

PORTFOLIO

Faber Van Driessche

2025



Faber Van Driessche

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2000 Antwerpen

25/10/2000

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Education

2022 - 2024 Master in Architectural Engineering: KU Leuven
option: architectural design
grade: magna cum laude

2019 - 2022 Bachelor in Architectural Engineering: KU Leuven
grade: cum laude
exchange of six months: Politecnico di Milano

2013 - 2019 Secondary education: Onze-Lieve-Vrouwecollege Antwerpen
option: greek - mathematics

Rewards & Honors

2022 Alumni Engineering Prize of the Faculty of Engineering Science.
The prize rewards the best bachelor project.

2019 - 2024 6 times featured in the yearly "Launch" book of the faculty.

Experience

2023/08 2024/09-12 Extended summer intern at Kaai Design: design furniture shop and interior architects.

2019-2024 Student work: tutoring, administrative work, web design, photographing, graphic design, food courier, …

Extra activities

2019 - 2024 Leader and Group Leader of Scouts Den 2
5 year leader of different ages in scouting
2 year group leader: managing the day to day, finance, special projects and infrastructure of a scouts with over 420 members.

2022-2023: Existenz: responsible for action groep "pr" and "website".
Existenz is a student organisation of the first Master in Architectural Engineering. Throughout the year, we organise various activities, such as lectures and design competitions. The highlight is Existenz Week, in which we breathe new life into an abandoned building through installations and performances.

2021 - 2022 Triplex: year organisation of the third bachelor in Master in Architectural Engineering.

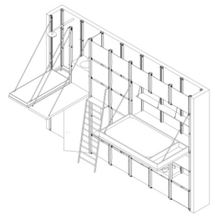
2024 - … Executive board member of the non-profit Scouts Den 2: managing and renovation the properties of the scouts.

2016 - 2017 Setting up and managing "FaLV": designing, making and selling leather hand-made phone case.

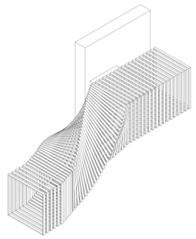
Skills

Fluent in Dutch and English(CEFR: C1). Proficient in French.

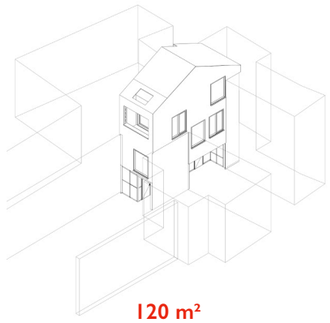
Vectorworks (3D)	+++++
Adobe Suite	++++
Affinity Suite	+++++
Sketchup	++++
Archicad	+++
AutoCAD	++
Matlab (mostly Stabil)	+++
Rhinoceros	+++
Rhinoscript (VSCode)	++++
Grashopper	+++++
Python	++++
QGis	+++
UnReal	+



