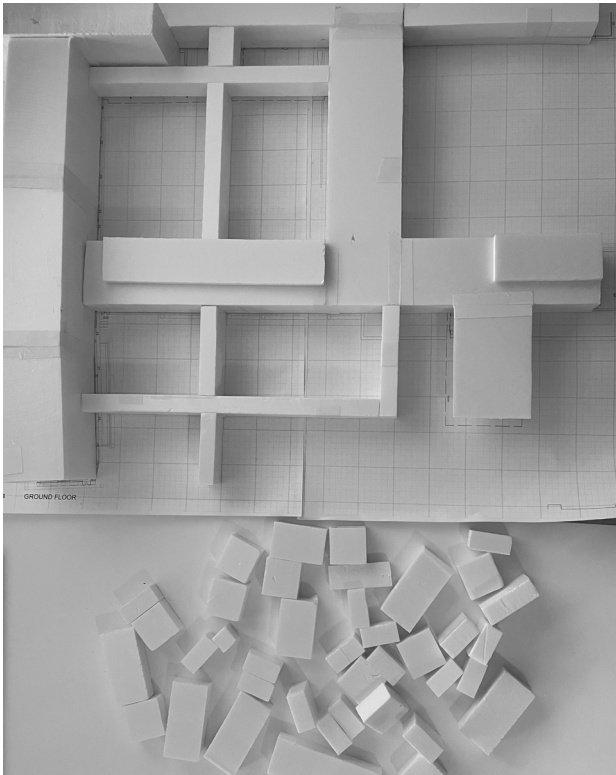
View Depot at Museum aan de Stroom



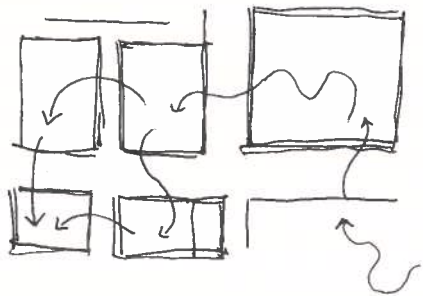
Open restoration studio at KMSKA



I updated my working model with a frame in which I plan to fit my addition. Underneath the model, I incorporated the grid I intend to use and the cubes I have used before, matching the grid's dimensions. This setup allowed me to experiment with creating interesting courtyards inside the volume within the frame.



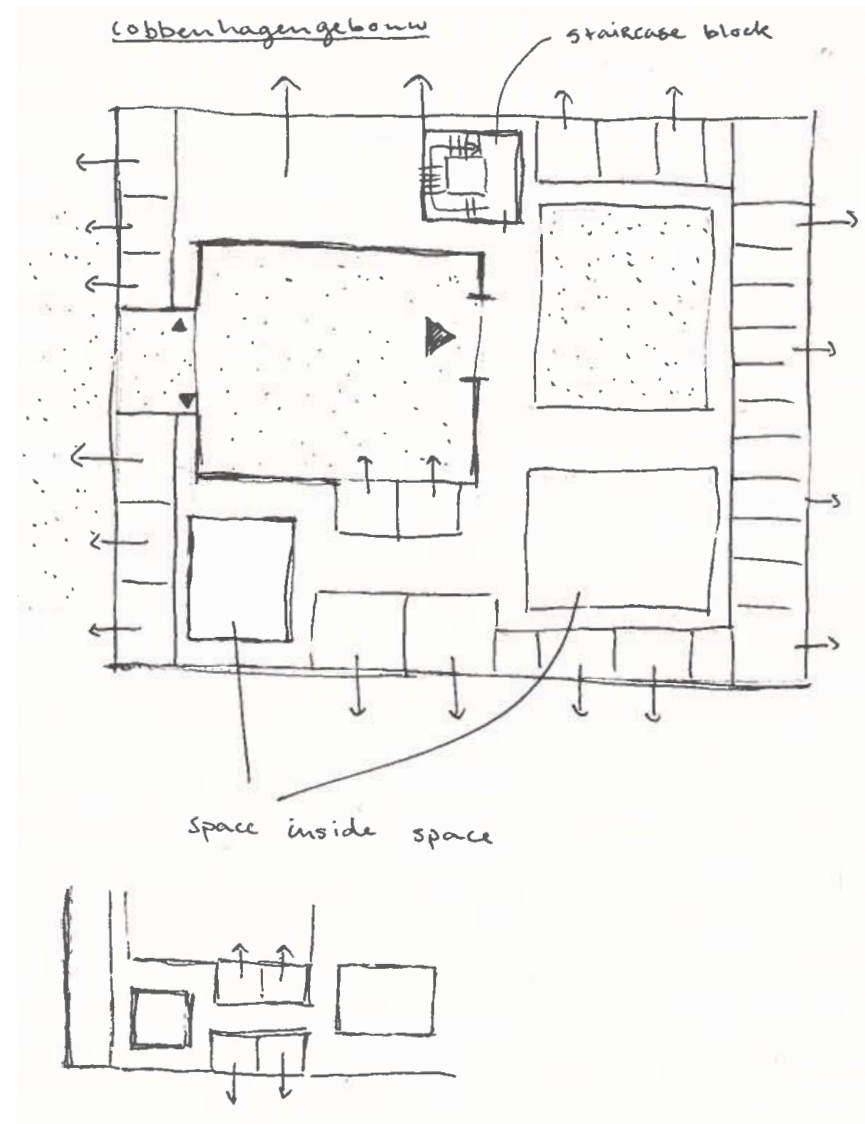
Big too smallen courtyards

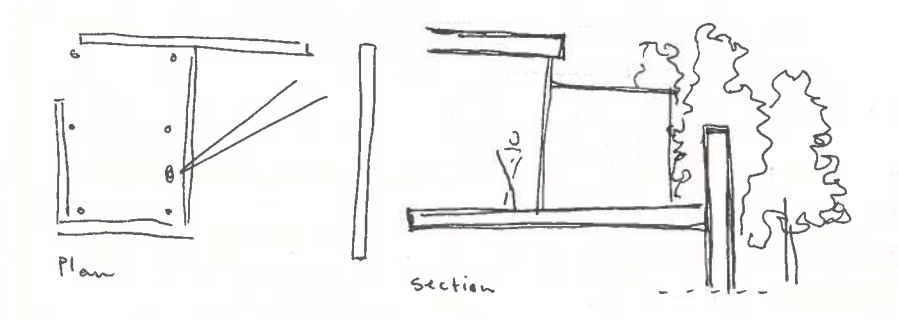
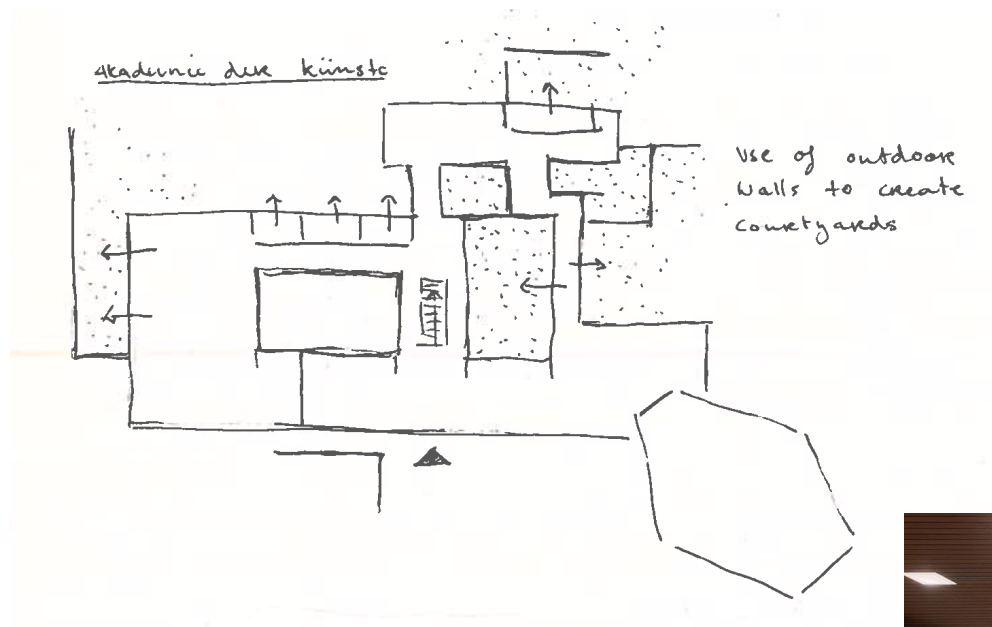


Cobbenhagengebouw, Tilburg

I analysed the plan of the Cobbenhagengebouw and how the interior spaces relate to the outdoor spaces. I noticed the outer layer of the plan consists of smaller spaces like classrooms. While the inner layer of the plan consist of a network of hallways which are defined by bigger spaces like courtyards or the auditorium.

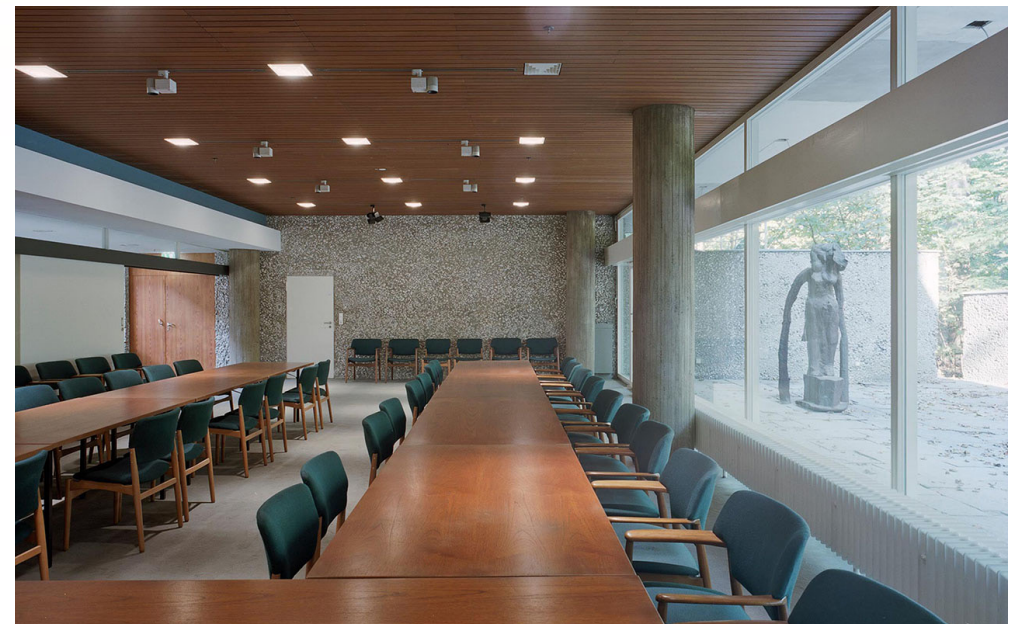
Analysing reference plans with courtyards





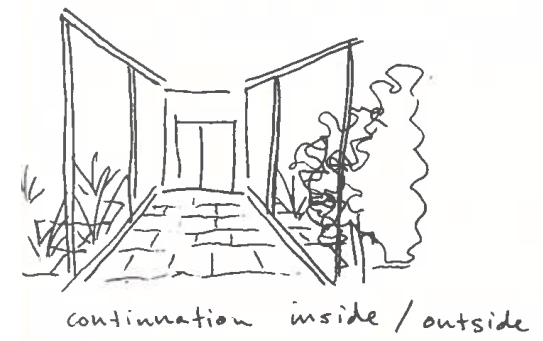
Akademie der Künste, Berlin

This project made me think about how intimate courtyards can be created. In this project courtyards can be found which are not completely surrounded by the building itself. An intimate outdoor space is created by installing an outdoor wall. Which prompted me consider how intimate outdoor areas could be created without being entirely surrounded by buildings.





Akademie der Künste, Berlin





Cobbenhagengebouw, Tilburg



Thoughts after the Pre-P2:

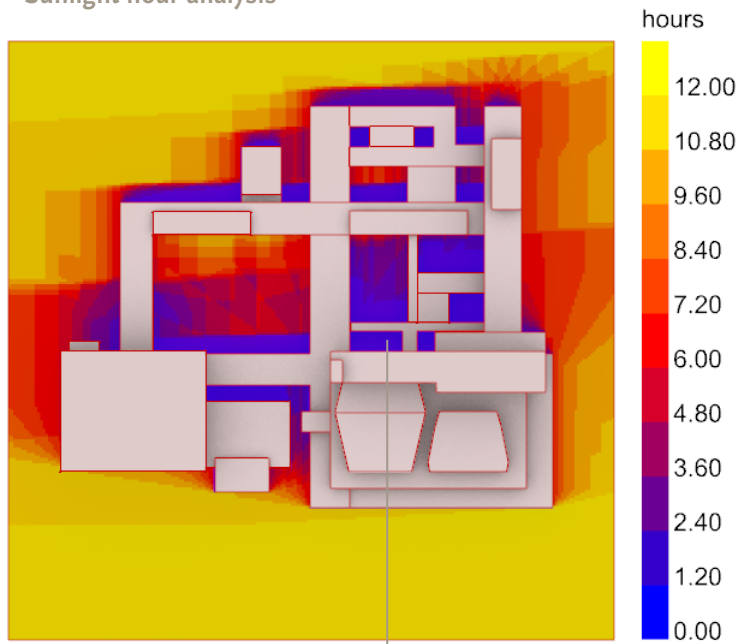
- How do I invite people up?

I moved the entrance to the west courtyard, to create a transition space from the city. However, having a new entrance so near to the old one can seem redundant. At the same time I think the existing entrance needs a improvement while there is no clear gathering and dispersing zone inside the building.

Is it ok to be able to permeate into the building?

The various connections I created with the current DeSingel axis already make this achievable. By having multiple entrances, I might be able to highlight this even more. For instance, an entrance between Wing G and the extension or through a bookshop near the main entrance. Having several places to enter the building likewise mirrors DeSingel's methodology.

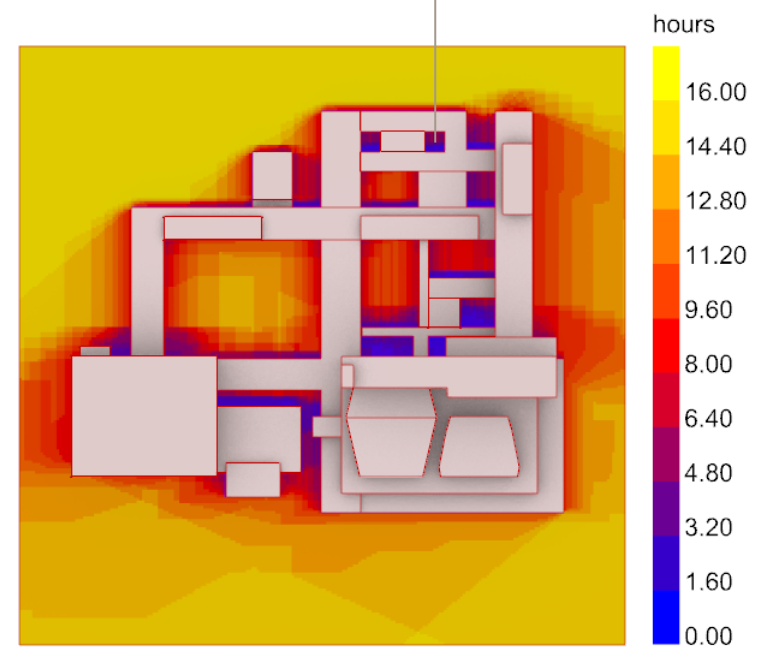
Sunlight hour analysis



March 21st

Throughout the year, the artists café's outdoor seating almost never receives direct sunshine.

At the moment the smallest courtyards only get roughly four hours of sunlight on the longest day of the year. The courtyards might be less gloomy if they were raised to the first story.

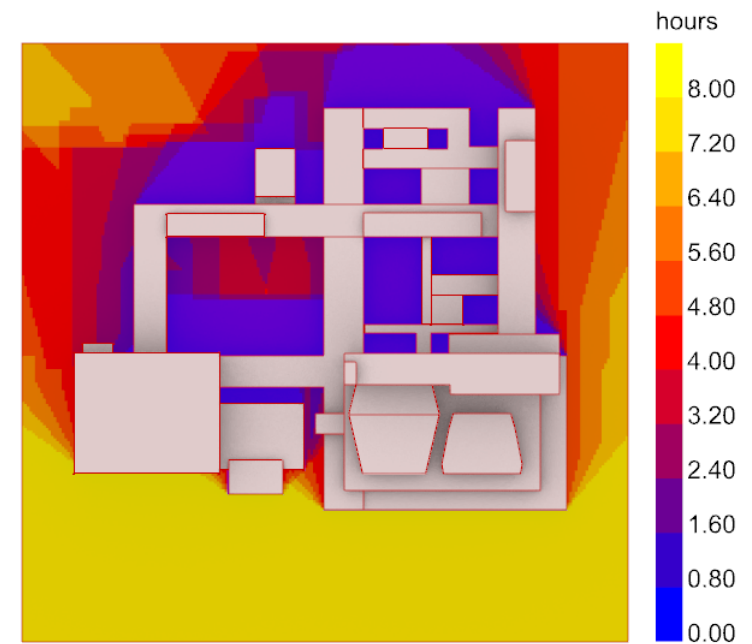


June 21st

The courtyard in my extension that receives the most direct sunshine throughout the year.



September 21st



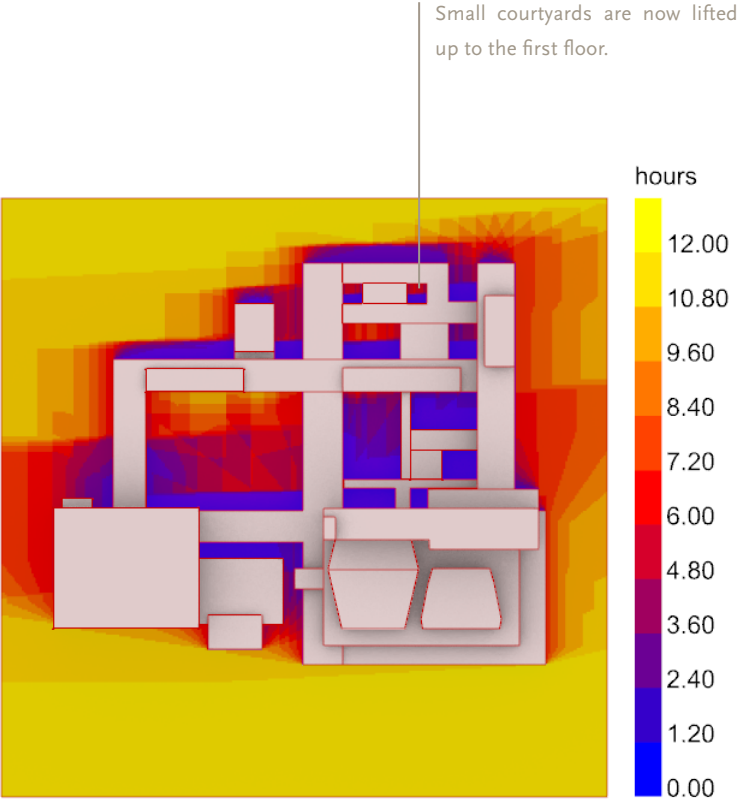
December 21st

Conclusion

I will have to think about the materialisation of the courtyards, considering they will not receive much direct sunlight.

For instance, adding trees and plants that are primarily tall. To prevent them from becoming gloomy, some courtyards could be moved to the first floor.

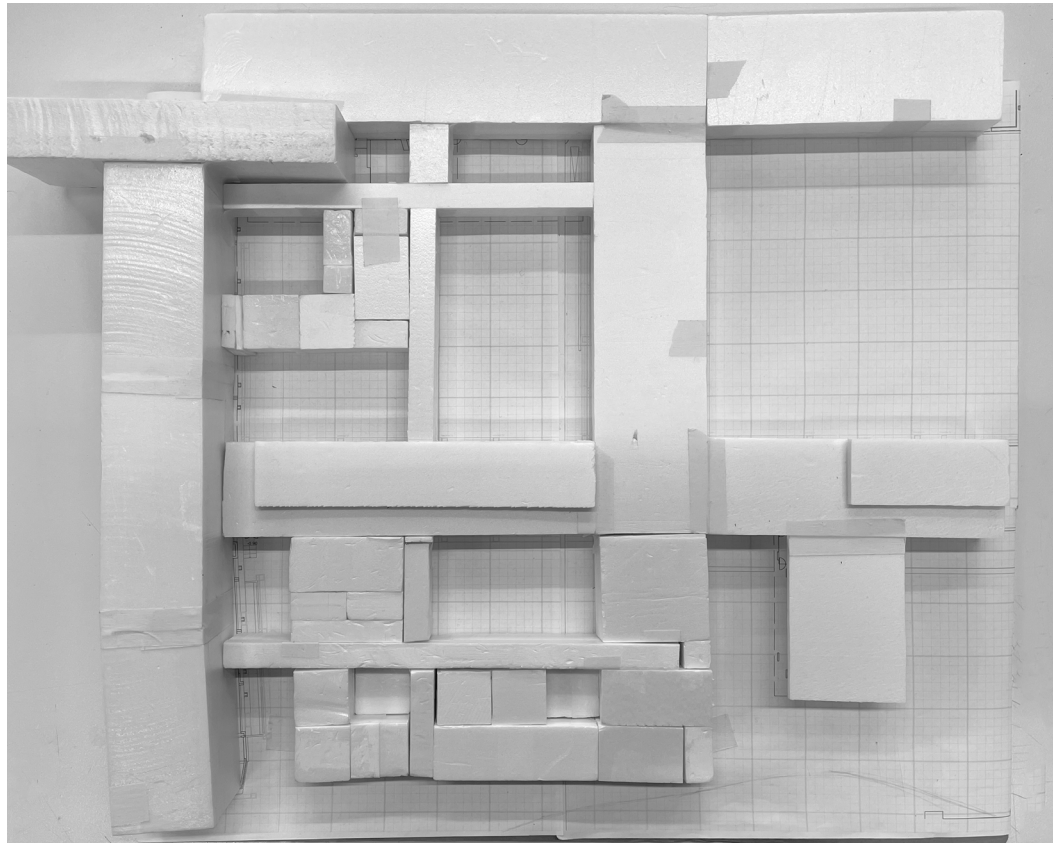
Sunlight hour analysis: after adaption



March 21st

The end result

The addition now fits the setting by sitting farther away from the Ring road. As well as lifting up the two smallest courtyards for more direct sunlight.



Facades

In search of ideas for my façade. I'm investigating how to provide a glimpse of the interior to people who pass the extension on the street. Connecting the public with archival work. While at the same time tending to the requirements of the artefacts.



Renzo Piano, Morgan library & museum



Appels Architekten, wooden house

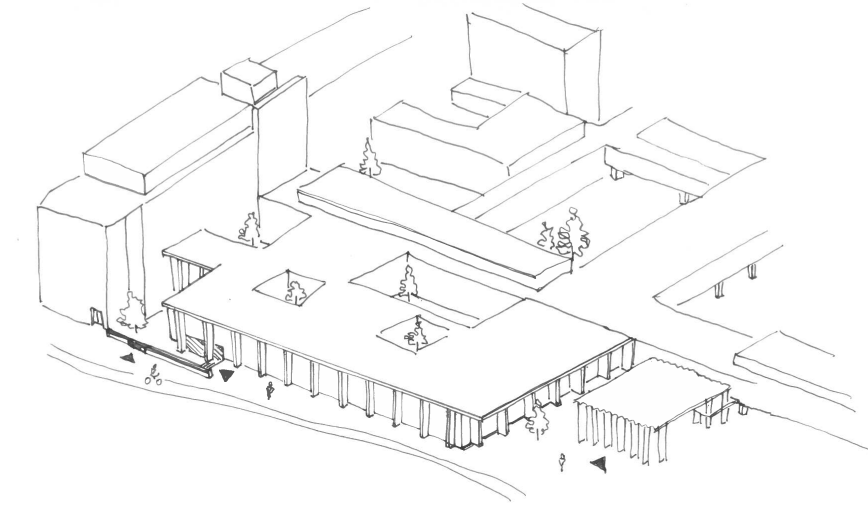
Lahznimmo Architects, museum discovery centre



Barozzi Veiga, cantonal museum of fine arts



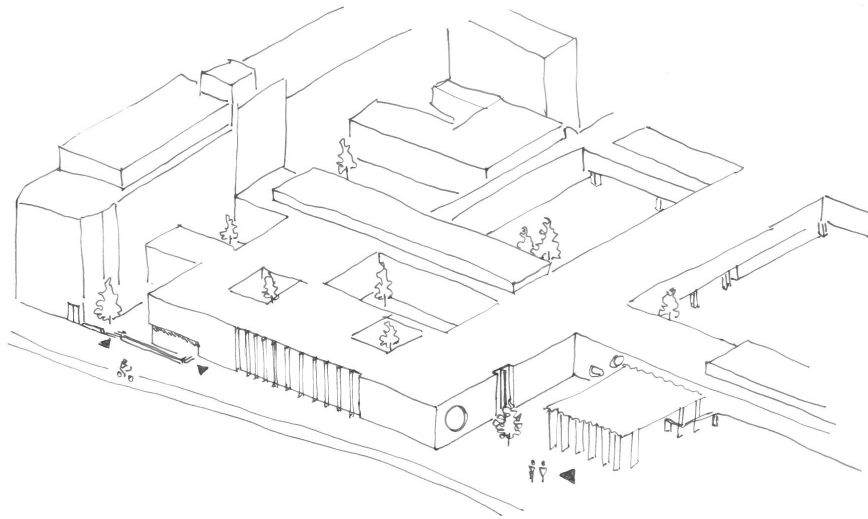
Vicens & Ramos, faculty of communication



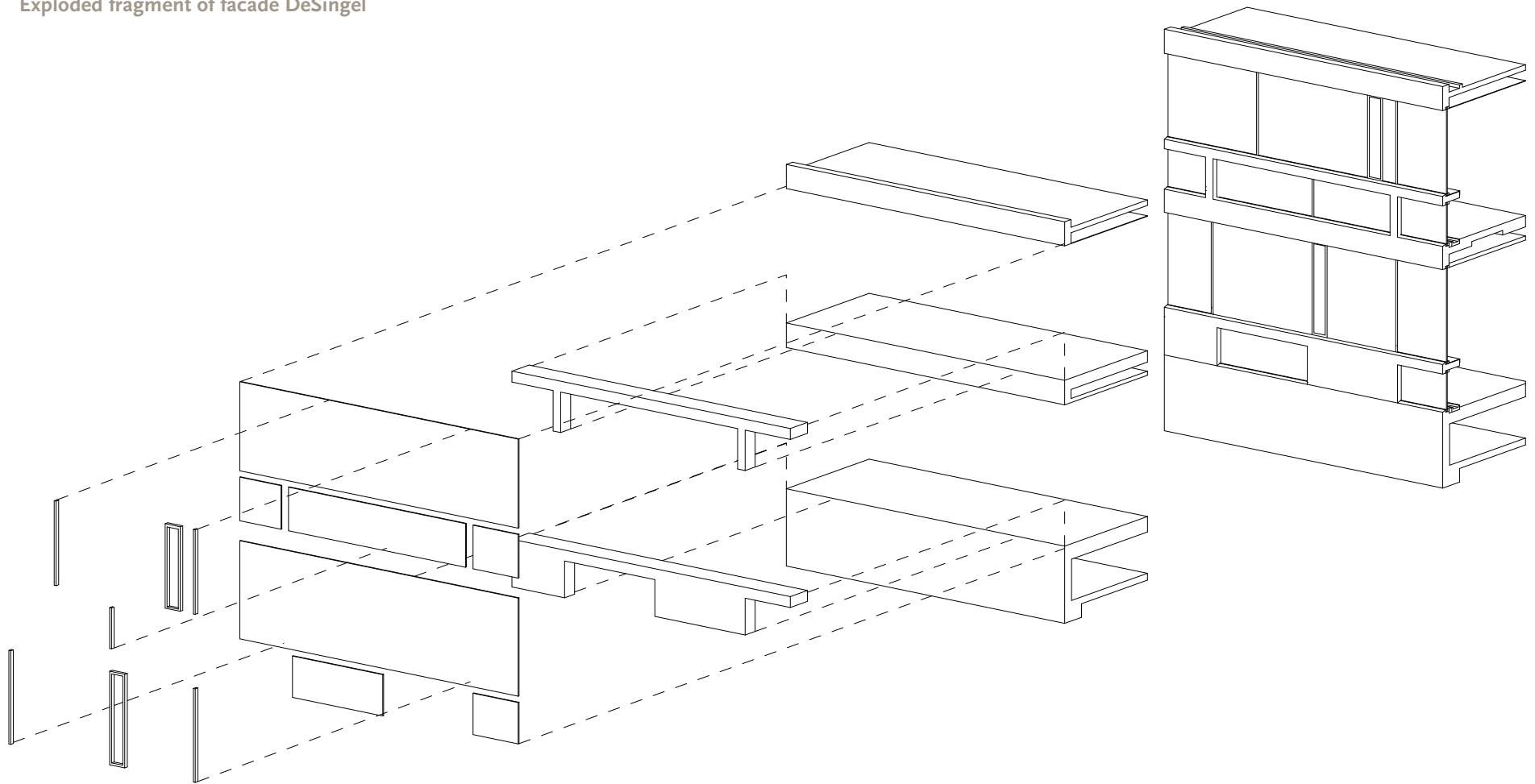
Sketching a facade on my addition

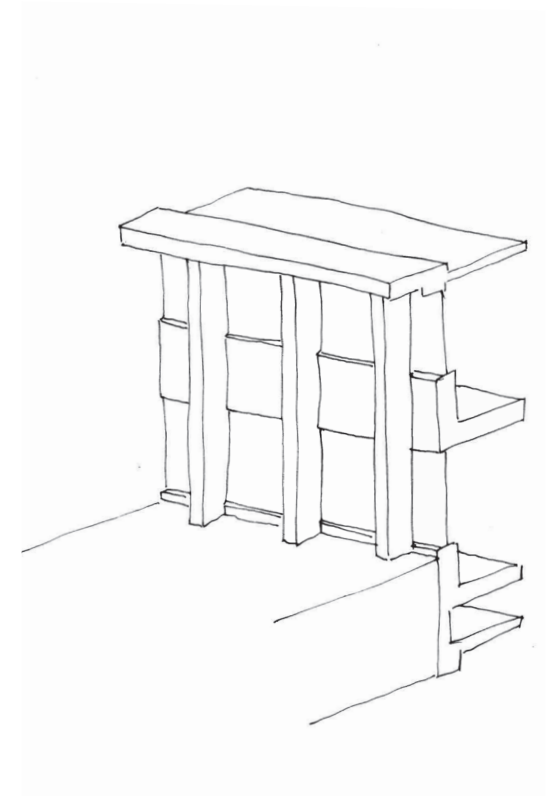
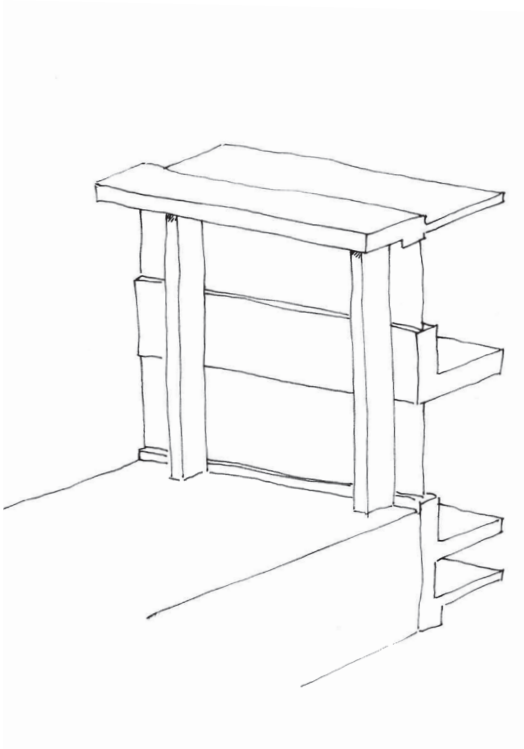
I soon realised I need to analyse and understand the existing facade of the DeSingel before I can sketch a new facade.

With my adaption I am already connecting to the existing structure of DeSingel. I could do the same with the facade.



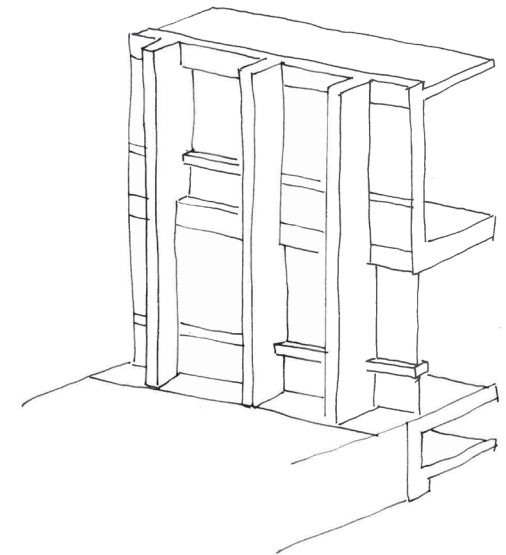
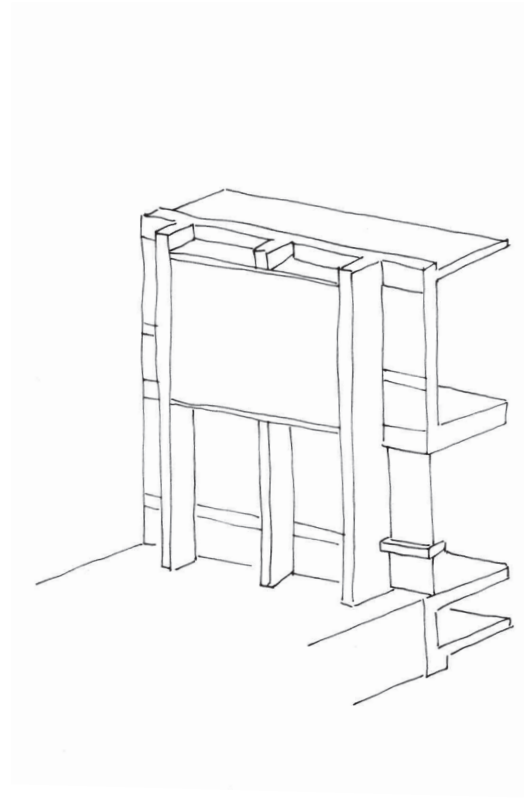
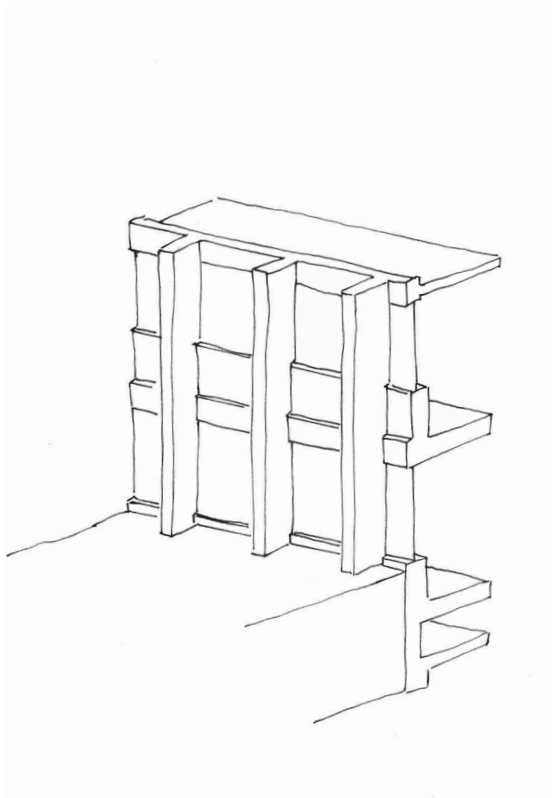
Exploded fragment of facade DeSingel

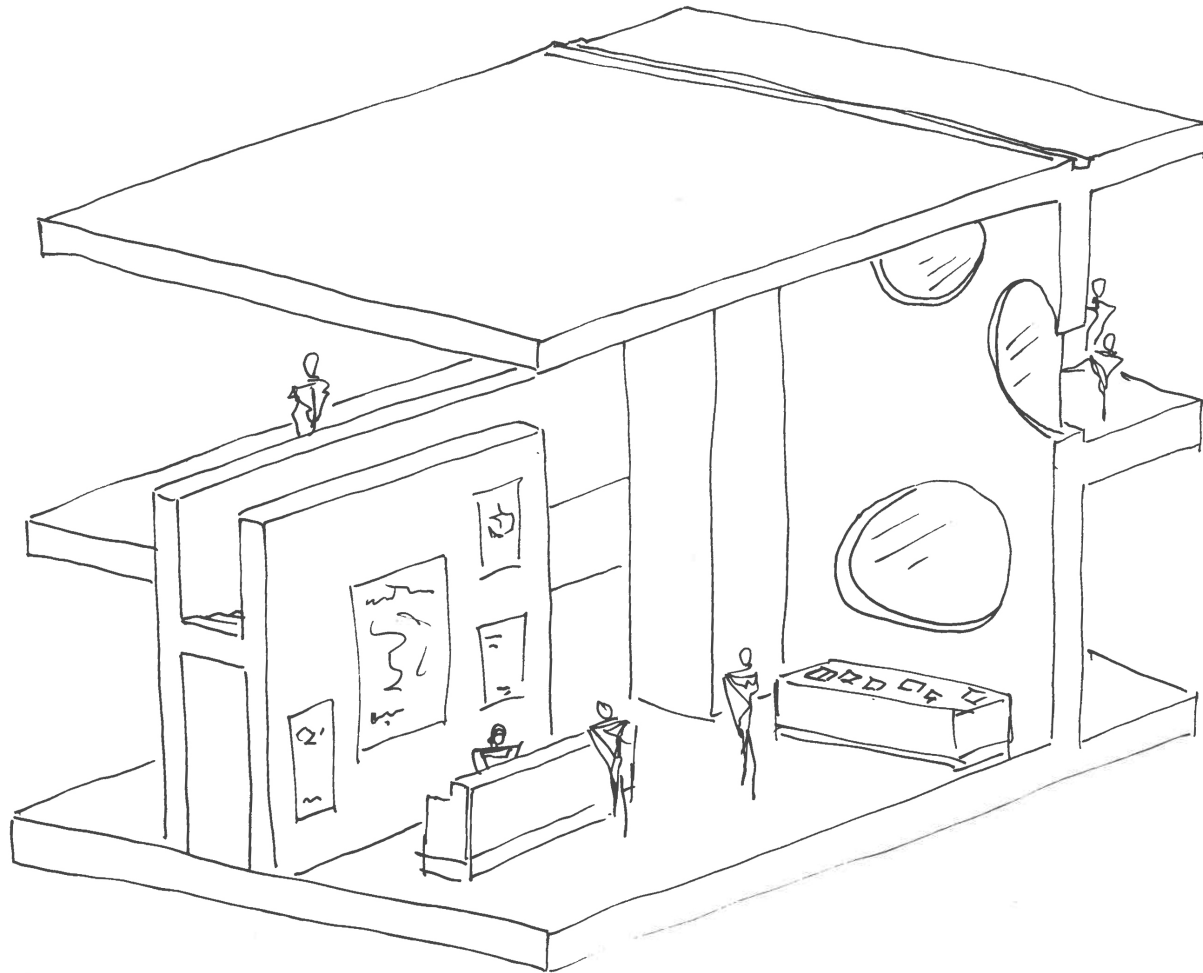




Iterations

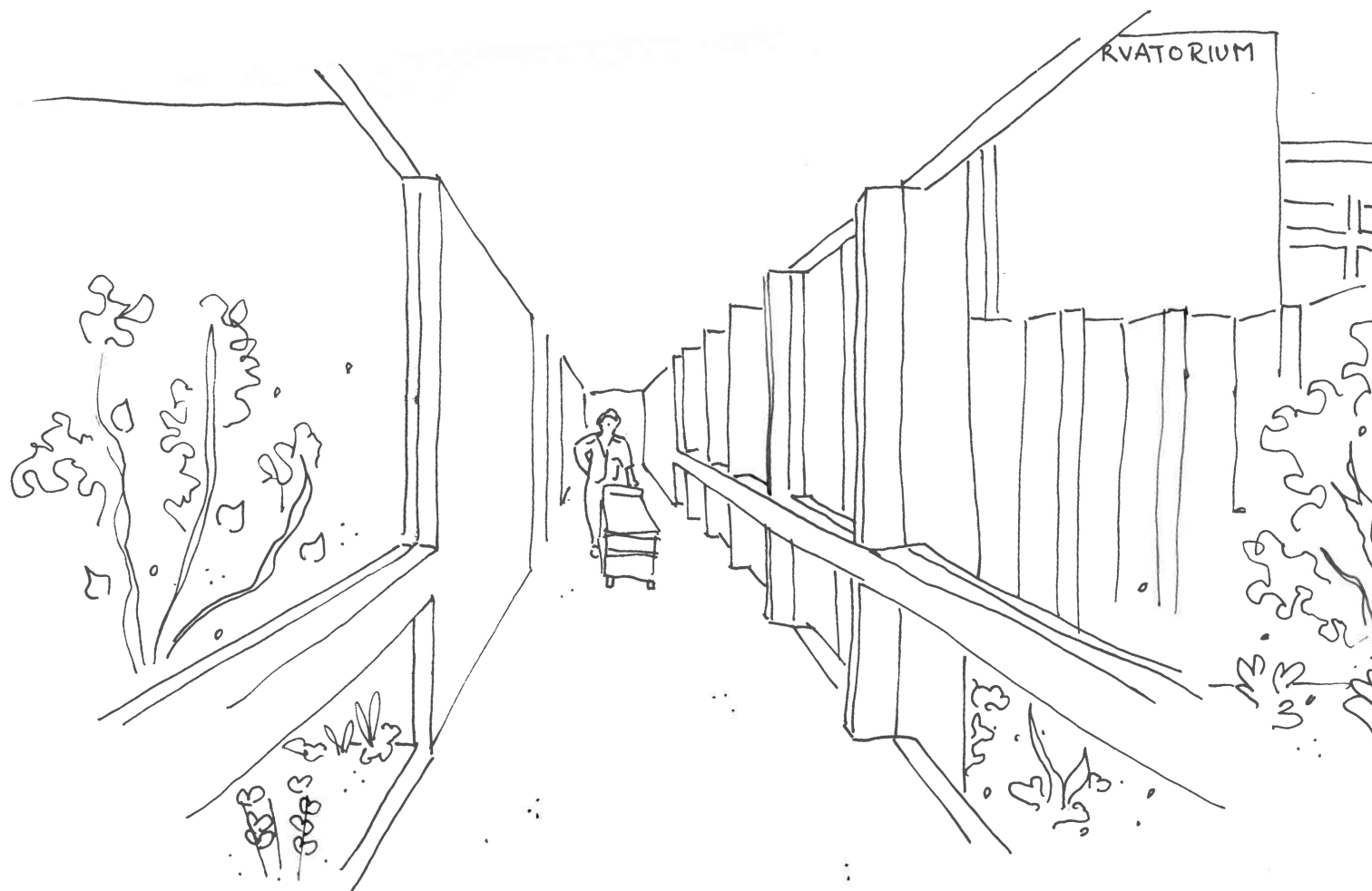
Since the shape of my intervention is quite horizontal I would like to make an adaptation of the facade of DeSingel where the vertical lines are accentuated in order to give my building more length.





Entrance zone

I sketched how the entrance zone of the bookshop would interact with the existing structure of DeSingel behind it.



Notes P2:

"Your project has developed well and is promising in its approach. Many 'Singel-motifs' are repeated here on a small scale, which can work well but also has its problems. Nice spaces, interesting perspectives, but also long distances, complicated and unclear organisation.

You describe the archive as a performative, entertaining machine that can be observed and influenced by the audience. Which fits the Singel itself, its programme and its audience very well. But take a close look at the actual spatial conditions you have created and try to avoid overly complex situations. Above all, the porous mass of the building should offer pleasant spatial situations, but not chaos.

We also think it is important to examine what it means that your extension is now the part of the Singel that lies in closest proximity to the city and the street. The structure is quite timid for this; we cannot help but associate it with suburban shopping centres (also because no clear statement has yet been made about the façade). Should the volume here perhaps gain a little more mass? "

Subjects to focus on after P2

- **Elaboration:** extensiveness, degree of detail of all aspects
- **Knowledge and know-how:** effective study and use, processing of precedents and principles
- **Reflection:** careful consideration, evaluation, effects, comparing and positioning
- **Material and technical aspects:** such as material, detailing, physics, structure, construction, and climate design
- **Contextual aspects:** such as site, response to the surroundings in shape, composition, mass, function and circulation

How I am planning on tackling these topics:

- - Try to elaborate aspects that I have now applied to my design and evaluate those aspects.
- - Document more of my ways of thinking, how I integrate precedents in the design and try to apply more from literature I am reading.
- - Speaks for itself. Document this!
- - How does my extension connect to the existing construction of DeSingel? This connection can be part of the architectural language.
- - Look at my design and how it responds to the street and the building across from the street.



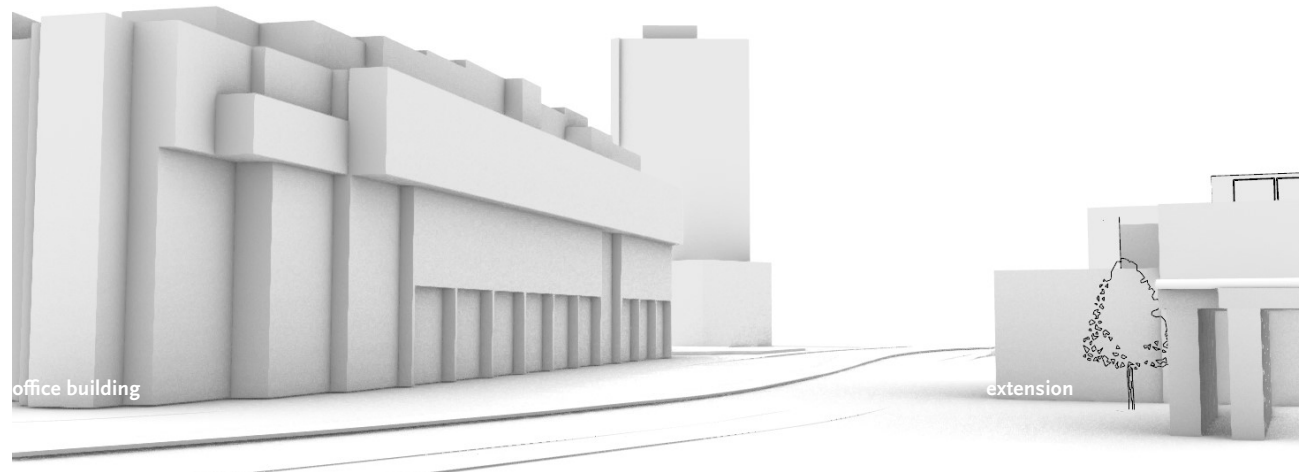
Context

My extension is facing outward. For this I will also have to take in consideration the road and the building across from the street.

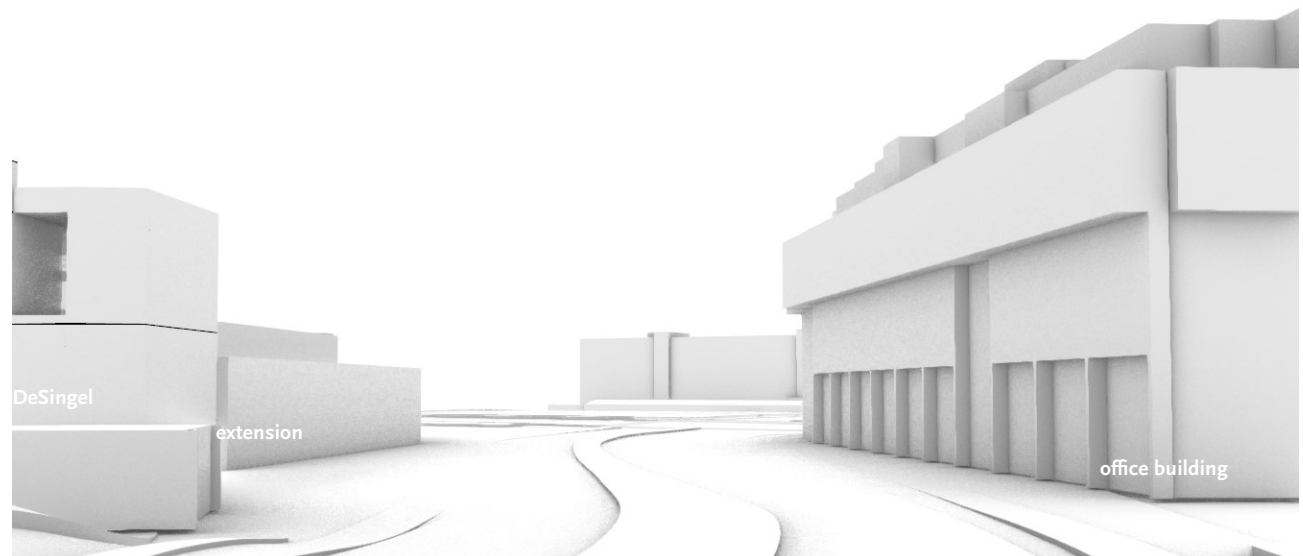
It's a high-end office building called Greenhouse Collection. Built in 1975 and renovated in 2022.