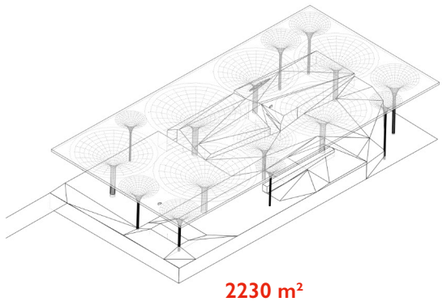
18.5 m²



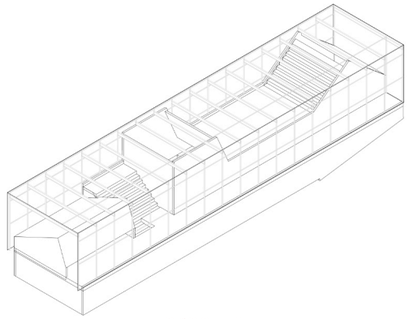
56 m²



120 m²



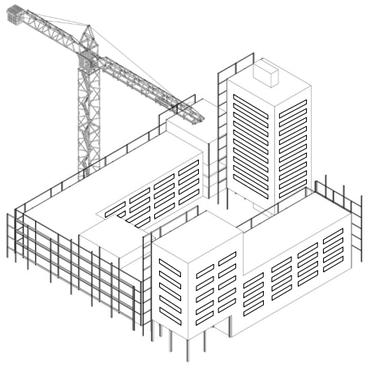
2230 m²



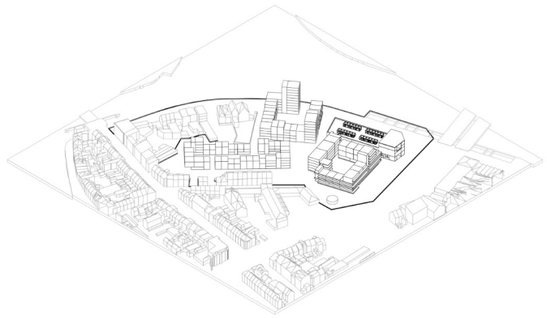
2620 m²



2785 m²

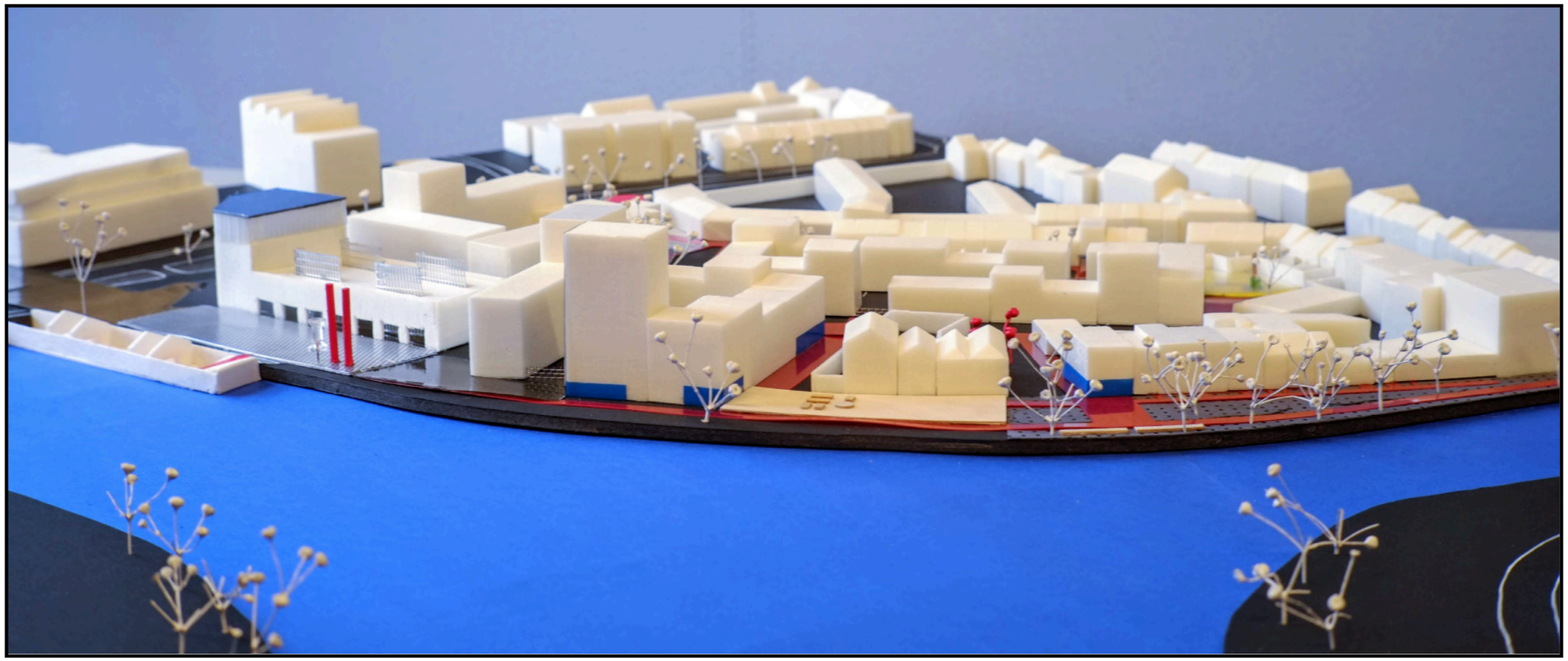


11856 m²



31580 m²

	p.2	**CV**	
		Projects	
31580 m²	p.5-12	2021	OmRand - masterplan
11856 m²	p.13-22	2022	Space & Time - appartement complex
2785 m²	p.23-30	2023	Molens Van Orshoven
2620 m²	p.31-38	2021	Library Haasrode
18.5 m²	p.39-46	2023	Clip it On!
2230 m²	p.47-52	2020	Symbiose
120 m²	p.53-57	2020	Little Beguinage
56 m²	p.58-60	2019	The Twist
		Academic Projects	