View from 2nd floor on DeSingel



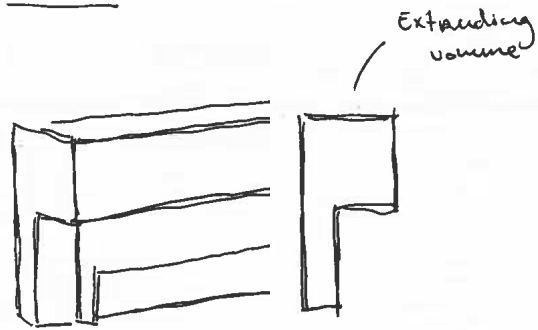
The office building has seven floors. As you can see in the model, it appears like the facade's rhythm somewhat mirrors DeSingel's, which gradually fades away as the structure rises above DeSingel's front facade height.



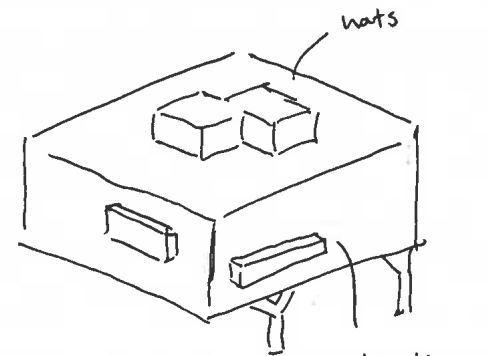
"Should the volume here perhaps gain a little more mass? "

Analysing volumes of context (inc DeSingel)

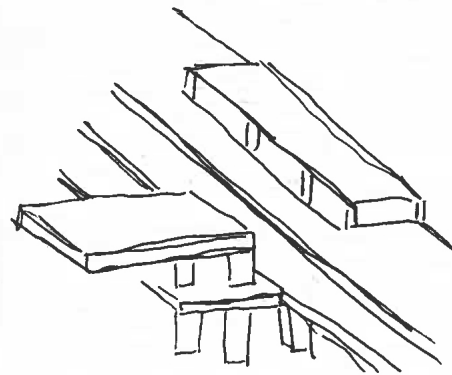
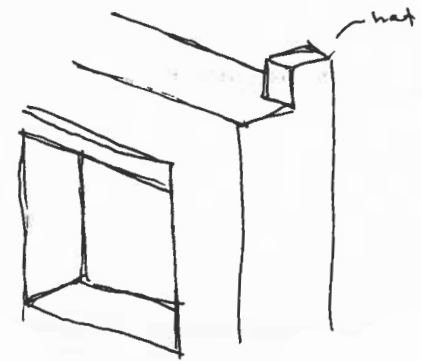
context



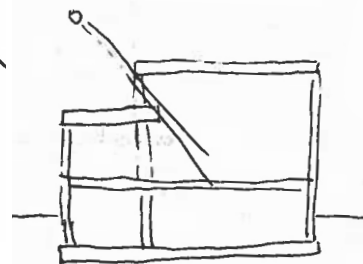
office building side profile



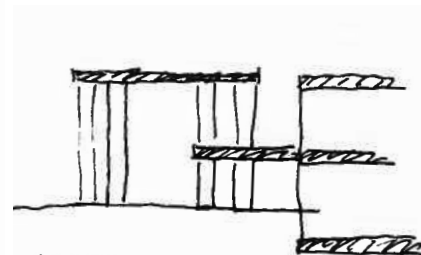
Beel-paet



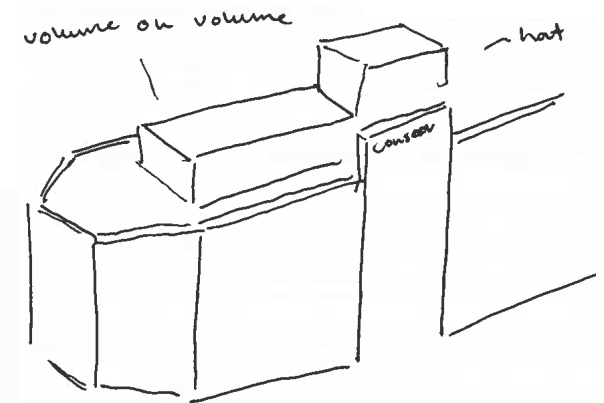
DeSingel



wing A

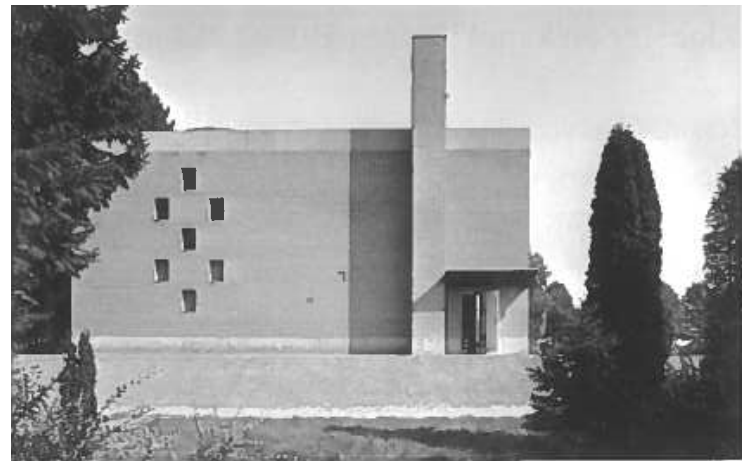
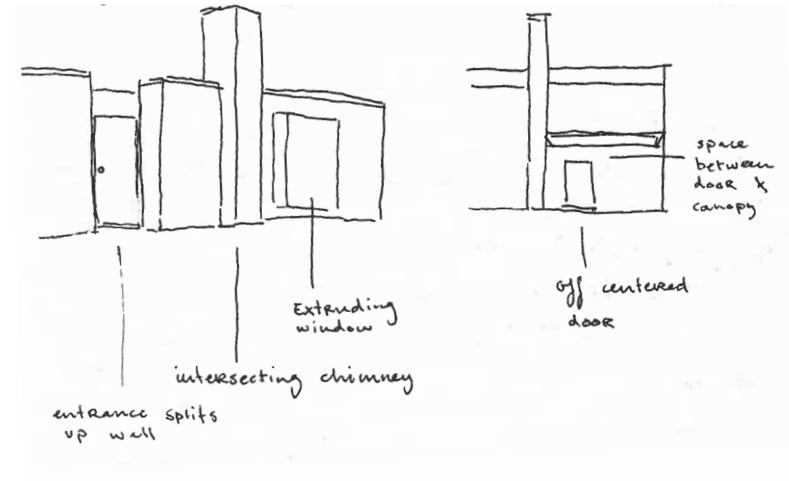


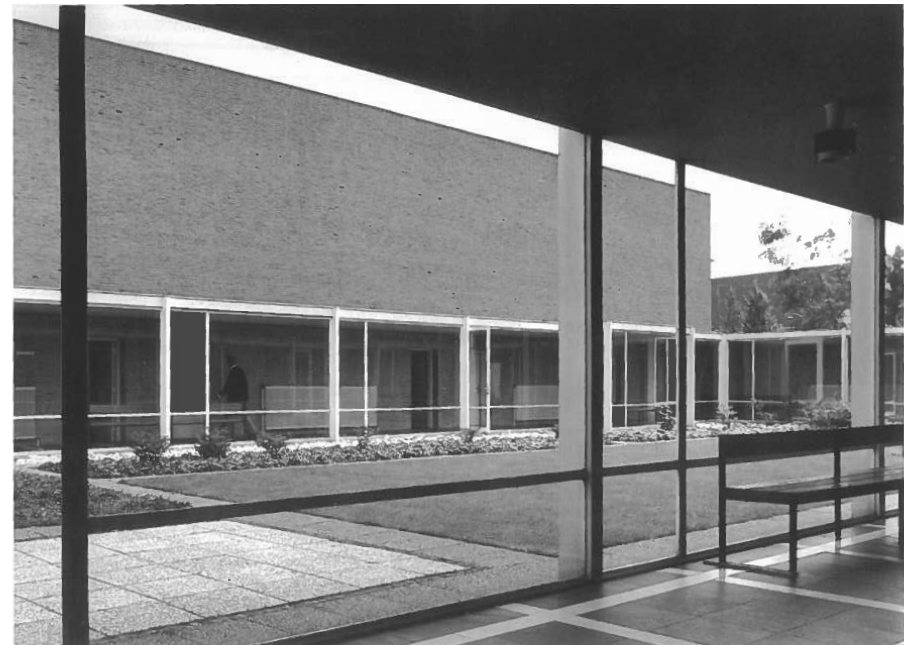
canopy



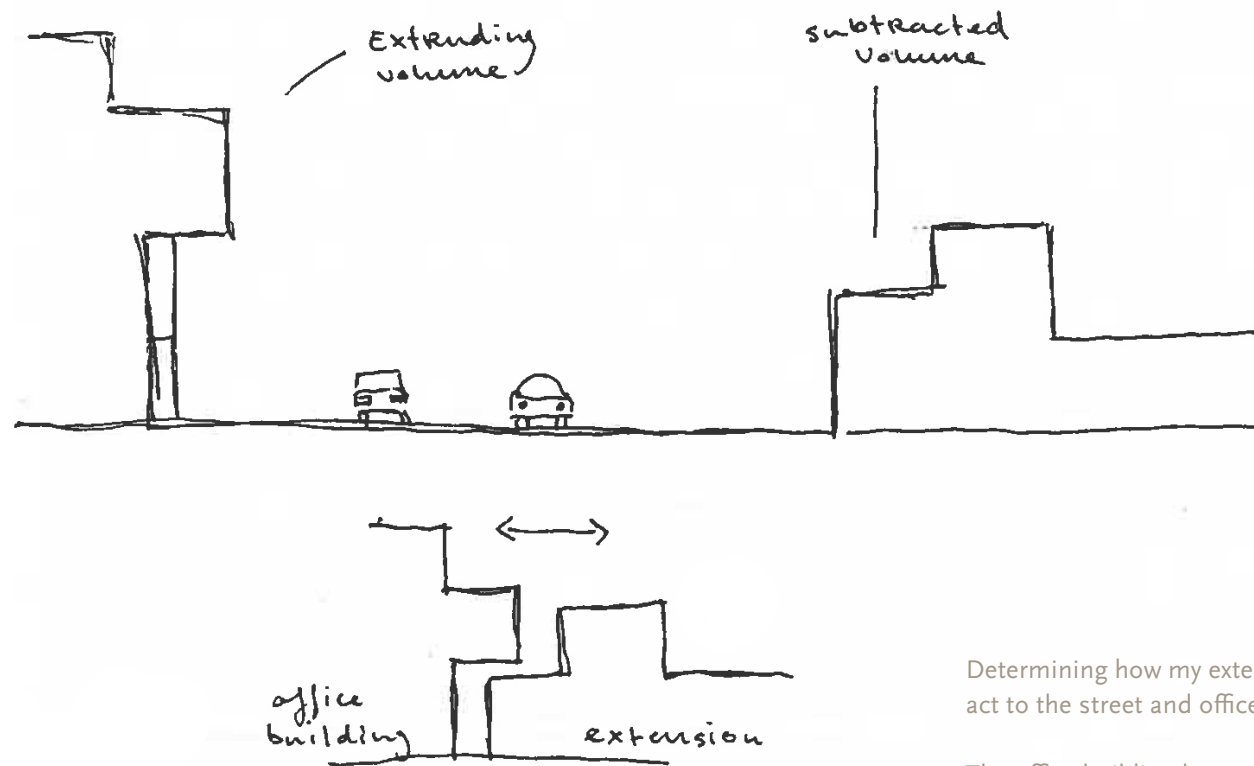
wing G

References play with mass



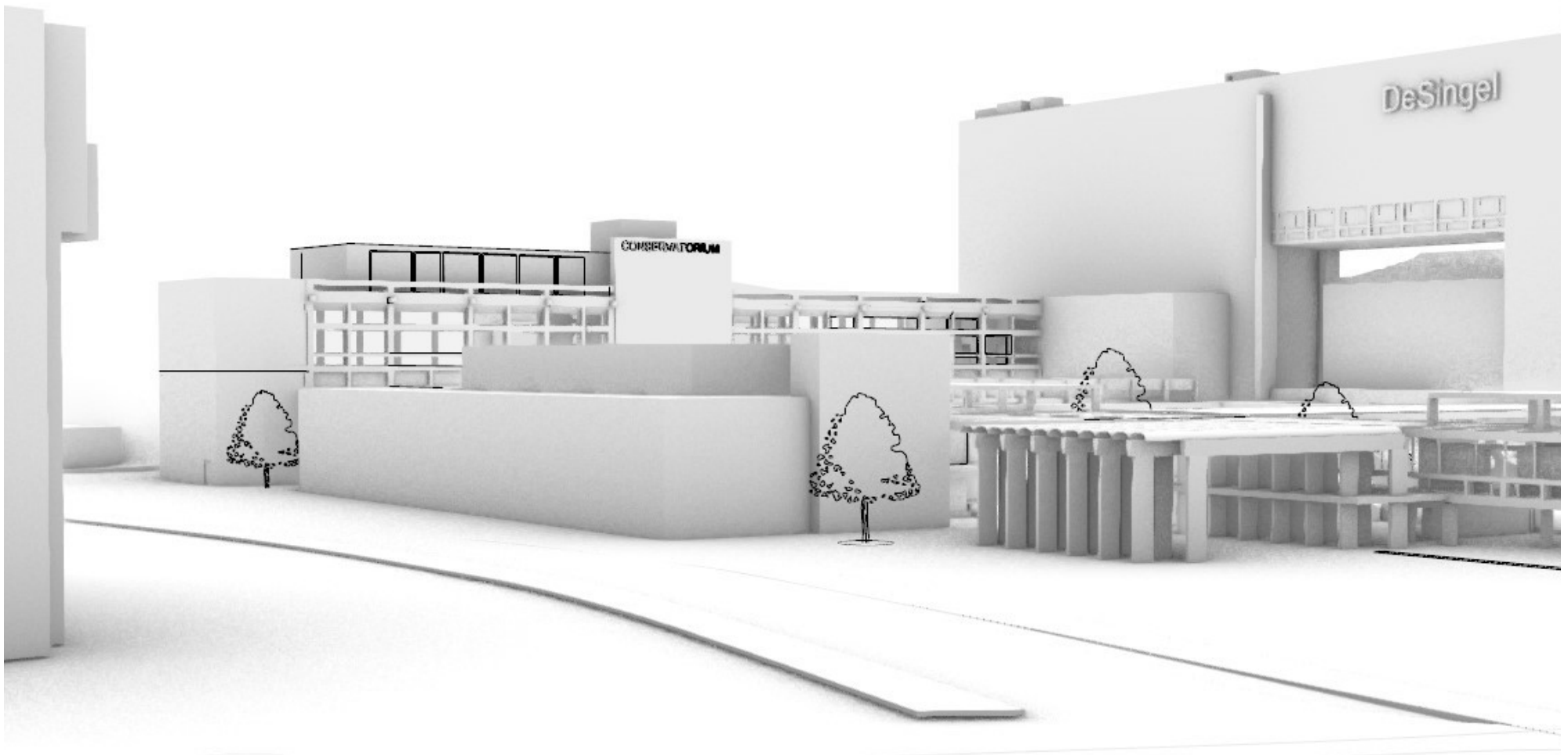


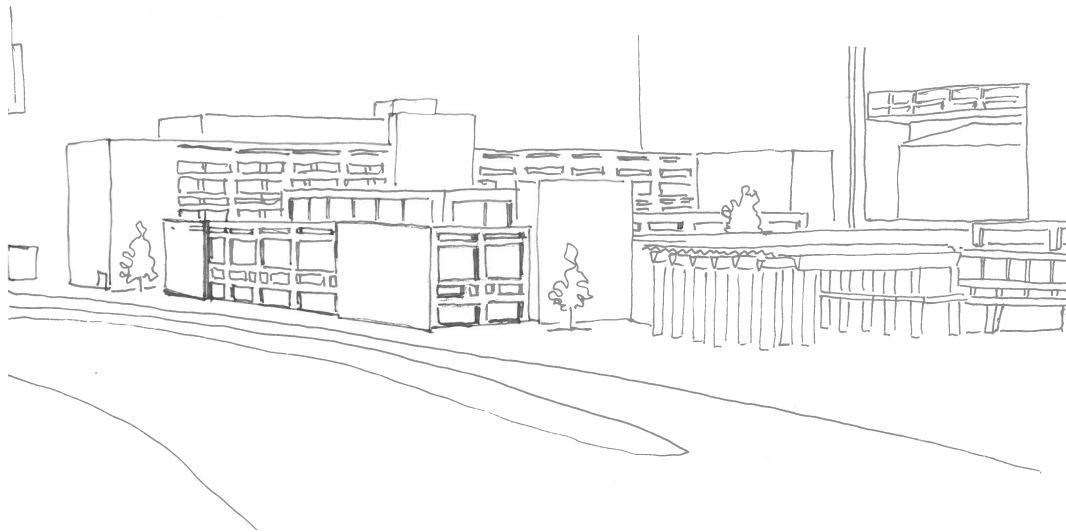
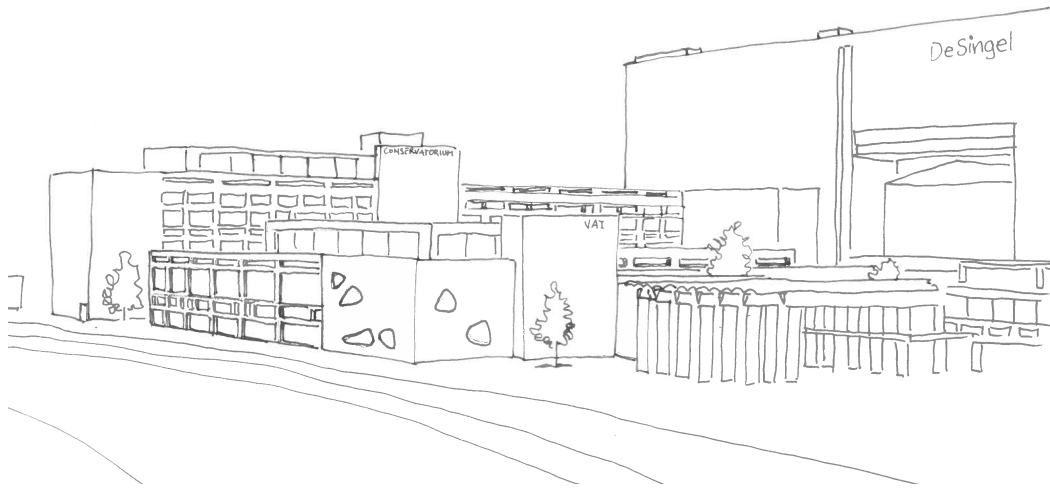
Source references: Leenen, C., & Van Es, E. (2010). Jos. Bedaux: architect (1910-1989).



Determining how my extension can interact to the street and office building.

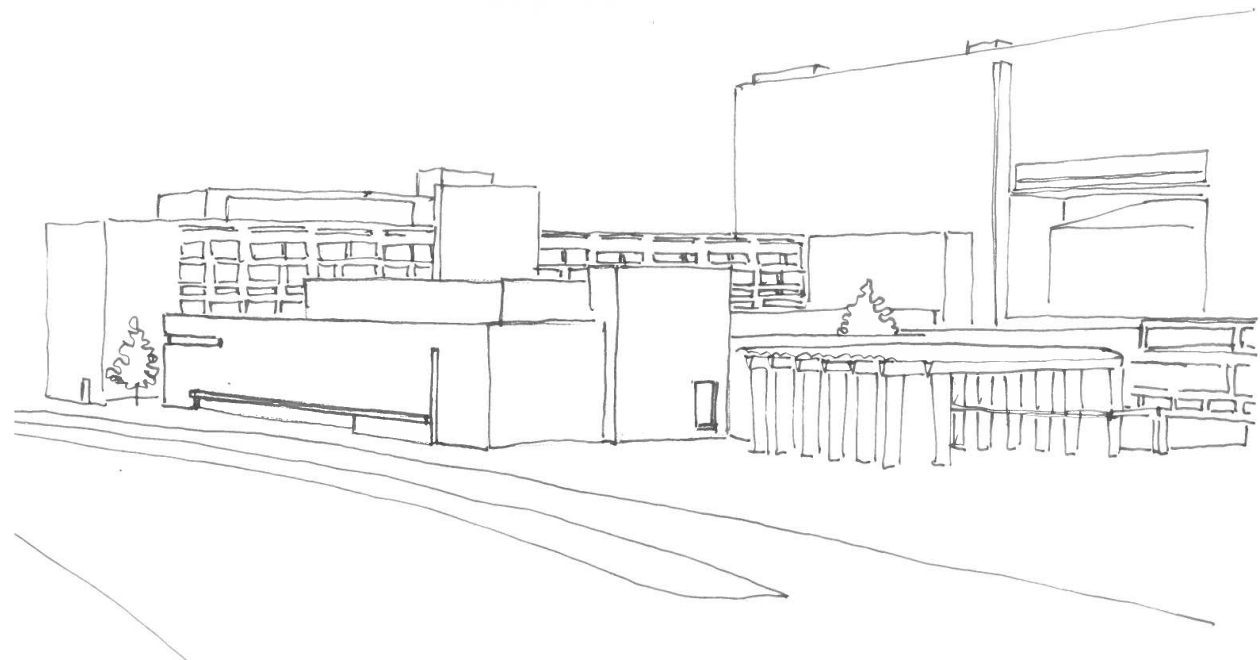
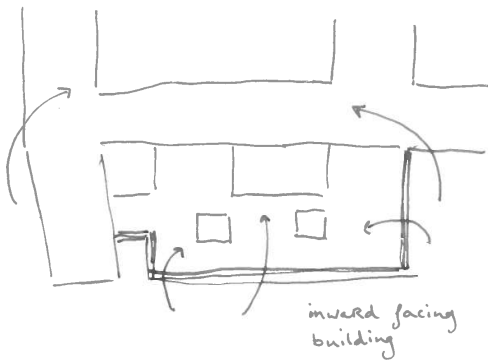
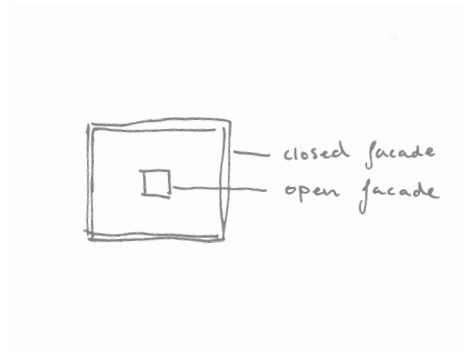
The office building has an extrusion from the third floor up. If I mirrored this shape in my extension, the two buildings may function as a puzzle with the road between.

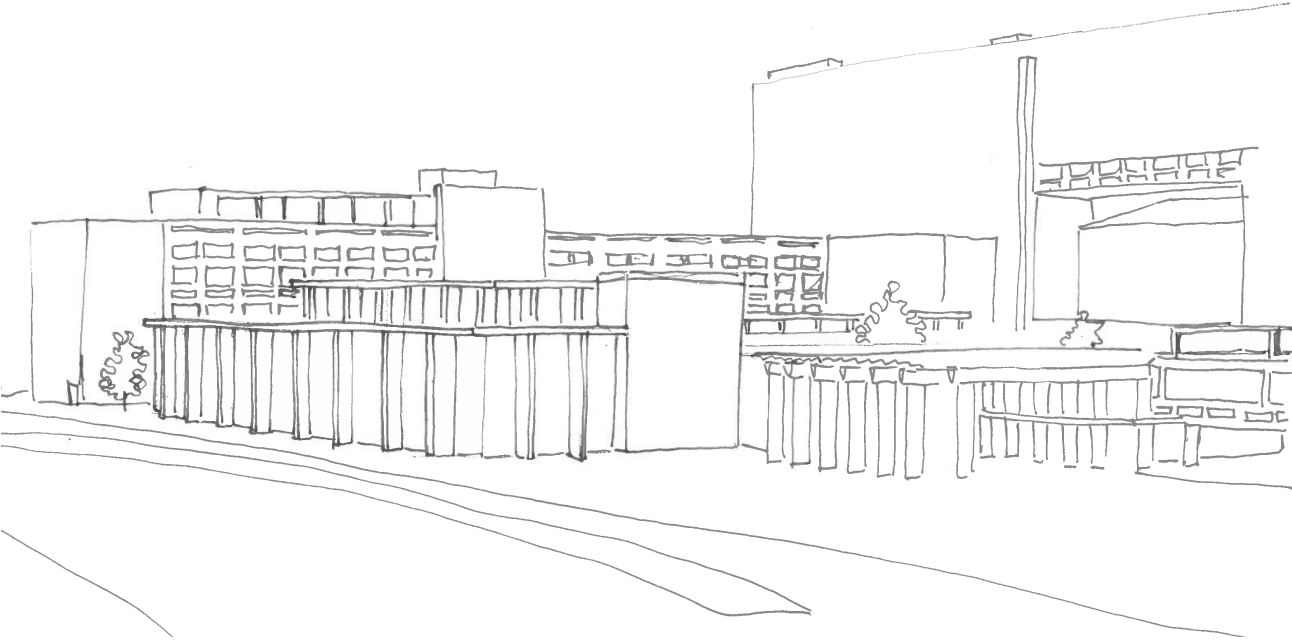




Facades

Based on the mass study I sketched facades onto my extension. I started with sketching facades that blend in with the current architecture of the DeSingel. I then attempted to create other variations.







Construction

Self supporting brick

Materials

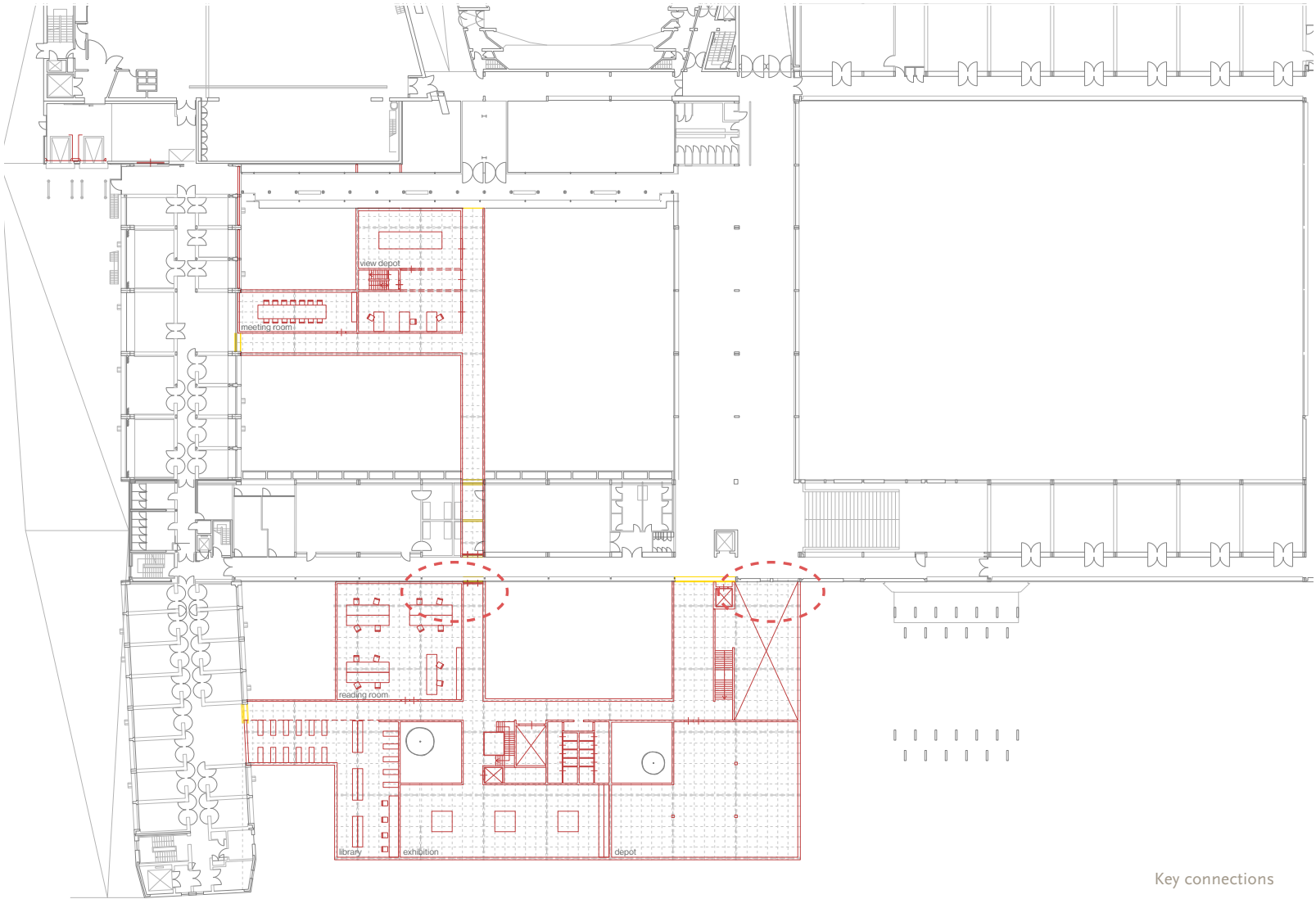
Light colored brick or lime slurry brickwork



Barozzi Veiga, cantonal museum of fine arts



David Chipperfield Architects, gallery building am kupfergraben



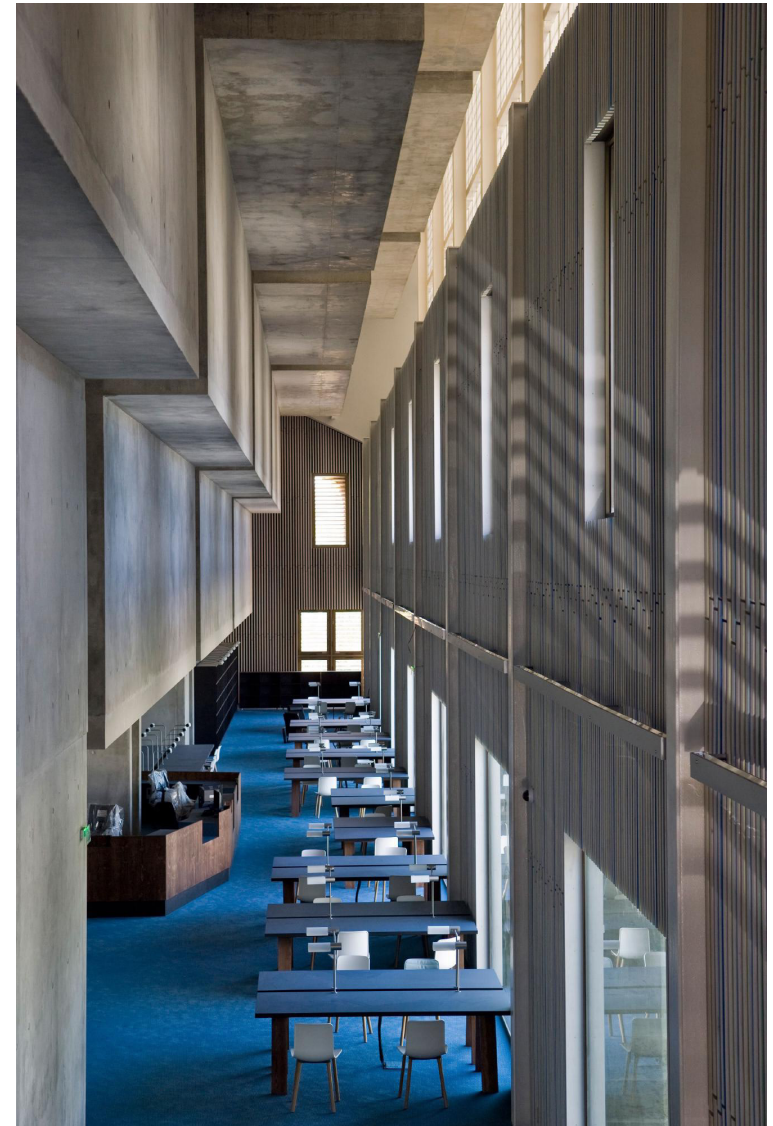
Key connections

References

Looking for references on how to bridge a visual connection between different floor of the extension.



Jacques Kalisz, centre nationale de la danse

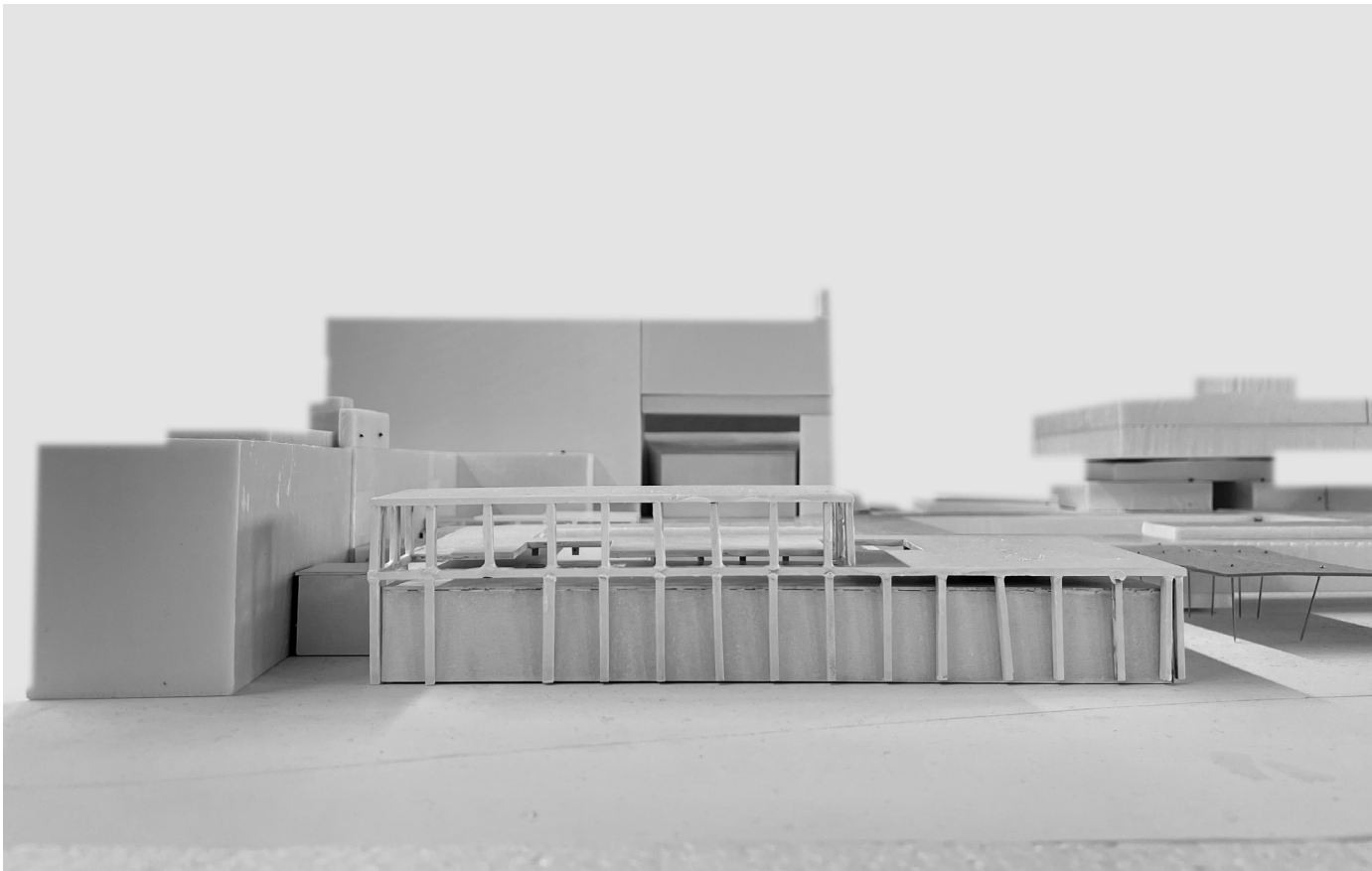


Robbrecht en Daem Architecten, city archives of Bordeaux



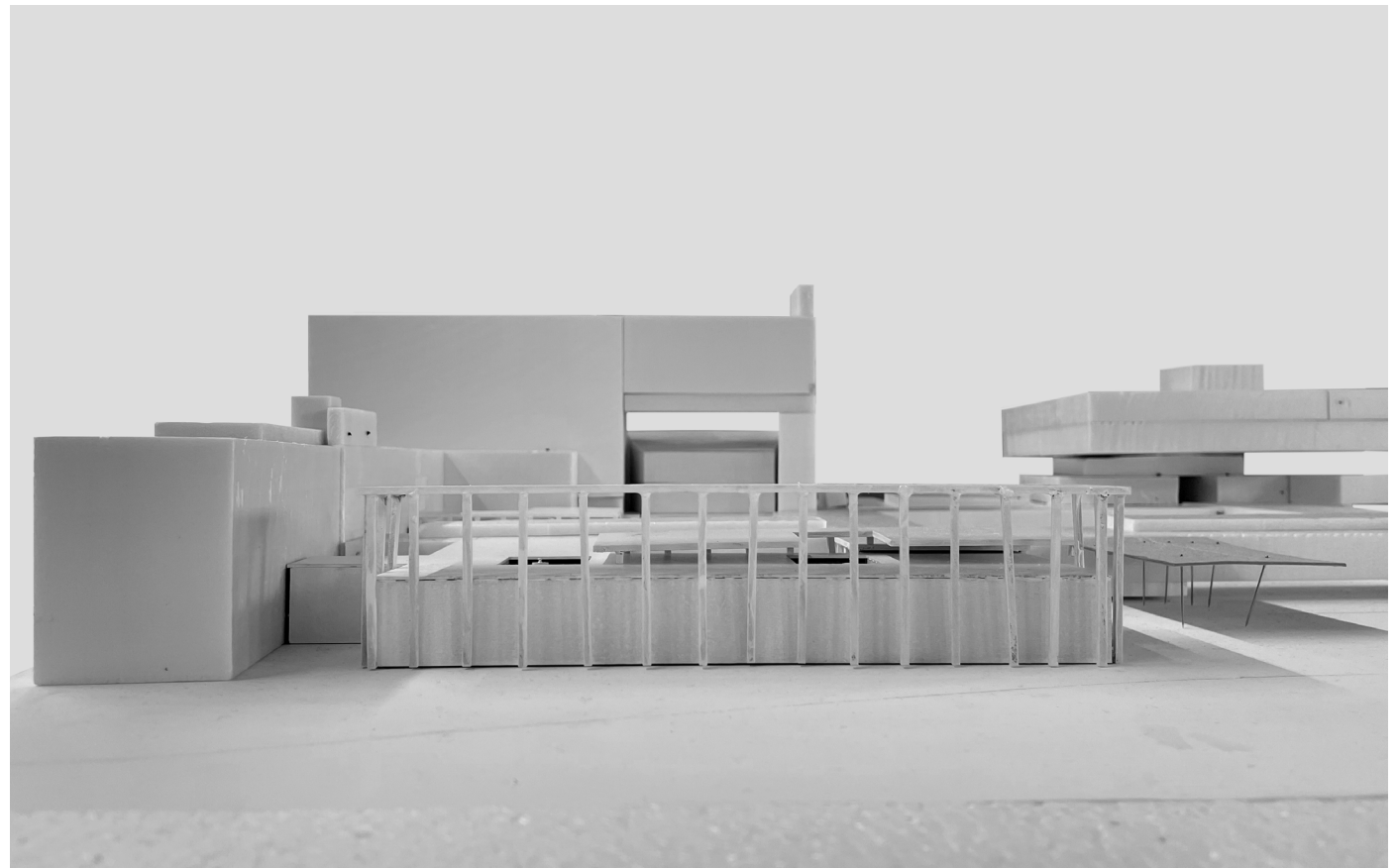
Juan Benavides's documentary "At the Garden's Pace" about
Enzo Valerio's project Pinetum Pavillion (2024)





Model

To try out the massing on top of my current model, I created a number of variations. One with a massing on the left side and one along the entire length of the front facade. Additionally I built a column structure, to observe the impact on the extension.





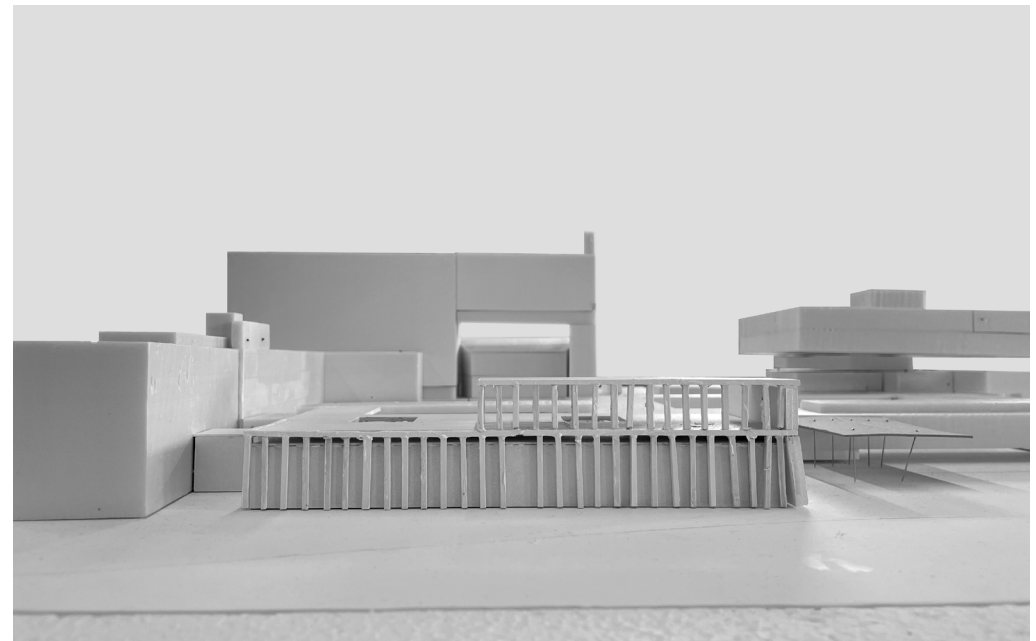
Collage

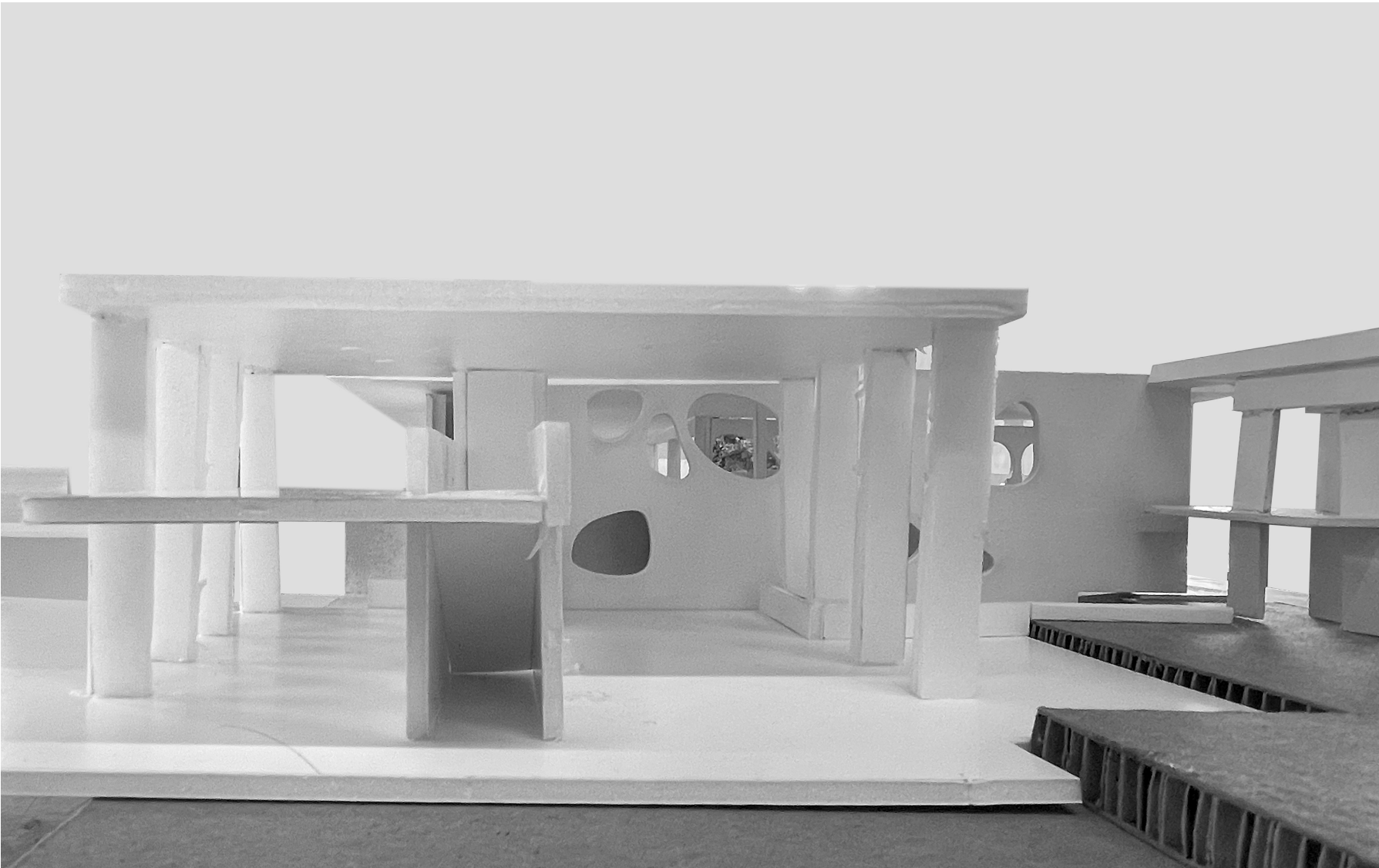
I created a collage by combining the DeSingel site with Barozzi Veiga's column construction at the Cantonal Museum of Fine Arts. Primarily to see how the placement of DeSingel could be combined with the materialisation of light brick.

For reference, I modelled the office building that is opposite DeSingel in order to study how my facade and volume will interact with this structure.



Referencing the collage I created, I added more columns to my model. However, I don't like the look. Additionally, it is only evolving into a skin that does not represent what is happening beneath it. The building's foundational columns are something that DeSingel firmly possesses.