	p.61-64	2023 - 2024	Master thesis - Architectural robotics in digital fabrication



OmRand - masterplan

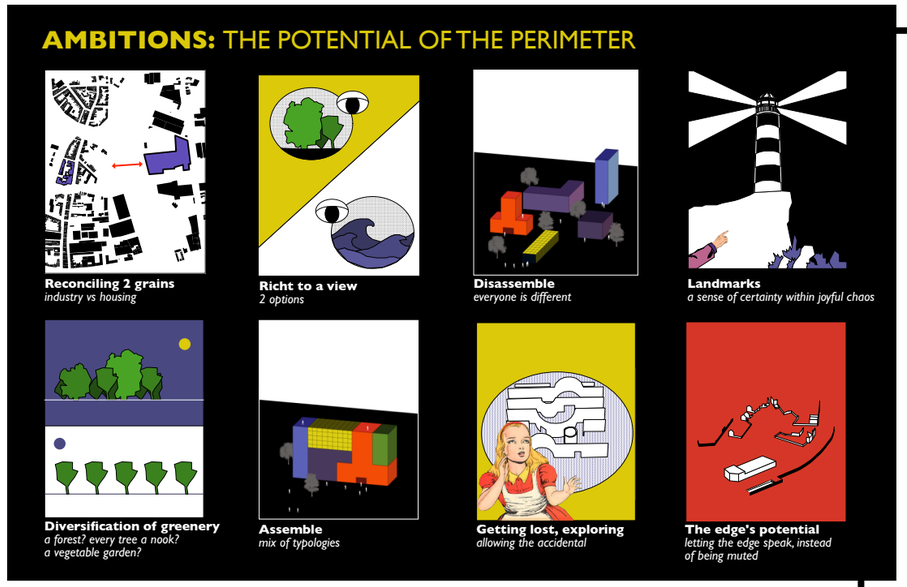
OmRand - masterplan

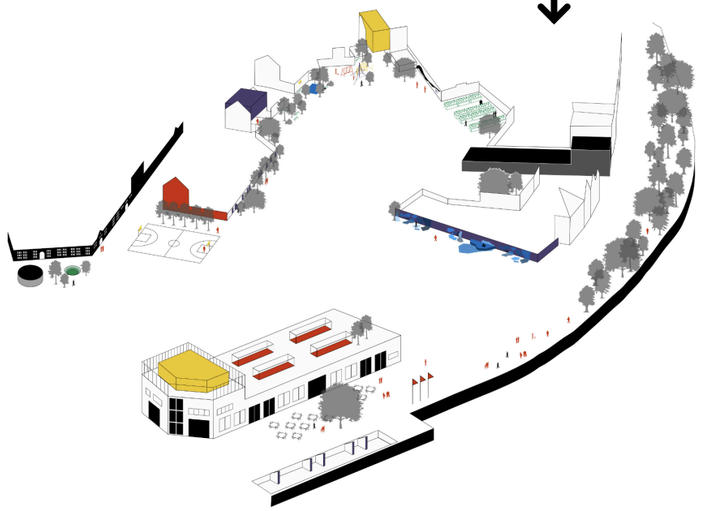
2021: 3rd Bachelor

Degree: 17/20

Using three strictly rectangular, precisely fitted building blocks, this master plan creates a field of tension with the jagged edges of the site. This creates numerous unique places that one discovers while strolling along the edge. The three building volumes comprise not only a very broad programme but also collective (rooftop) gardens, each with its own character. Voor ieder wat wil(d)s!