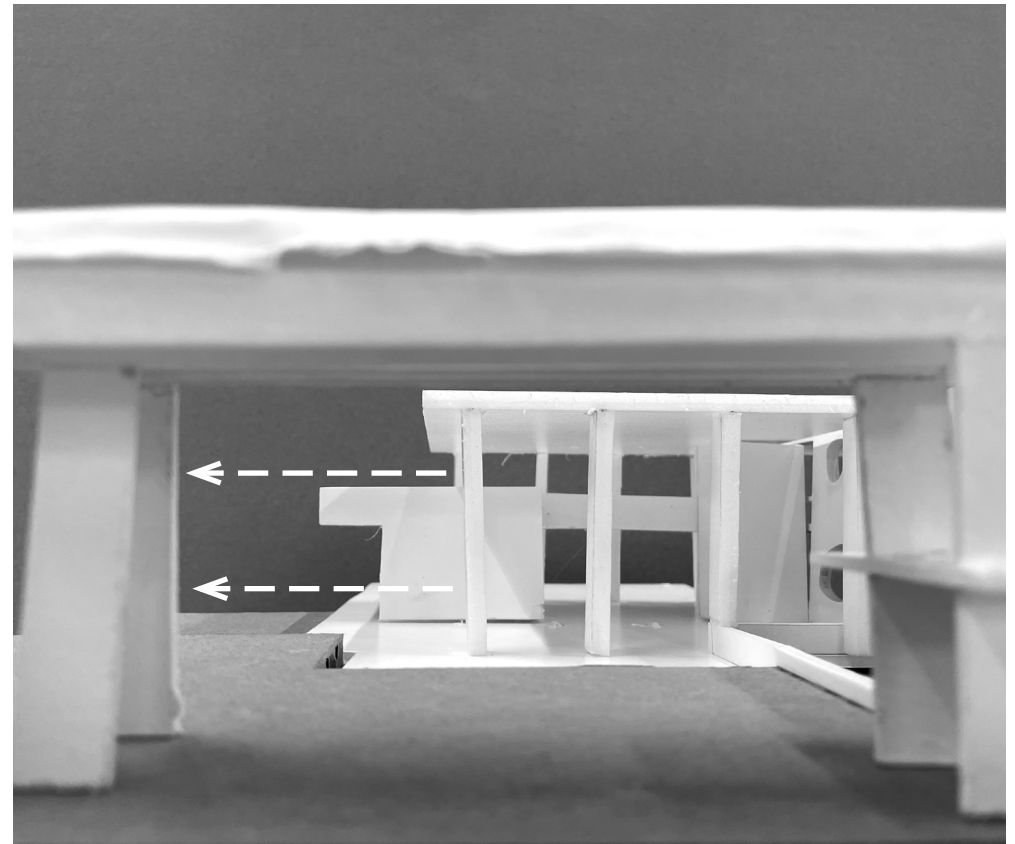


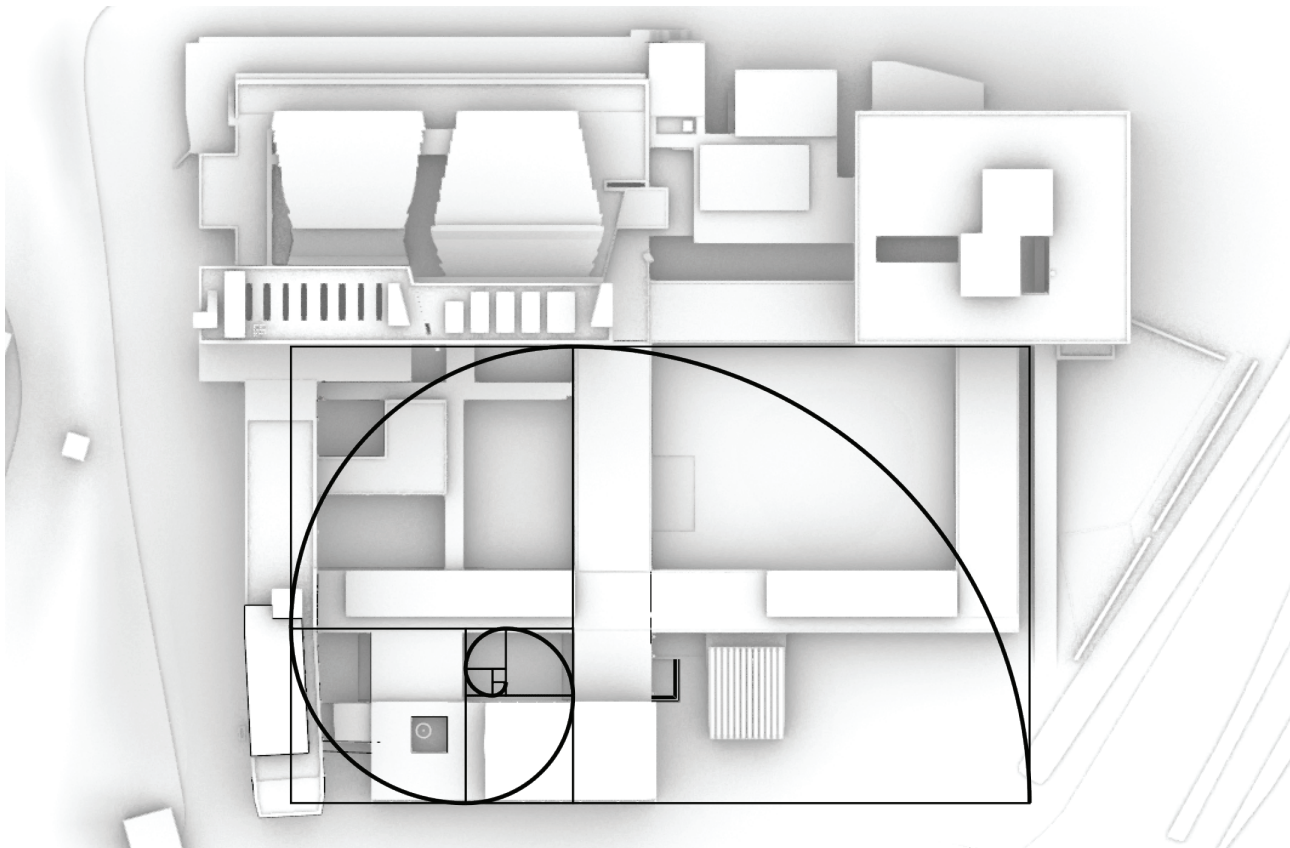


Entrance

In order to test the setup and maybe explore various areas of the extra entrance space, I modelled it.

The entrance and columns ought to be more clearly defined in relation to the canopy opening, as you can see on the right.

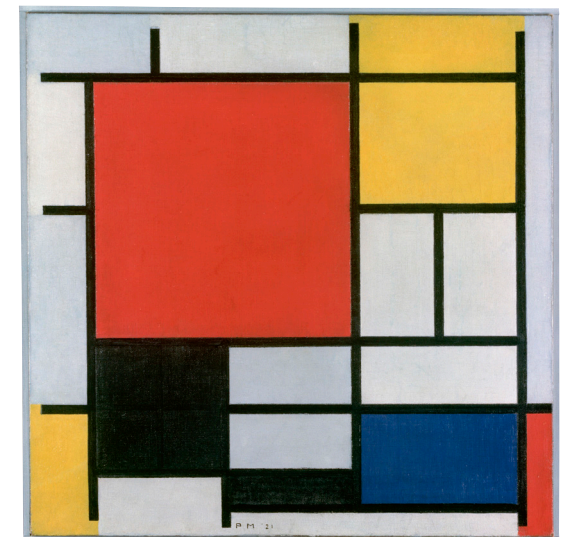
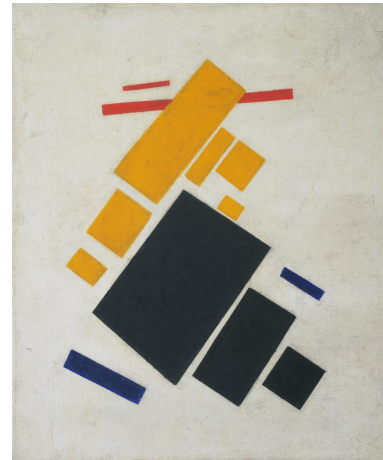
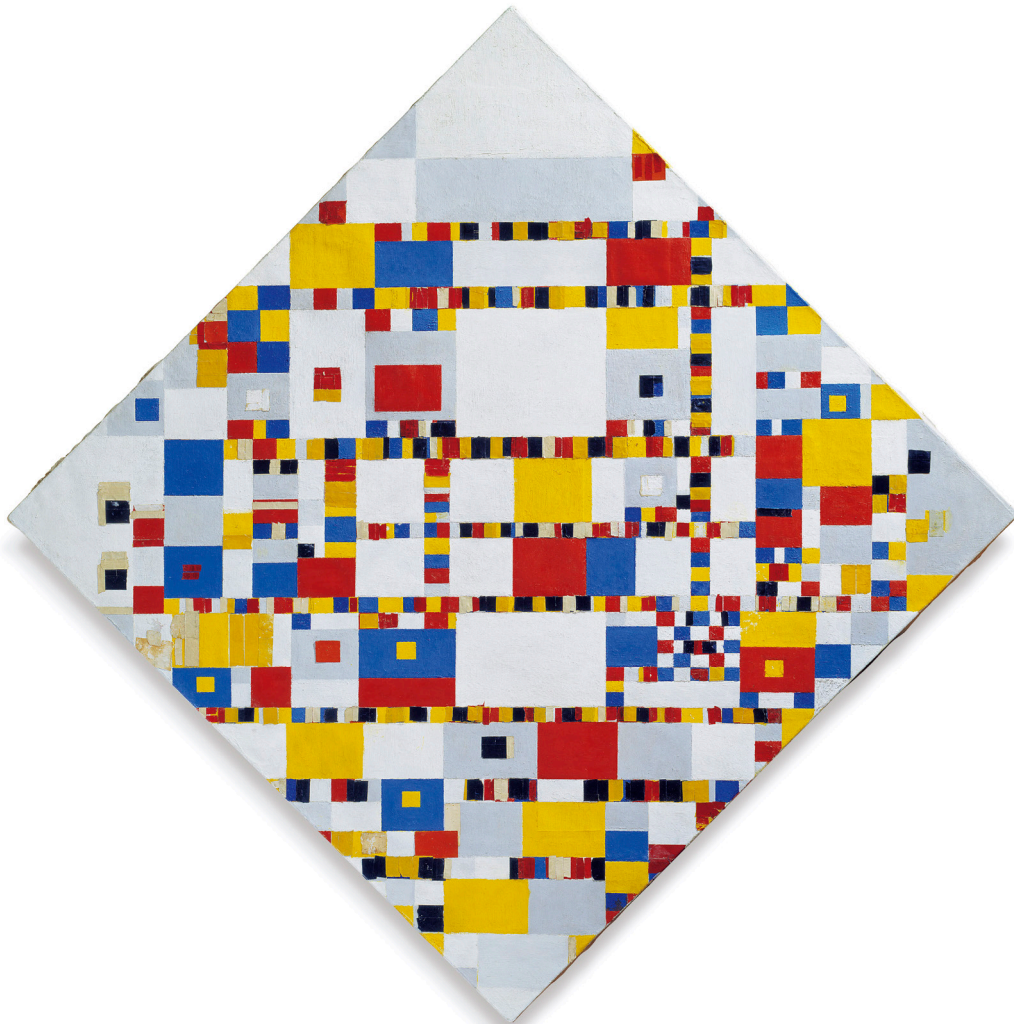




Compositions

Determining the composition of the additional volumes on my extension was the next task.

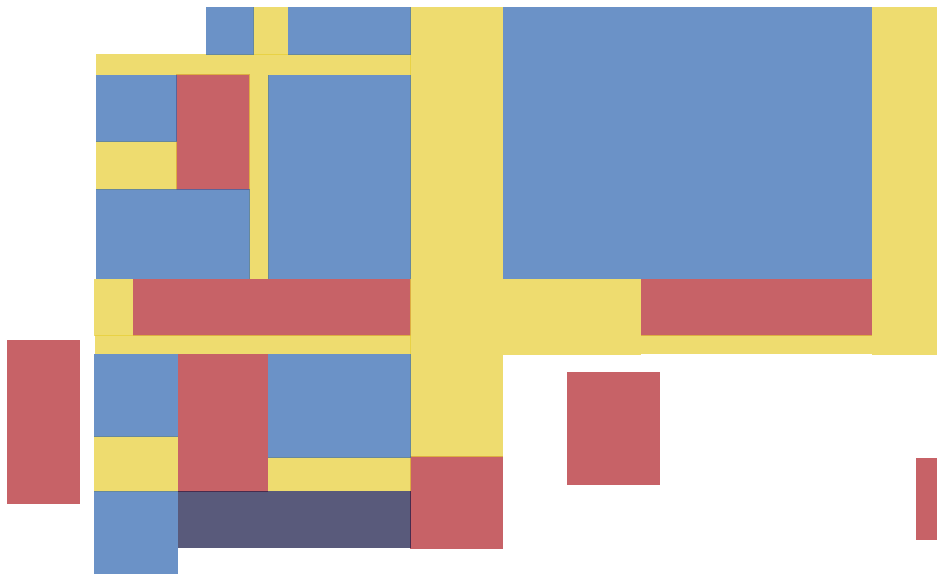
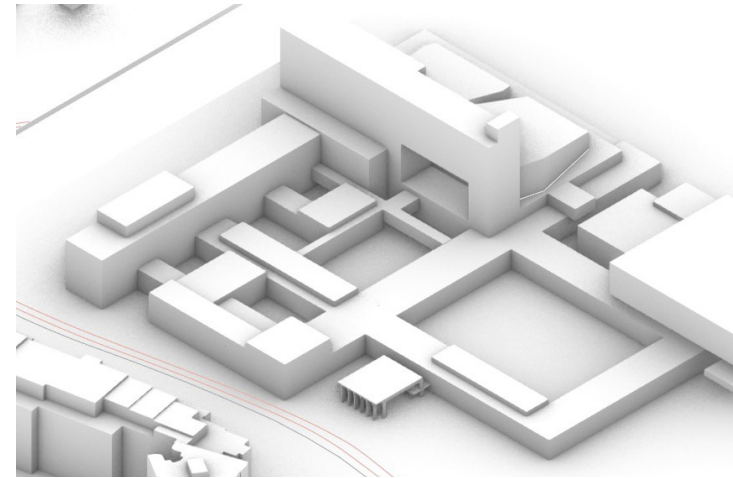
I started by projecting the golden ratio on to the building. As far as I knew, Stynen also used it in his design for DeSingel. At the same time, I looked to contemporary works by Malevich and Mondrian for inspiration.



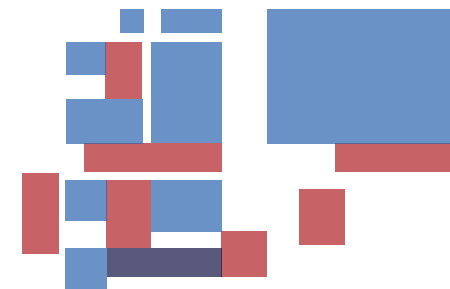
Compositions

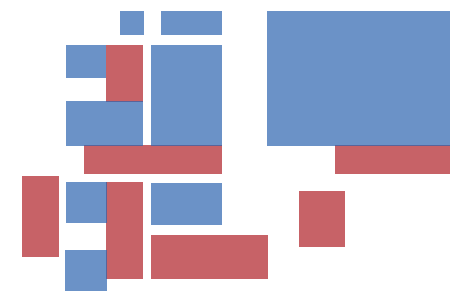
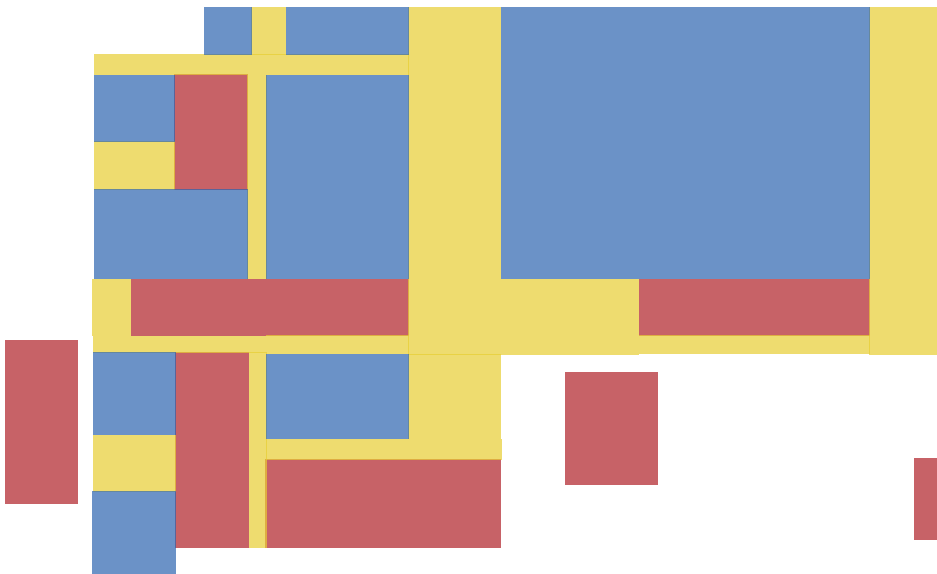
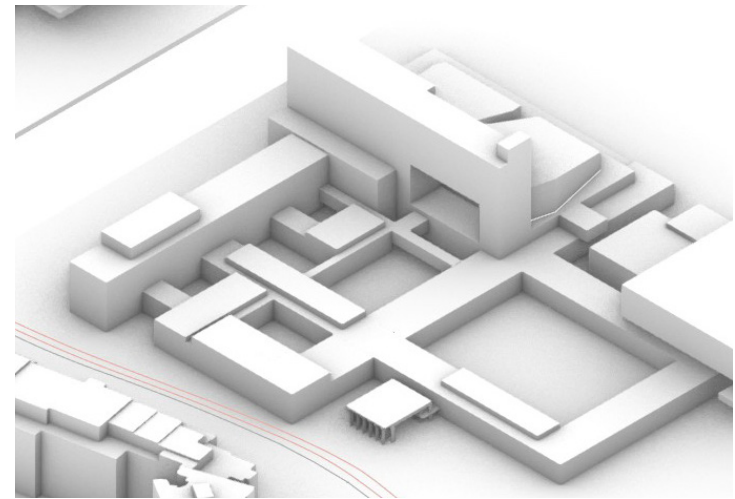
Two different approaches to choosing a composition for the extension based on DeSingel's current composition are shown on the left and right pages.

I separated the structure into three parts: the low rise, the height accents and the courtyards. Based on this, I made an effort to weave a new composition within the one that already existed. My favourite page is the right one.



- Courtyard
- Low height
- Additional height
- Additional height





Self supporting brick facade

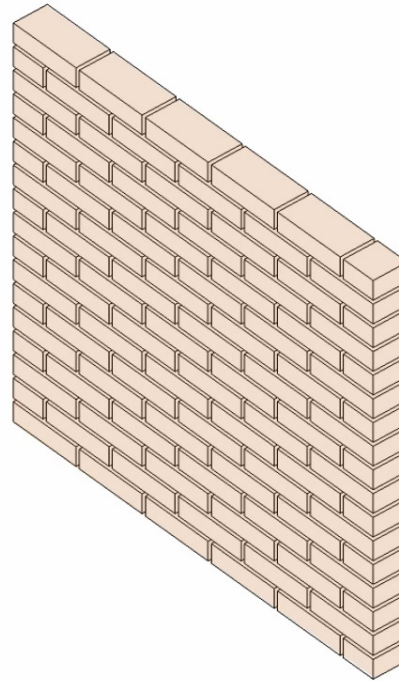
A self-supporting brick facade is characterised due to the absence of lintels, facade supports, horizontal dilatations and the use of very few cavity anchors. The facade consists of a thicker outer leaf, in brick or one-and-a-half-brick masonry with large offsets, reveals and progression over the facade. The masonry is reinforcement in the parapets, there is only cavity anchoring in the junctions of the piers and parapets.

Advantages:

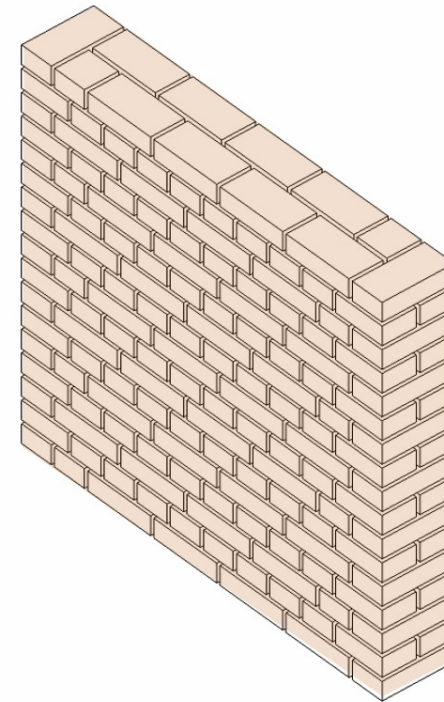
- No use of facade supports or lintels (= less steel)
- Less maintenance
- Prevents linear thermal bridges
- Fully support wind load
- Easier to insulate
- More aesthetic and decorative possibilities in brickwork

Disadvantages:

- 5% higher construction cost (instead of half brick a whole brick outer cavity wall)
- Less favourable ratio gross floor area (2,2%)



Half stone facade leaf



Full stone wall, dnA house



MasterClass Baksteen: Lieven Nijs, BLAF architecten - Big Brick Hybrid Tannat

KNB Koninklijke Nederlandse Bouwk...
173 abonnees

Abonneren

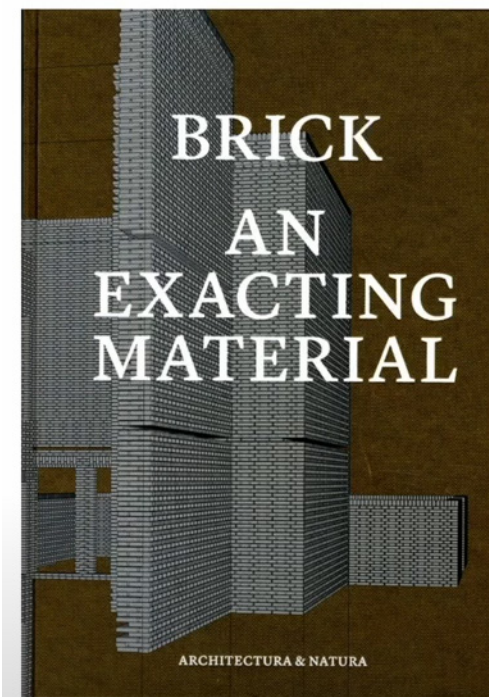
2

Delen

Downloaden

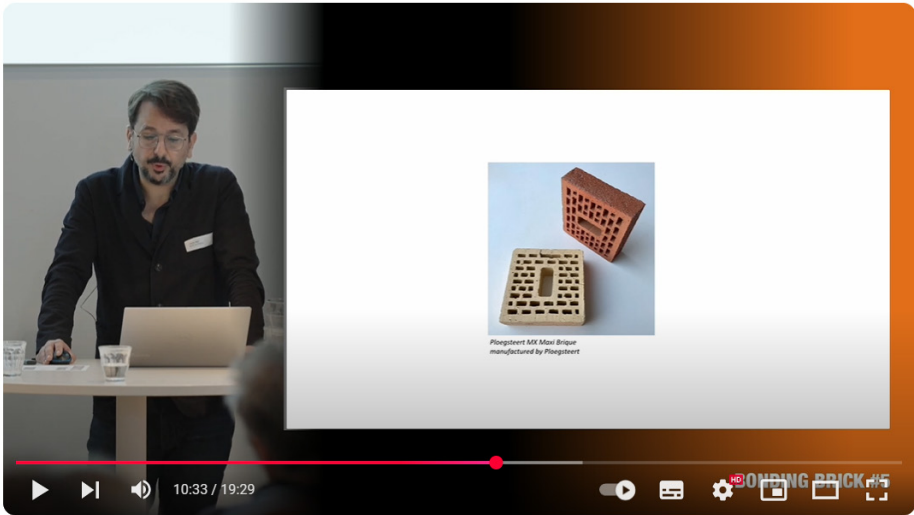
Lecture by Lieven Nijs of BLAF architects
during the KNB MasterClass Brick 2024/
Bonding Brick #5 on September 19, 2024 at

In this book the idea of making facades self-supporting is described using completed cases from the Netherlands.



From which the Brick Beng was written.
Which provides an effective description of the process.

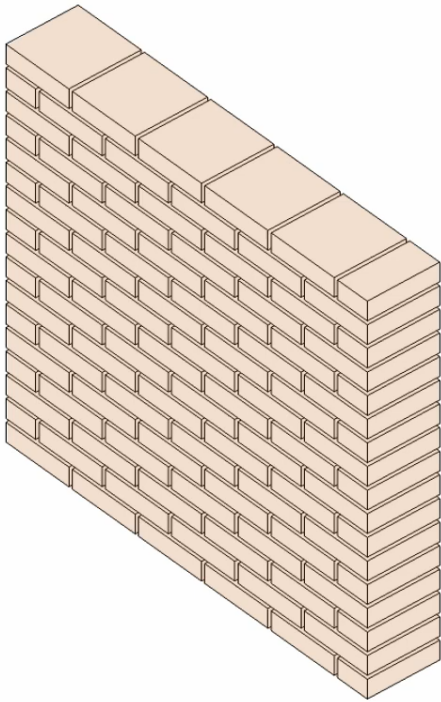




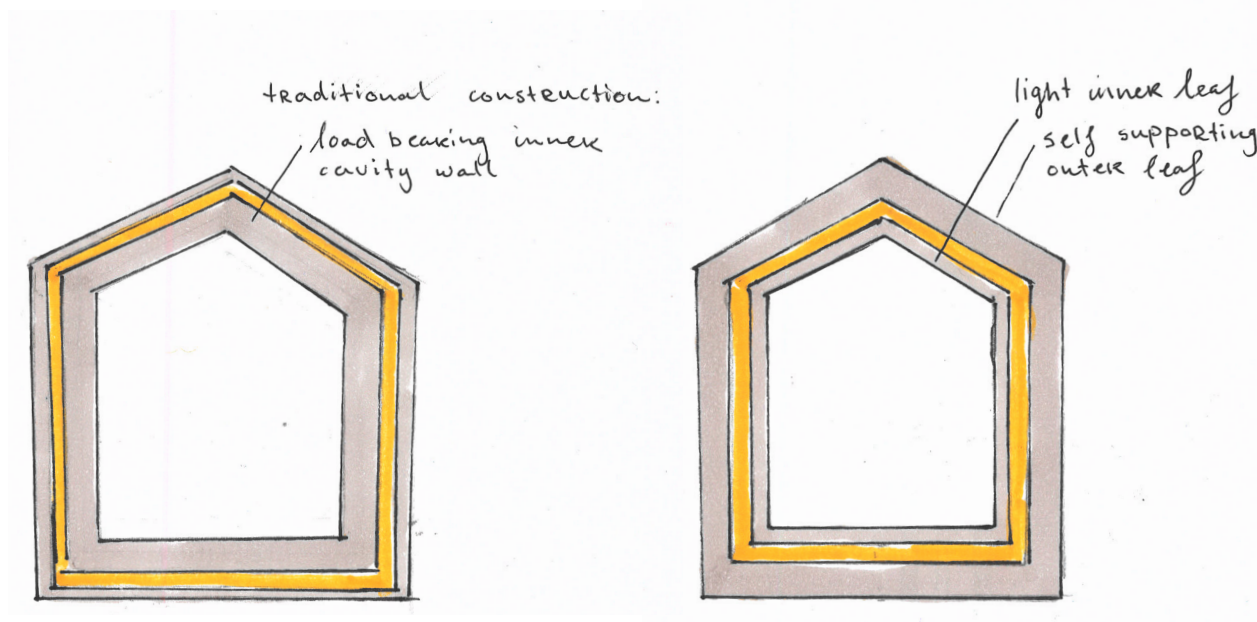
MasterClass Baksteen: Lieve Nijs, BLAF architecten - Big Brick Hybrid Tannat

KNB Koninklijke Nederlandse Bouwk... 173 abonnees Abonneren 2 Delen Downloaden ...

Introducing the Big Brick to reduce labor with the advantages of a full brick wall.



Half stone Big Brick wall



Stable indoor climate due to high thermal mass

Less stable indoor climate, because thermal mass is located on the outer wall.

Reflecting on my research

I talked to Jurjen about my research into cladding the addition with a self-supporting brick facade, which prompted the question of whether an archive and a self-supporting brick facade might work well together. In order to maintain a consistent indoor climate, an archive actually requires more mass on the inside. Which stands in contrast with a self supporting brick facade.

Research Question: Is this a suitable application for an archive building where a stable indoor climate is a requirement?

References for spiral staircase inside square grid



Muoto Architectes, The Innovation Hall

Use of sand lime bricks in interior



Gort Scott Architects, Freehaus, 3 Mills Studios retrofit in East London

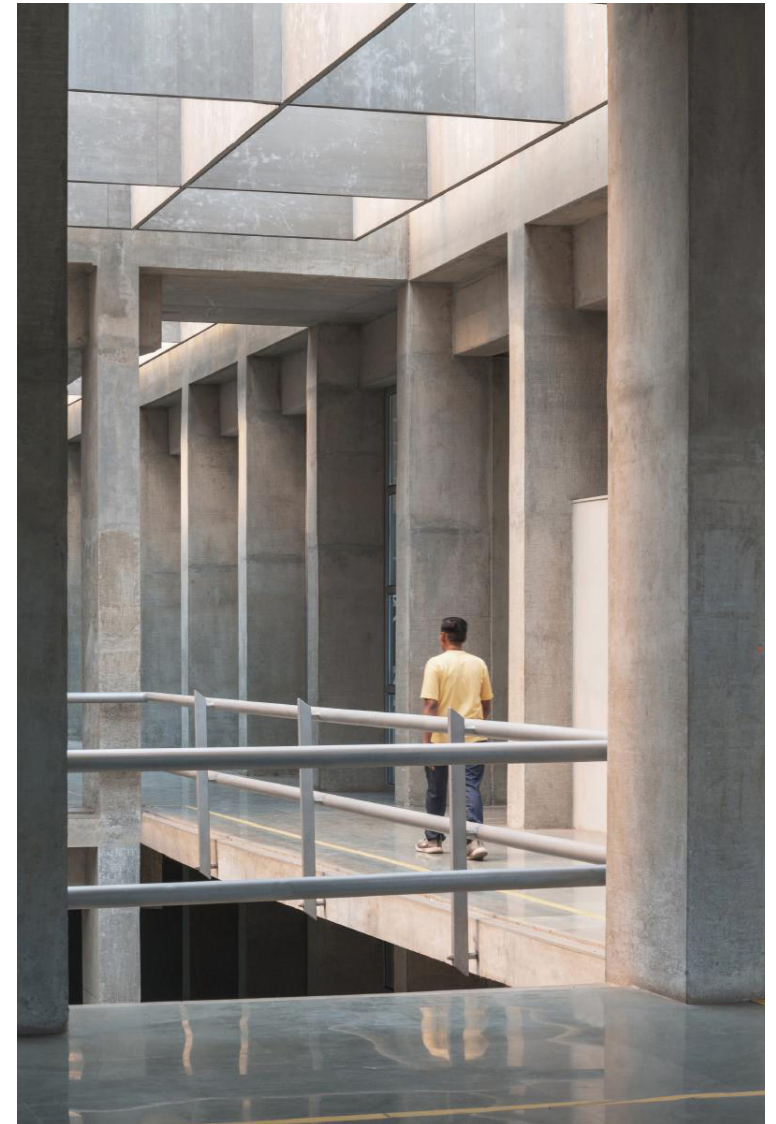


James Gorst Architects, New Temple Complex

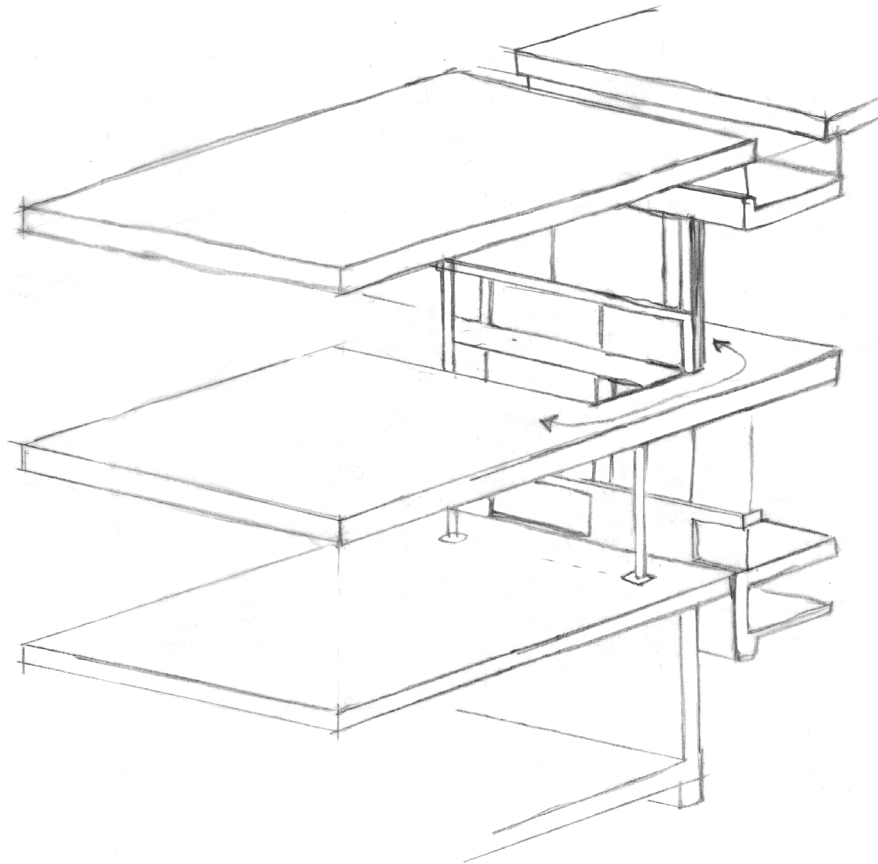
Reference for the facade that exhibits a rigid pattern when it is closed. Within the design of the windows the facade becomes more readable.



IKSOL Mallcom Factory

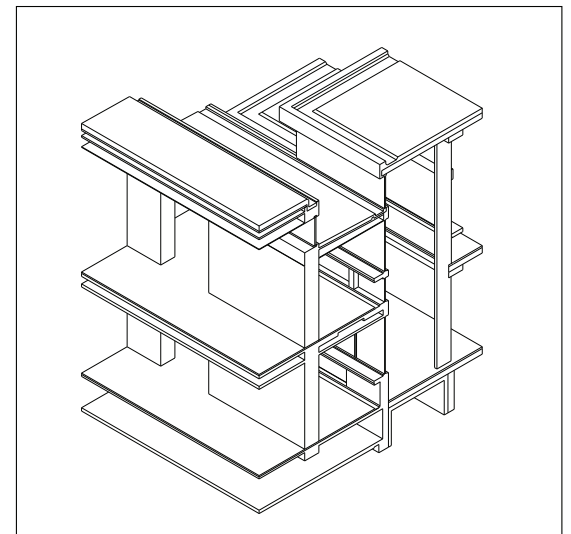
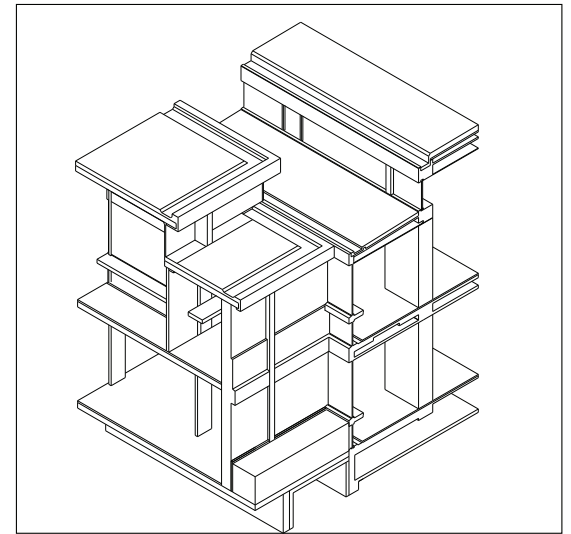
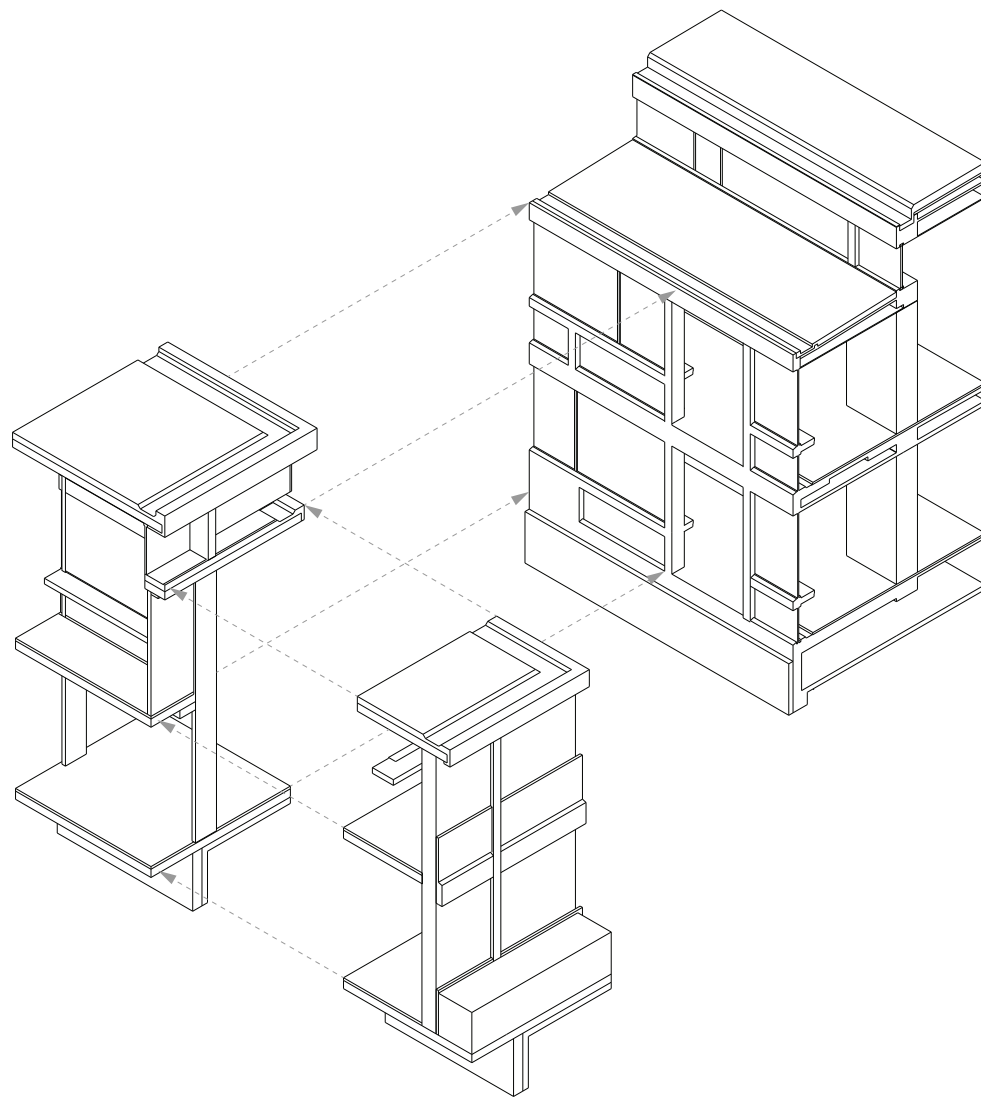


IKSOL Mallcom Factory



Model fragment

From idea to implementation. By constructing a small atrium between the two buildings, DeSingel's facade preserves its proportions while simultaneously establishing a visual link between the ground level and the first story.



Model fragment
the making of...







P3 setup including a 1:200 and 1:33 model























P3 in action

Thoughts after P3

- Iconic 'potato facade'

"... incorporating the 'potato facade' seems to overlook its iconic value."

Although I'm not sure if I agree with this statement, I'll try to see if I can persuade the tutors or try to come up with a solution. What I want to look into is:

- pushing back the extension one grid
- raising the connecting roof
- making the connecting roof of glass

- Gardens

"Your building shapes and differentiates the existing exteriors. The quality of these spaces, the gardens are essential for the spatial experience of the Singel. "

- find references for how I can incorporate the gardens with my extension
- design!
- What will the expression be of each individual garden?

- Expression of new building

"What expression do you give the building?"

- can I try to deviate more from the existing architectural style of Stynen?
- be more confident to express my own style!

- Key elements

"It is important to be able to state the key concerns of your project in a few sentences. This includes being able to show where the main programmatic elements are and what they hierarchy might be"

I made diagrams for the P2 presentations which I should have shown at the P3 presentation. F.e.

- where the archival elements are, additionally show how they differentiate
- circulation routes, especially show how archival material arrives and show how my new axes solve circulation issues.

- Facade

"How do you differentiate between archival spaces and working spaces (daylight)?"

I need to finish determining facade openings and closed parts in 3D.



“What will the expression be of each individual garden?”

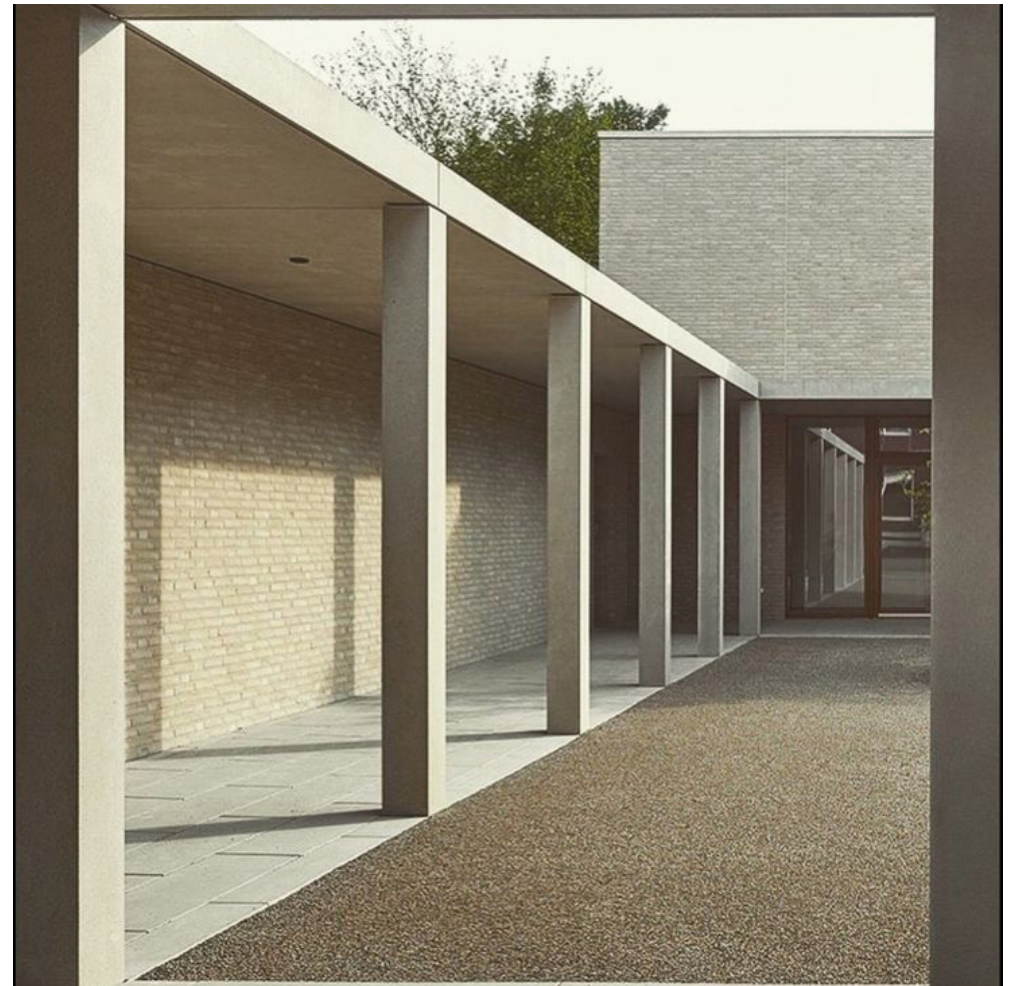


P1 model

Office Jos Bedaux, Goirle



Cobbenhagengebouw, Tilburg



Unser Lieben Frauen, Völlmar Architectur

Priorities

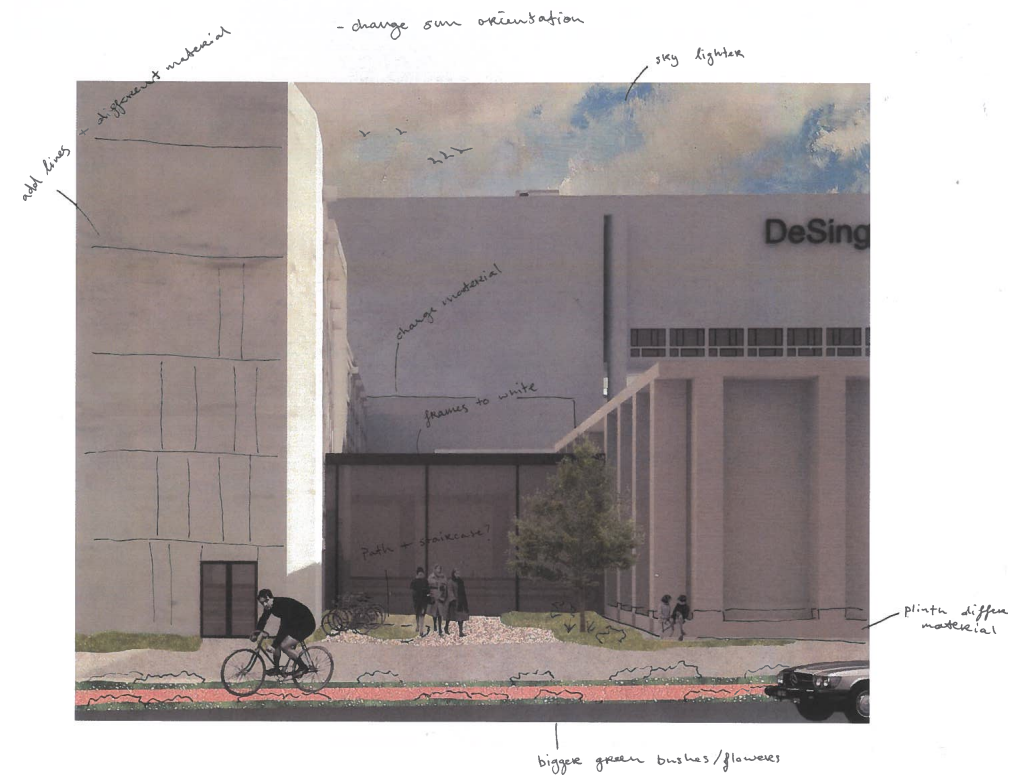
After the P3 presentation, I struggled to prioritize my next steps. Although I had a general idea of the tasks ahead, I found it difficult to determine what needed to be addressed first. At some point, I discussed my concerns with Susanne, explaining the difficulties I was facing. She helped me realize that my first priority should be to define the expression of the front façade.

There were still unresolved connections to the existing building, as well as uncertainties regarding the materialization of the new structure, which I had not yet visualized. Based on this, I decided that developing clear visuals would be essential.

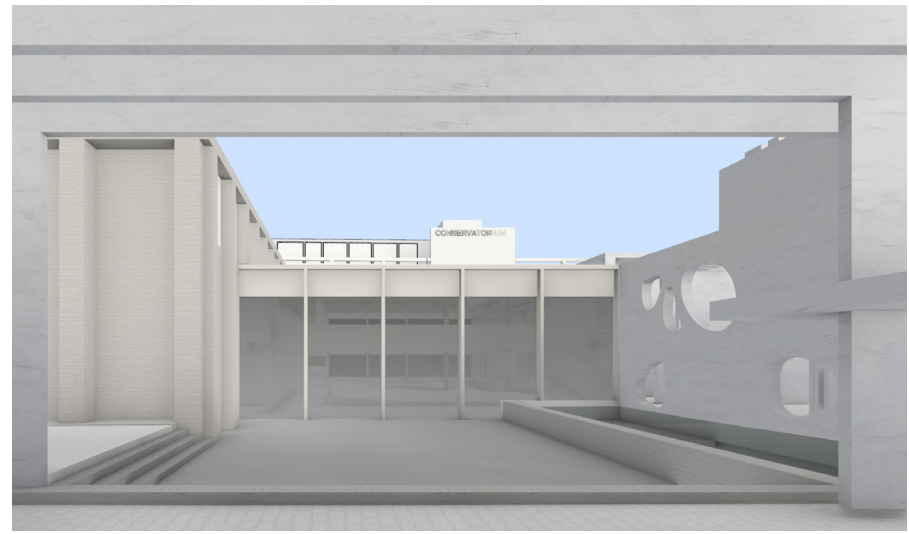
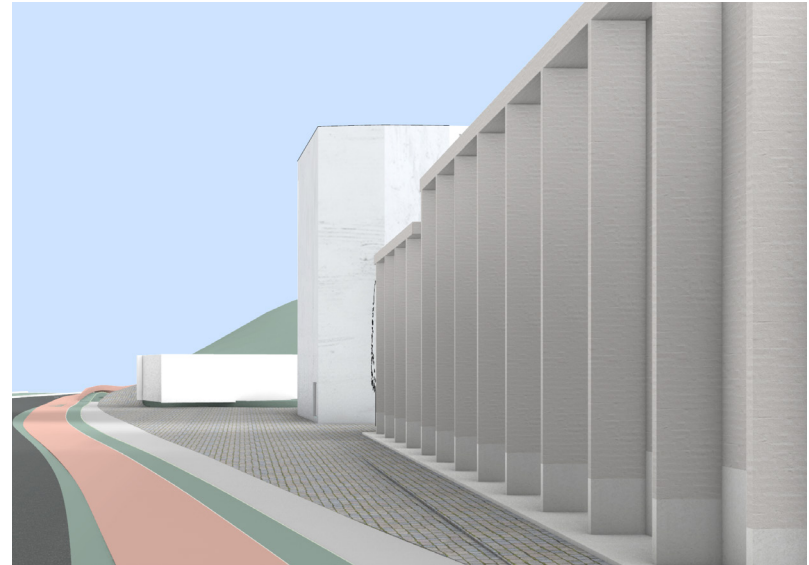
In the following images, you can see some initial developments of the 3D model (which is still a work in progress).

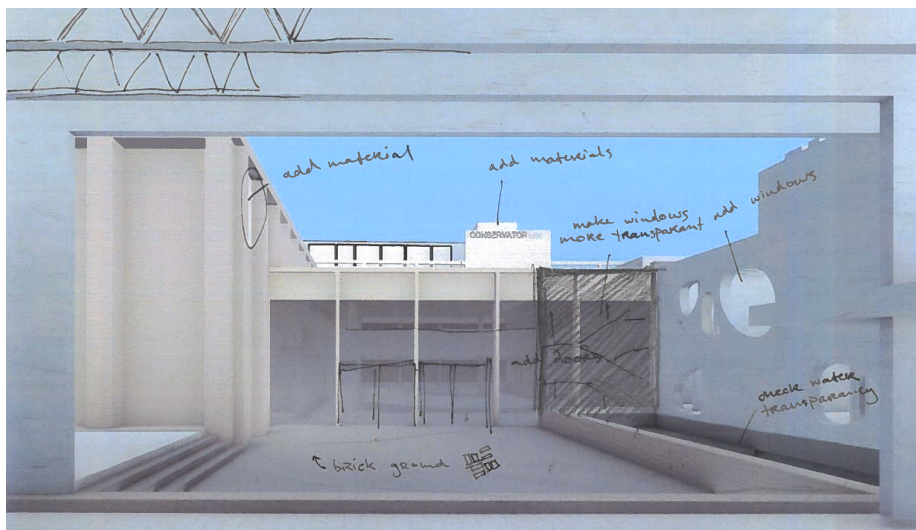
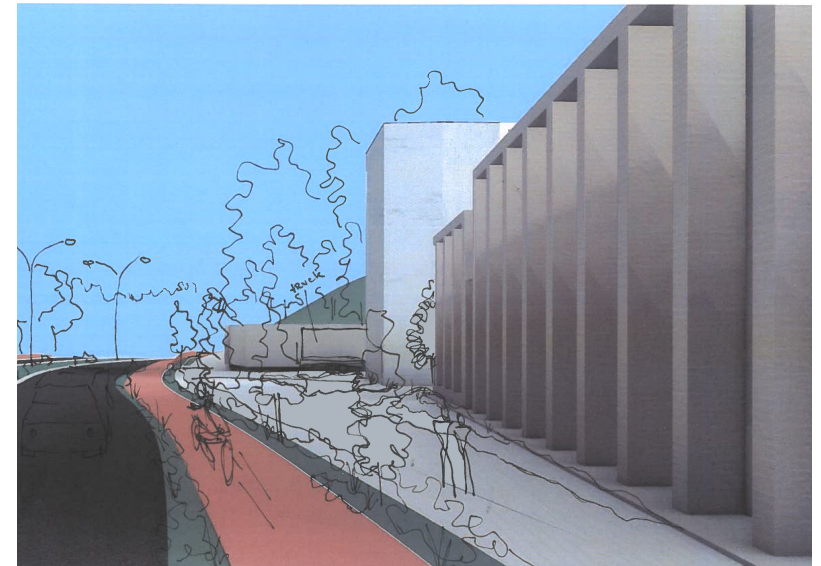
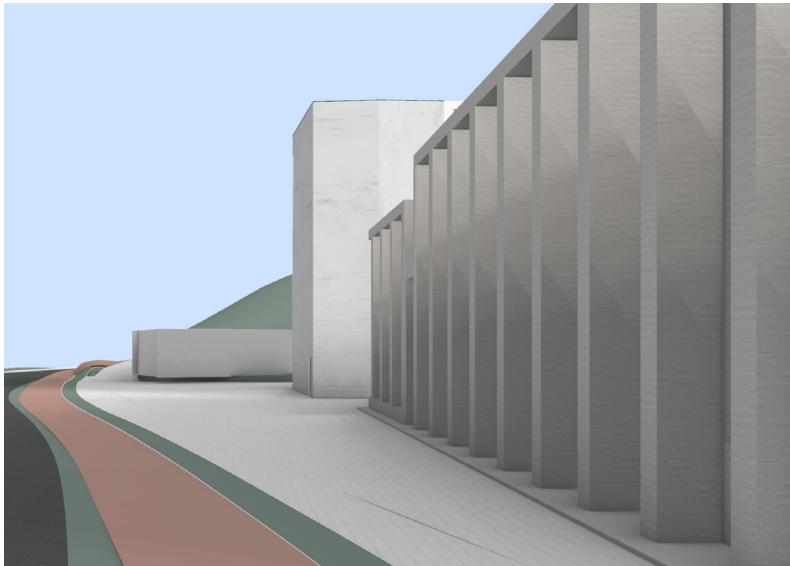


With this visual I am trying to figure out what kind of expression this pocket square has in response to the city. As it's adjacent to the busy Singel road, I don't imagine it as a recreation area. Alternatively, I believe it may be used as a rear entry for the Conservatory students, who already use this area to enter the refectory. By tending to their needs by f.e. adding bike stands this could become a sort of secondary entrance. Adding to the permeability of DeSingel.



I reinforced the brick façade by giving more weight to the columns, while volumes that act as connectors are designed as lighter elements with thinner columns. In this way, the expression of the building becomes a combination of two architectural languages.





I've been having trouble with how my new façade connects to DeSingel's existing façade, particularly where it joins the potato façade in this corner. I came to the conclusion that closing this corner would preserve the facades iconic value. The only drawback is that you will no longer see the staircase behind it. But maybe this isn't that awful?



Additionally, I've been attempting to determine what my openings in the façade be like.

Anna Klaver

Van: Koen Mulder
Verzonden: zondag 27 april 2025 13:17
Aan: Anna Klaver
Onderwerp: RE: Hulpvraag - toepasbaarheid zelfdragend metselwerk bij archief functie

Hoi, afgelopen week was een beetje erg druk.
 Je zou deze week donderdagochtend kunnen aansluiten bij de groep van Hentage waarna ik les geef.
 We zitten dan aan de westzijde naast het kraaiennest, boven de bibliotheek.
 Voor een archief zou ik toch denken aan ook een zware binnenconstructie, vanwege de grote belastingen en vooral ook vanwege het constante klimaat.
 Ik heb eventueel de bouwtekeningen van het stadsarchief van Delft, van Winhov wel voor je.
 Dat is toch vooral een stevige betonnen doos, met een op de plintrand zichzelf dragende metselwerkgevel - die wel nog voor de windbelasting plaatselijk afsteunt op de achterliggende constructie.

Hartelijke groet,

Koen Mulder

From: Anna Klaver <A.J.Klaver@student.tudelft.nl>
 Sent: Tuesday, 22 April, 2025 11:58
 To: Koen Mulder <K.B.Mulder@tudelft.nl>
 Subject: Hulpvraag - toepasbaarheid zelfdragend metselwerk bij archief functie

Beste Koen Mulder,

Ik ben op zoek naar jouw expertise en advies over de toepassing van zelfdragend metselwerk in combinatie met een archief functie. In het bijzonder vraag ik mij af hoe dit constructieve principe, met vaak een licht binnenblad, zich verhoudt tot de klimaattechnische eisen van een archief, waarbij juist een stabiel en thermisch traag binnenklimaat noodzakelijk is. Zo u mij hierin kunnen adviseren, of wellicht eens met mij willen meedenken?

Momenteel ben ik bezig met mijn afstudeerproject binnen de studio Interiors, Buildings, Cities. In deze studio werken we aan de opgave voor een nieuw onderkomen van het Vlaams Architectuurinstituut (VAI), waarbij het programma van het architectuurarchief wordt geïntegreerd in een uitbreiding van het bestaande gebouw DeSingel in Antwerpen.

Voor mijn ontwerp onderzoek ik de mogelijkheid om een zelfdragende metselwerkgevel toe te passen als uiterste schil van het gebouw. De keuze hiervoor komt voort uit mijn fascinatie voor de robuustheid en duurzaamheid van dit geveltype, zonder overbodige techniek of opsmuk. Het metselwerk draagt op die manier bij aan een zekere monumentaliteit, die volgens mij past bij de architectonische waarde van DeSingel. Daarnaast biedt metselwerk als materiaal ook ruimte voor meer esthetische toepassingen die het nieuwe deel herkenbaar maken.

Tegelijkertijd realiseer ik me dat deze techniek constructief en thermisch niet zonder meer aansluit bij de eisen van een archief. Vaak wordt het gecombineerd met een licht binnenblad, waardoor de thermische massa zich aan de buitenzijde bevindt, terwijl je bij een archief functie juist zou willen sturen op een zwaar binnenblad en stabiele binnentemperatuur.

Zou je me hierover advies kunnen geven, eventueel tijdens een kort overlegmoment (op locatie of online)?

Bij voorbaat dank voor je tijd en ik hoor graag of je iets voor mij zou kunnen betekenen.

Final thoughts on the brick facade

Returning for a moment to my proposal for a self-supporting brick facade. I spoke with Koen Mulder, a tutor at the faculty and a brick specialist.

He confirmed my doubts about implementing a self supporting brick facade in combination with an archive. I therefore decided to stick with a halfstone brick exterior, which differs from the concrete in texture but just reflects the white appearance of DeSingel.

Making of the P4

While making the P4 presentation I had to go through some old pictures. Some of which I documented in here.



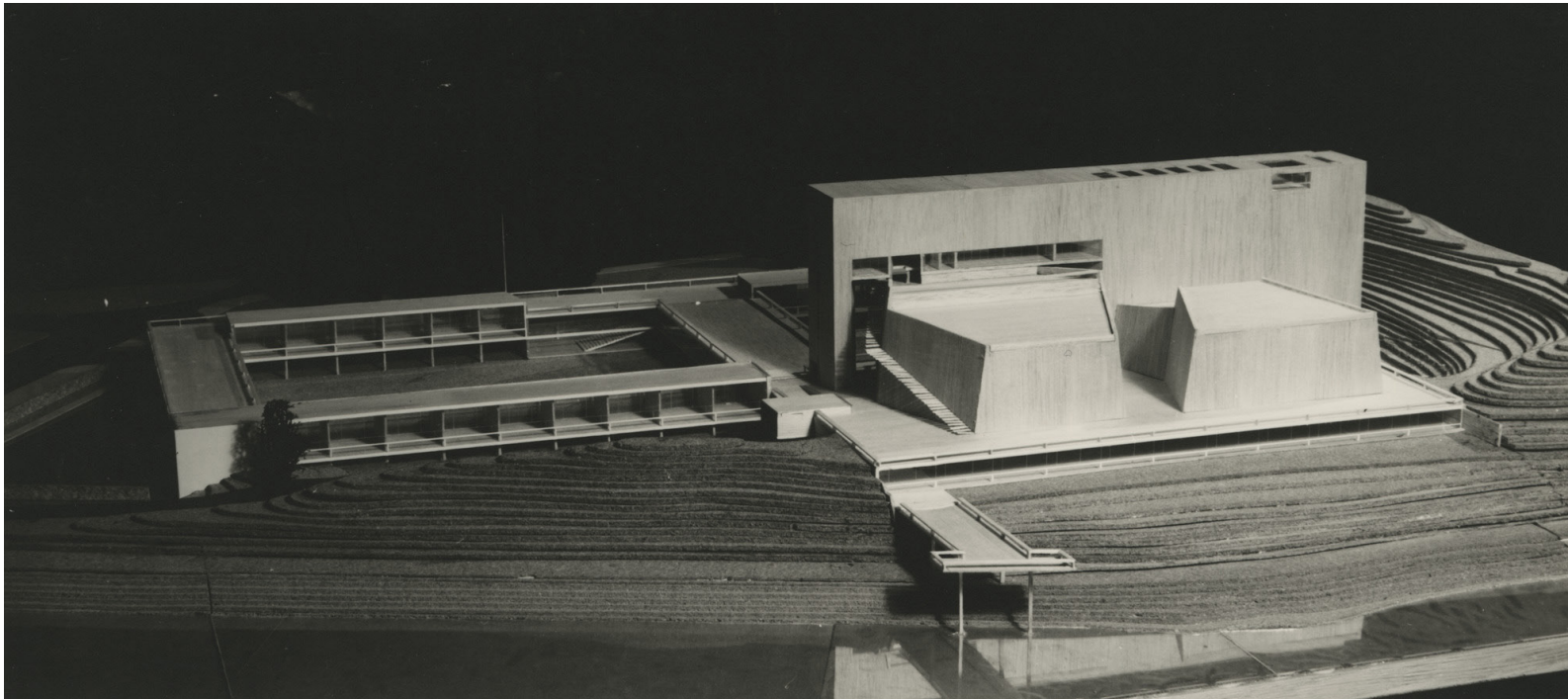
Stumbled upon this picture of special DeSingel wheelchairs. It stands in such strange contrast to the building itself, which has high ramps everywhere and isn't wheelchair accessible at all.



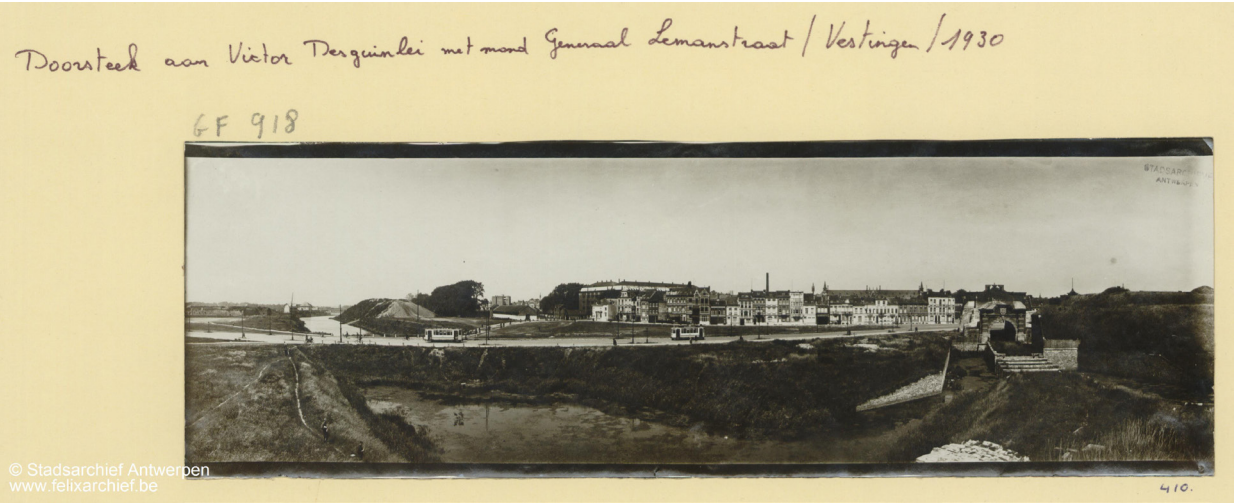
How can the VAI plug into DeSingel?



The modularity of the entrance staircase



Upon revisiting this image after some time, I became fascinated with Stynen's design of DeSingel within its landscape. He designed this footbridge with a view of the moat, for instance. The fact that it now overlooks the periphery instead is such a stark difference.



Side quest

In order to prepare for my P4, I searched for an old photograph that would depict the site and scenery prior to DeSingel's construction. I got a little bit lost in the history, and learned new things about the area. The photos are all from around 1932. The majority depicting landscapes following the dismantling of the 1930 World Exhibition.

It was the picture on this page that was chosen for the presentation. The description is as follows:

"The fortifications and grounds of the 1930 World Exhibition on the Jan van Rijswijcklaan from the Kolonielaan (now Camille Huysmanslaan) to the Desguinlei (right). In front the remains of the Wezenberg. From the ramparts at the Desguinschool."

The Wezenberg is where DeSingel is located now. The hill next to DeSingel shows the remnants of it still.



What found so interesting is the Desguinschool in the back of the picture which used to be the dressing room the Olympic pool. This Olympic Pool was build for the Olympic Games of 1920 in the moat of the Brialmont ramparts. After the Games the pavilions were reused as the Victor Desguinschool. The school was later on demolished during the construction of the Ring, 1966.

magazine.antwerpen.be

Another fascinating fact: "The name Wezenberg ultimately derives from a small mountain on the location of the De Singel Arts Centre. Due to the abundance of shrubs, it was a well-liked spot for romantic lovers to meet at the time."

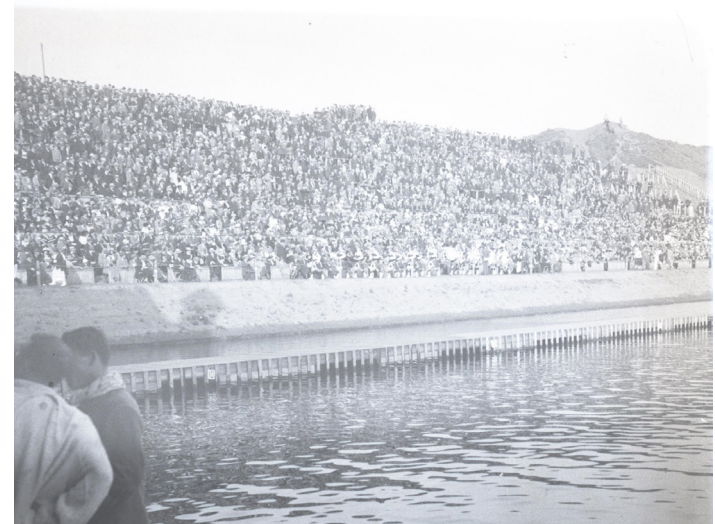
www.gva.be



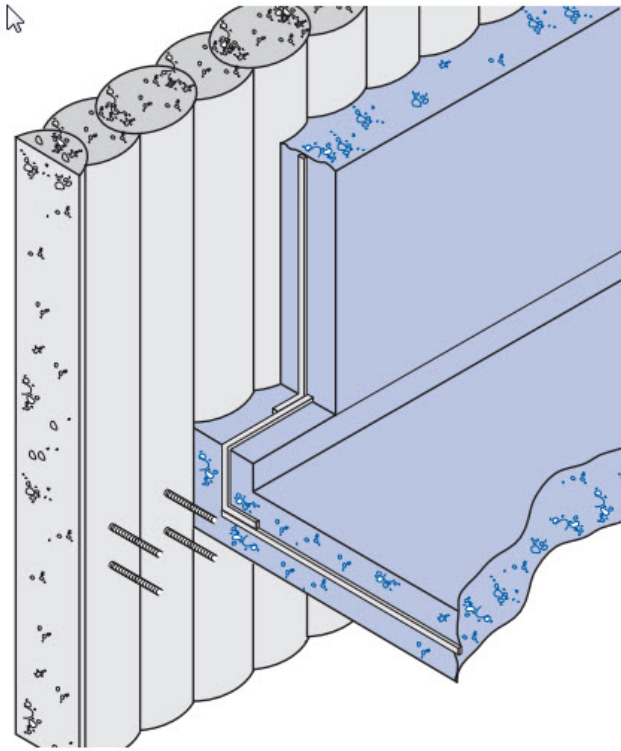
The Olympic pool built for the Olympic Games of 1920



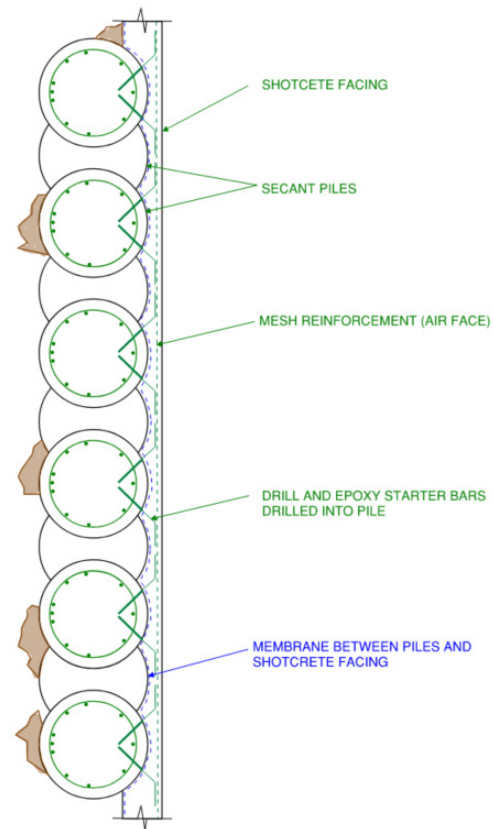
The Olympic pool, with the changing rooms on the left



Seats were placed on the slope of the rampart.



Adprufe 100 integrally waterproof concrete with secant piled retaining wall

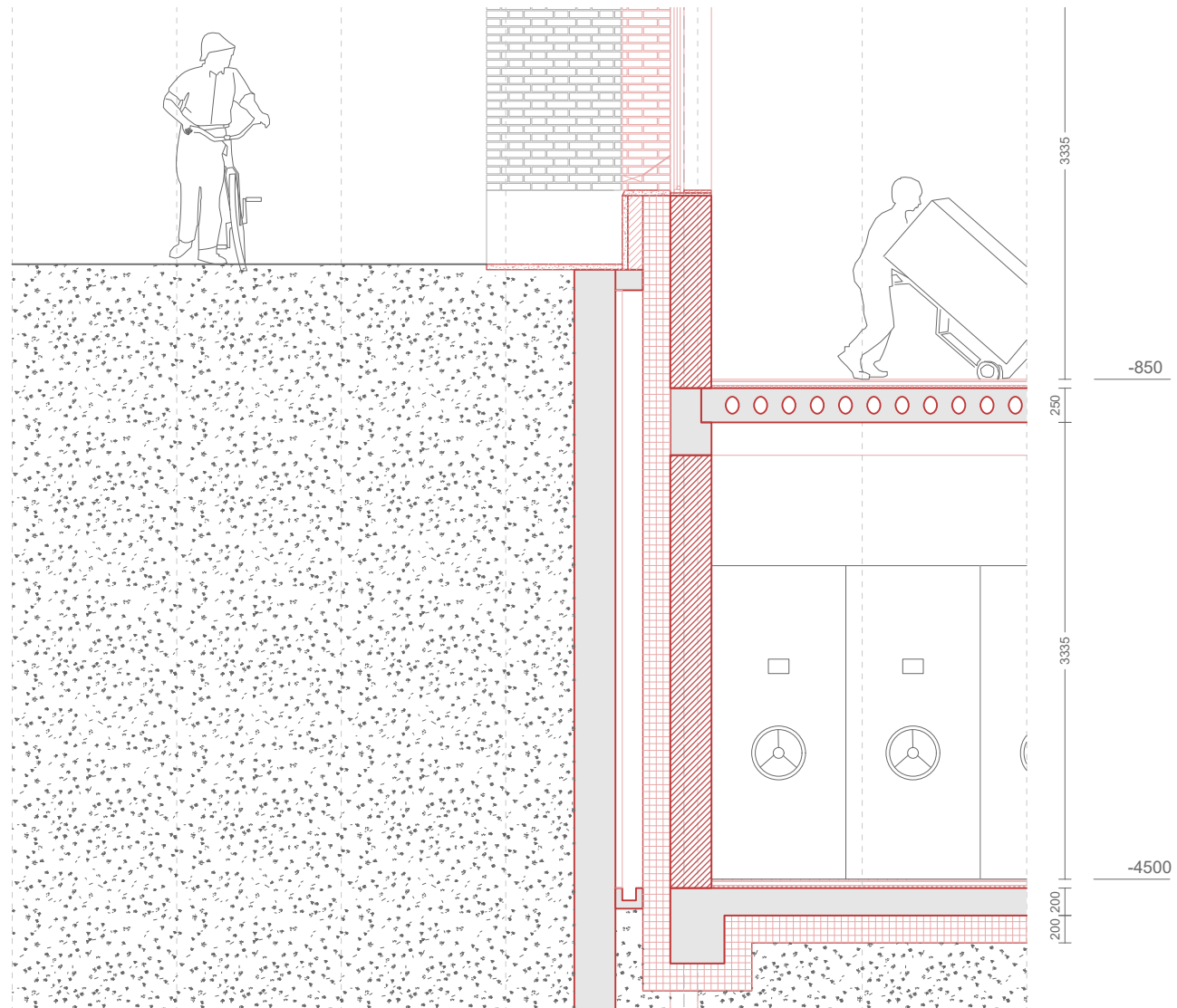


Construction

After speaking with Mauro, he suggested that in order to keep the ground from collapsing around DeSingel, I should design secant/auger piles for my construction.

Before realising that I needed to construct a second construction wall, I attempted to find a means to insulate this wall. This ultimately wasn't too hard because I could utilise sand lime bricks in the same way as the rest of my project. I now had a layer of secant piles between the sand lime brick and the dirt for protection.





Notes P4:

"You speak about your project in a very natural and authentic way. It comes across as grounded and sensitive, which makes your intentions accessible and convincing. The images from the courtyards are beautiful. The way these spaces relate to the interior is compelling. This feels like a core strength of the proposal and could be emphasized even more.

The narrative of public access, however, is not yet fully clear. How does your intervention alter the perception of the Singel as a whole? What does the visitor experience when entering the new VAI wing, and at what point do they know they've arrived? By bringing the public layer down to the ground floor, you effectively reposition the VAI at eye level, rather than elevating it. This is a strong conceptual move. Are the existing and new networks interwoven, or do they remain distinct systems?

The building seems to work best from the inside out. The street façade, especially the front corner, is less convincing. The volume feels somewhat bulky and unrefined. Could the building respond more subtly to its urban context – perhaps by picking up on the angle of the neighbouring structure in the direction of in the tectonic of the facade?

With regard to the technical aspects, there's still some work to do. The detailing is still a bit thin, with issues such as thermal bridges. It would also strengthen your proposal to develop a material narrative that ties back to your core arguments for the project."

Thoughts after P4

- Courtyards

I'll need to try to include these green spaces more in the narrative or reconsider the order in which I deliver them. Additionally, I will attempt to include my models that highlight these green areas.

- Public access

The concept of lowering the public layer to the ground floor is quite apparent but it might be further developed inside the building plan. I feel like the next best public area is currently too far away from the entrance space/bookshop. Moving the exhibition area to the ground floor would allow visitors to interact with another public VAI place more directly.

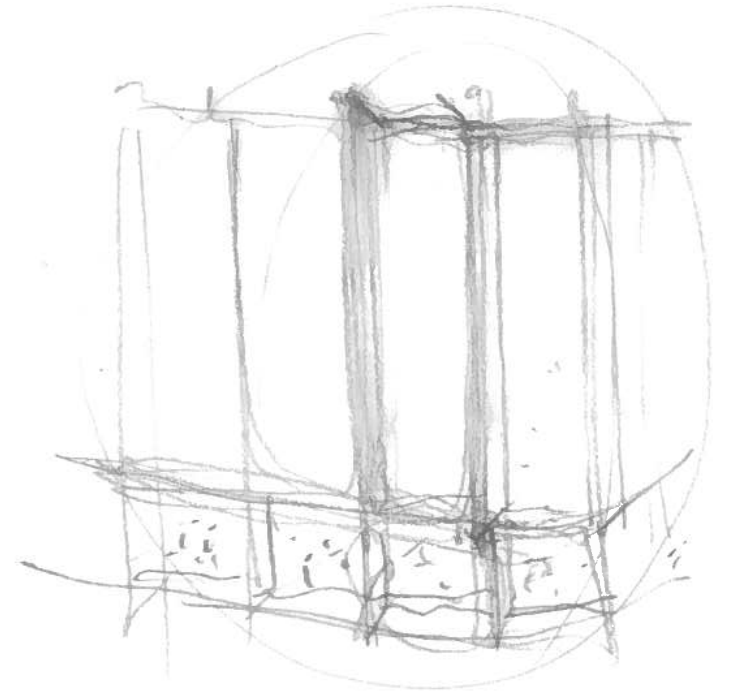
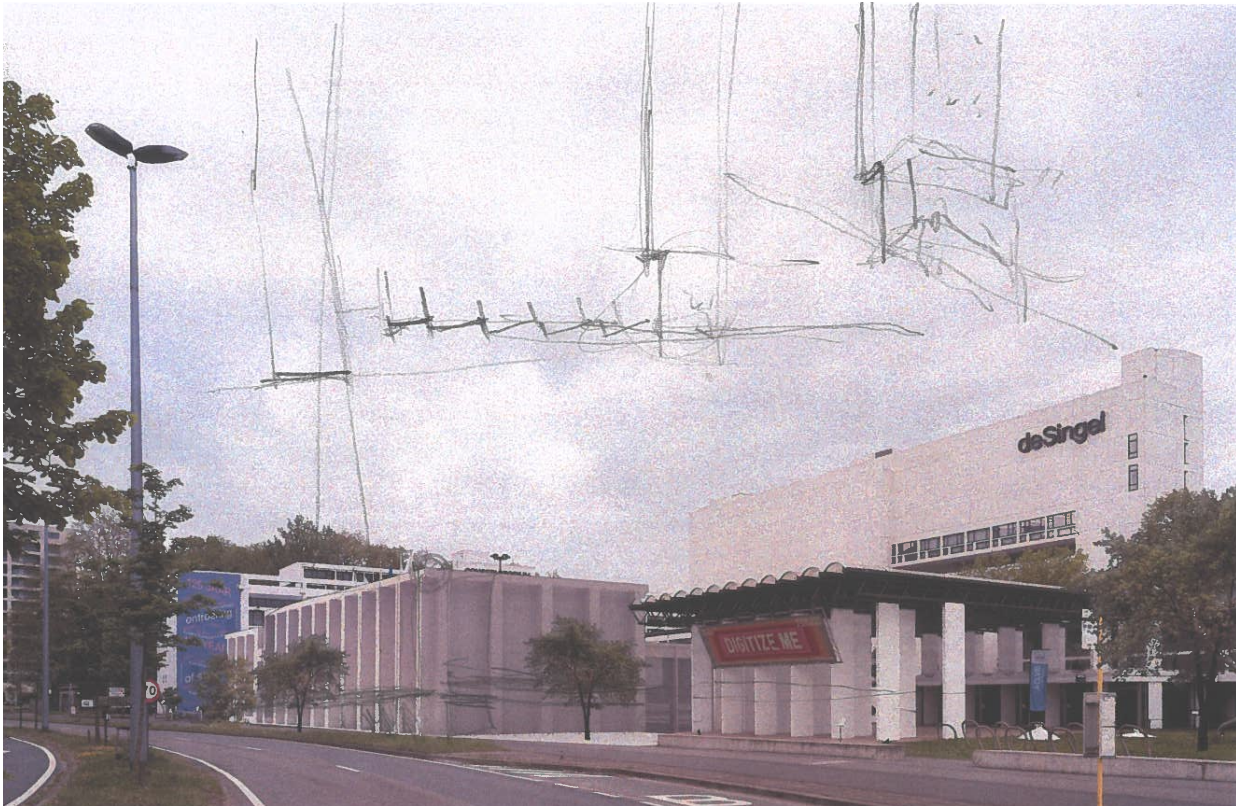
- Street facade

Having previously struggled with the front corner and street façade, I suppose this will be the most difficult challenge. I understand that the brick façade is overpowering and that I should concentrate more on interaction with ground-level pedestrians.

- Technical aspects

I'll check in with Elina as I'm developing the new façade to talk about what details need to be improved.

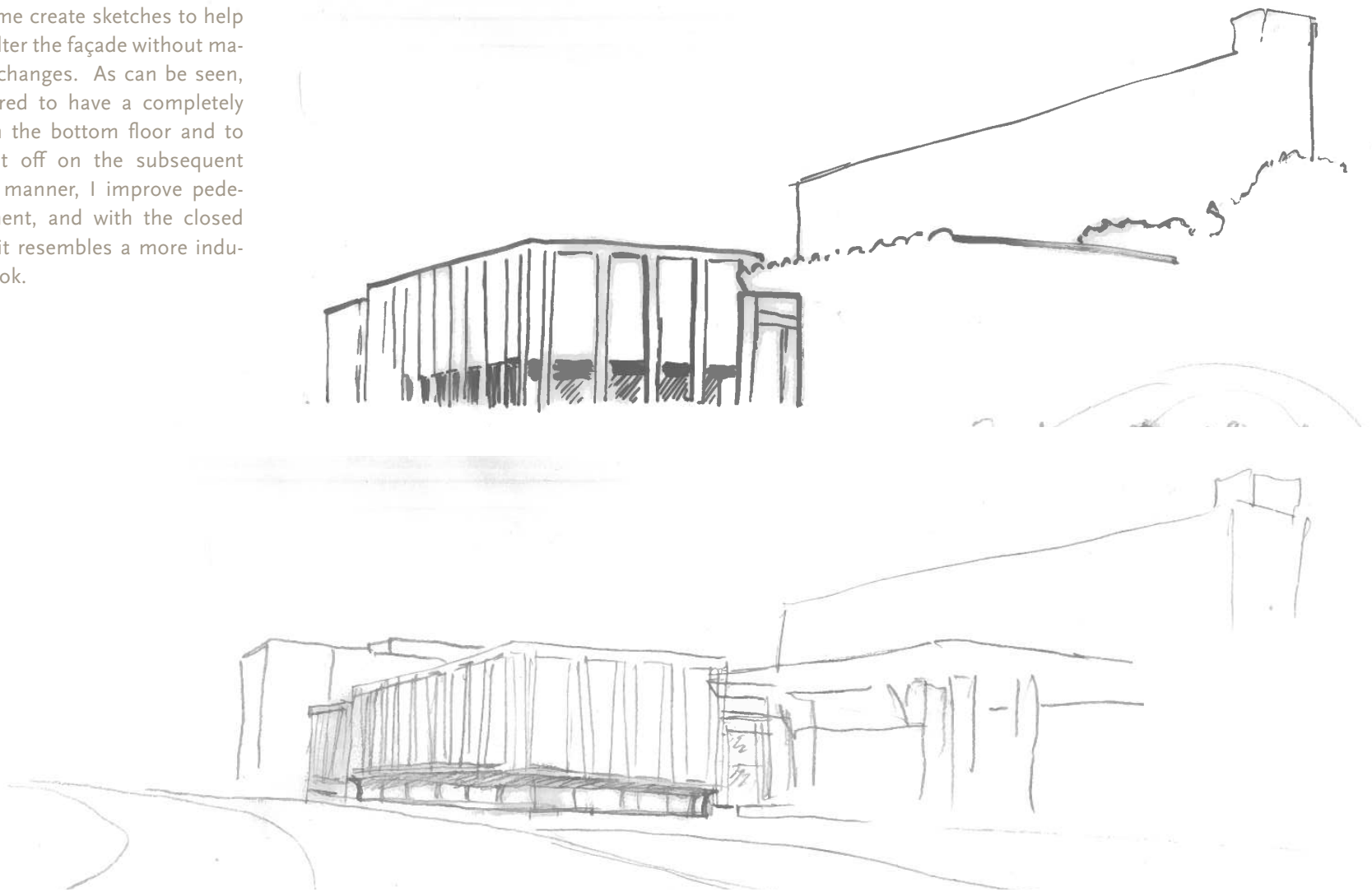
I believed that my material narrative and my main points were already sufficiently entwined, but perhaps this is not enough. I will therefore need to consider ways to improve it even further.



Street facade

A scanned-in image of the bulky front corner façade. I created this visual for the P4, even though I wasn't happy with the result, I felt compelled to include it in my presentation to spark up a conversation. On top of this image, Susanne's sketches offer various facade recommendations to explore.

Maksik helped me create sketches to help decide how to alter the façade without making too many changes. As can be seen, the idea appeared to have a completely open façade on the bottom floor and to entirely cover it off on the subsequent floors. In this manner, I improve pedestrian engagement, and with the closed façade on top, it resembles a more industrial silo-like look.





Lahznimmo Architects, museum discovery centre



Renzo Piano, Morgan library & museum

Akademie der Künste, Berlin



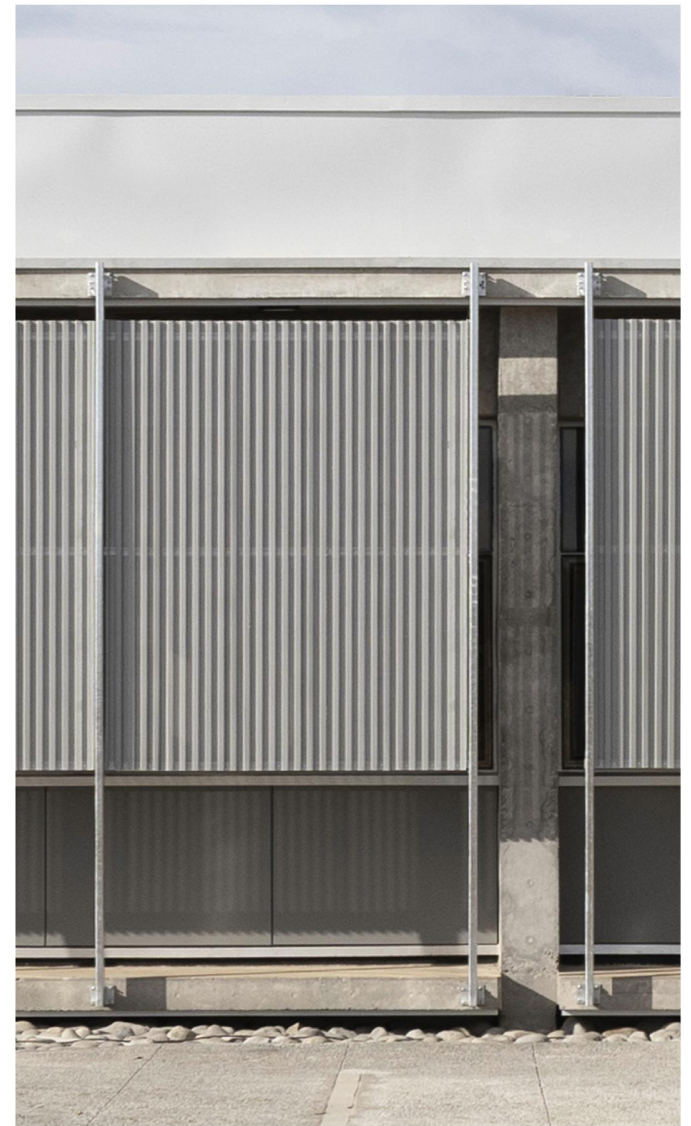
References

First, let's look at references for the facade. Located on the left page, references which I previously mentioned in my project journal. Tying back to ideas I had before about my proposal. On the right, new suggestions for a lighter roof structure, an open ground floor, or a more industrial appearance can be seen.

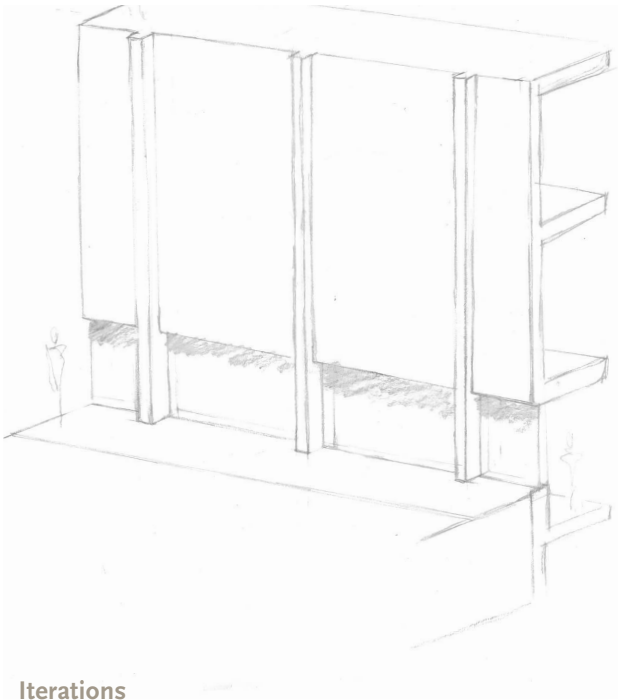
Rabštejn cultural center, Kosteletk



Karljosef Schattner, episcopal archive building, Germany

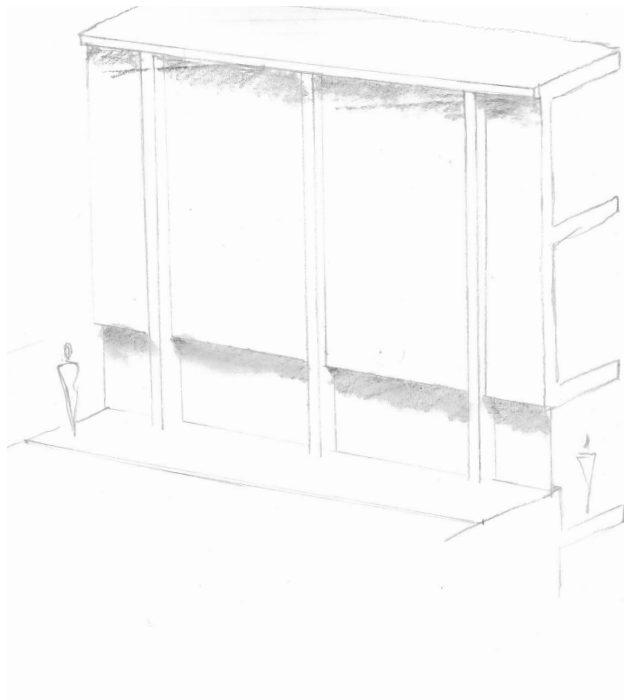


Cristian Berrios Architects, APS building

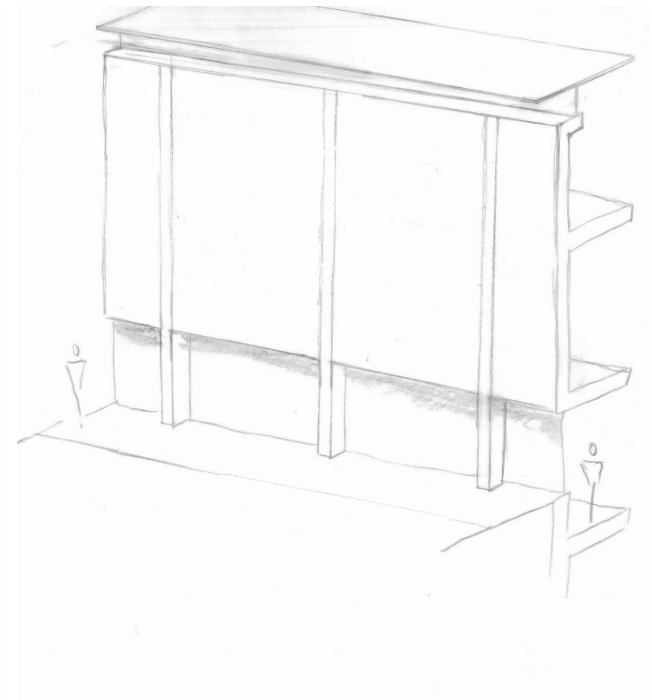


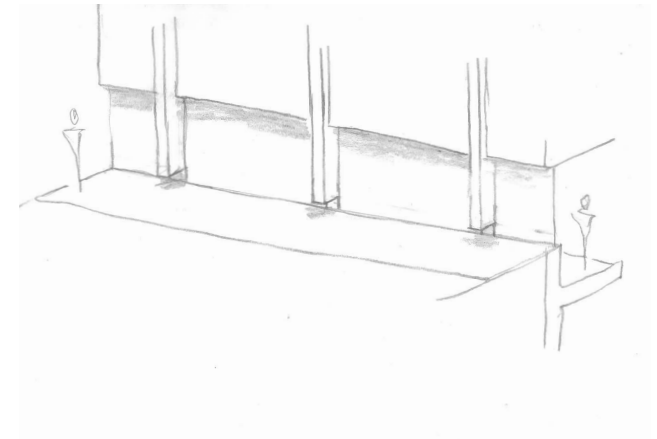
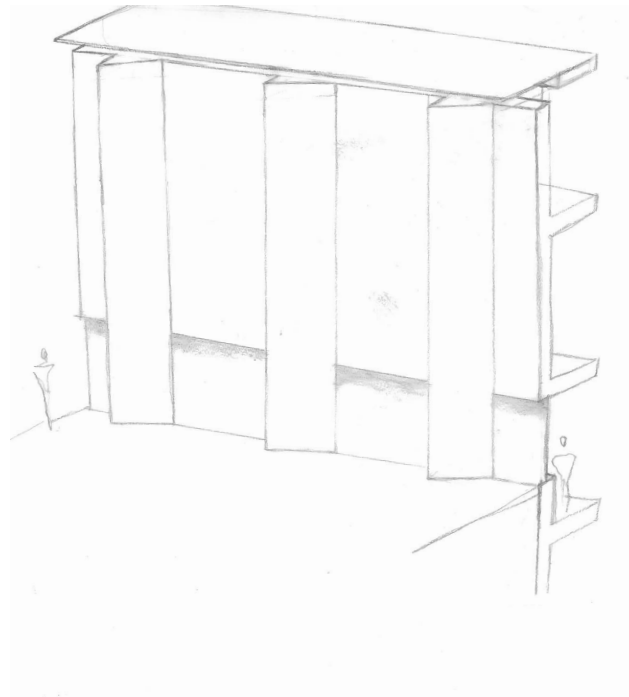
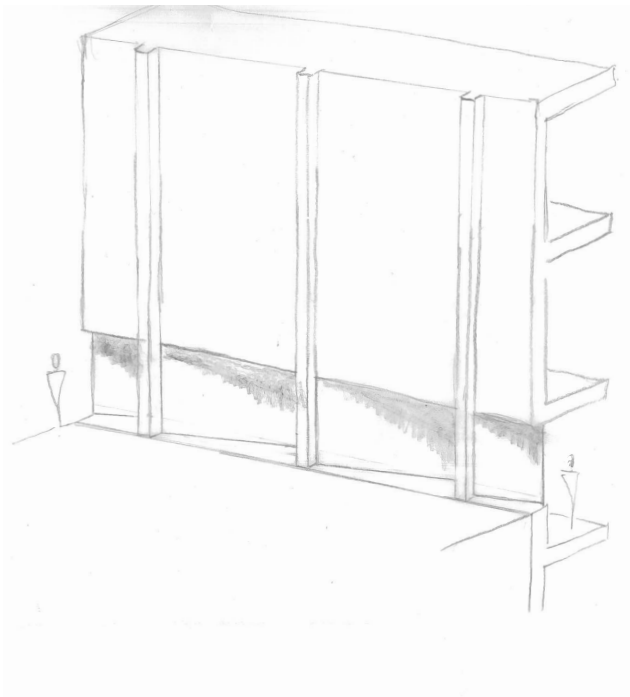
Iterations

Trying out different iterations all with thinner pilasters, trying out different roof finishings, and trying out rotating the glazing or pilasters reflecting the rotation of



the neighbouring addition of DeSingel. As well as adding floating pilasters like the columns on the balcony on the other side of DeSingel.





Reflection

Introduction

My graduation project explores how the Flemish Architecture Institute (VAi), currently split between the DeSingel arts campus and a separate archive depot in Antwerp, could find a unified architectural home. Beyond the practical needs of archival storage and workspaces, the project seeks to reflect the VAI's broader ambition: to be a visible, public-facing cultural institution that fosters engagement with architecture. The existing site of DeSingel, a layered modernist complex with spatial and organisational challenges, offered the perfect context for rethinking how such an institution could grow within and alongside an existing structure.

This project fits within the Interiors, Buildings, Cities graduation studio, under the theme of "Palace." In this context, we were looking at public buildings not as grand, static monuments, but as places that can evolve with society, flexible, layered, and open to different kinds of people and uses. The VAI, being an institute about architecture itself, really pushed me to think about what an archive means spatially, but also what role architecture plays in culture today.

Research and design approach

The process of this graduation began with shared research into contemporary and historical archival buildings. Together with my group, I studied the Beinecke Rare Book Library, to understand the balance between the visibility of curated collections and the necessity of protecting archival material. We discovered that while archival work must be private and strictly climatized, it is still possible, and even desirable, to make glimpses of this work visible to the public. Not only by exhibiting the artifacts but also exhibiting the art of archiving.

One of the first exercises was to design a hybrid archive-workspace. I created a quiet, inward space connected to a green outdoor space, not knowing that this would later become the core idea of my final proposal. It wasn't until a tutor pointed it out, the way I was naturally trying to connect workspaces to outdoor courtyards, that I realised this could become a guiding principle.

I used this idea to reinterpret Stynen's original landscape vision for DeSingel. Where the building once floated above a sloping green terrain, that hill-like landscape disappeared as the city grew and conditions changed. I decided to reinterpret

that original landscape idea and adapt it to the current needs of the VAI, splitting existing courtyards and introducing new ones to form a range of more intimate, specific garden spaces.

Throughout the year, I shifted between abstract compositional thinking and detailed modelling. I learned that by testing one small corner of the building in detail, I could find out something important about the whole. If anything, I wish I had trusted that rhythm earlier, and brought technical and constructional questions into the design process sooner.

Process and feedback

The feedback I received over the course of the studio pushed me to make my project more specific, both spatially and technically. For example, the initial ambition to build entirely within one of DeSingel's courtyards evolved into a clearer, more legible extension towards the front of the site. This change allowed me to address an urban issue: the absence of a clear and civic threshold. By introducing a semi-sunken entrance square and a central junction space, my intervention creates a public "gateway" that helps reorganise DeSingel's fragmented internal circulation.

Another major shift was in the structural strategy. I initially explored self-supporting masonry walls but concluded this was not ideal for the archive's climate requirements. Instead, I adopted a dual construction strategy: concrete and sand-lime brick for the stable archival zones, and timber structure for the lighter, public-facing hallways. This division supports both spatial experience and performance.

Position

Although this project is closely tied to the specific context of DeSingel and the VAI, many of the questions it addresses are widely applicable. Cultural institutions across Europe, especially those housed in aging or modernist infrastructure, face similar challenges: how to remain open and relevant to the public while accommodating increasingly complex and technically demanding programmes. My project explores how an institution that is inherently closed off (an archive) can still offer a public-facing dimension without compromising on its environmental or security needs.

Personal reflection

Before starting this year, I expected graduation to be overwhelmingly stressful. But as the year went on, I found something else happening. The more the project developed, the more I felt the pressure lift. Not because I worked less, but because I began to understand what needed to be done, and what didn't. I learned to see which details needed attention and which could quietly support the whole.

The one-year duration of the studio made a huge difference. It gave me the chance to reflect, to take a step back, and to return to things with fresh eyes. It allowed the project to settle, and for me to feel more satisfied with what I had achieved. That said, this slower rhythm also came with its own challenge: motivation. In shorter projects, I was used to pushing hard and fast. Now, I sometimes struggled to keep momentum. I learned that working on a long project isn't just about discipline, it's about learning how to re-engage.

Another thing I've gained from this studio is a better understanding of how to talk about architecture. Many of the tutors are incredibly good at describing space, clearly, poetically, and precisely. I've always found that hard, especially in a second

language. But listening to them, and to my fellow students, helped me slowly develop my own vocabulary. I still have a lot to learn, but I now feel more confident expressing my ideas, not just with drawings or diagrams, but with words too.

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