In collaboration with Irena Vandenberghe, Andras Vanquaille and Ine Werckx

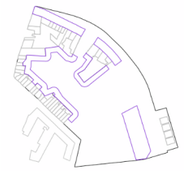




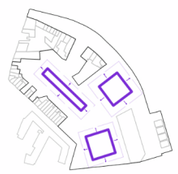
Read the whole magazine over here!



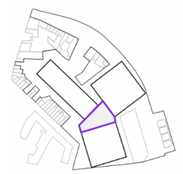
We link our ambitions to clear design choices.



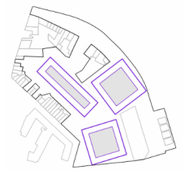
Edges are **potentials** rather than constraints.



Three volumes seek tension with the edges.



Where the three axes meet is **the heart** of the project.



The hortus conclusus brings light to the plan.



Sight and circulation axes **break** the classical building block.

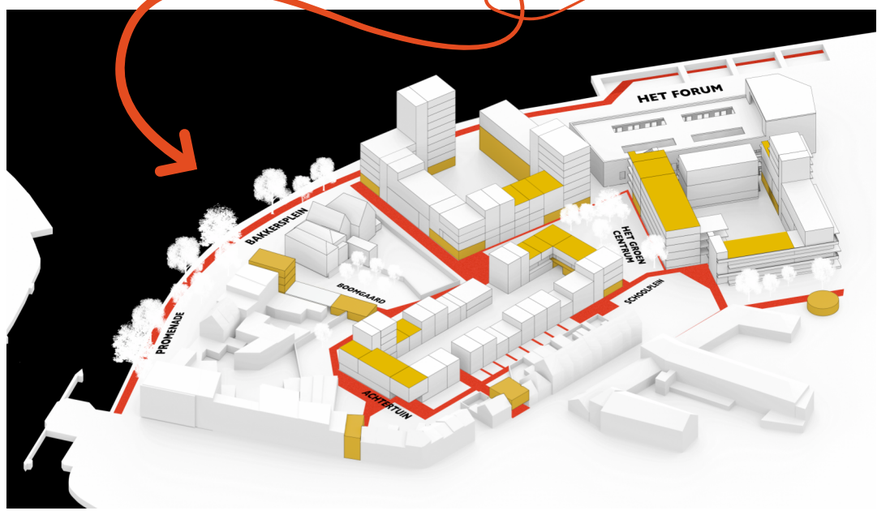


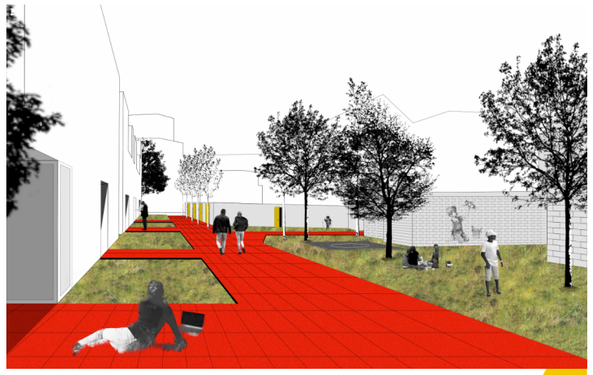
Complement the edges of the site where appropriate.

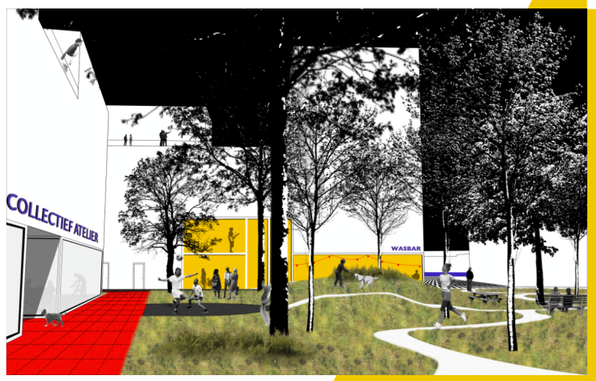


Landmarks taking into account sunlight and views.



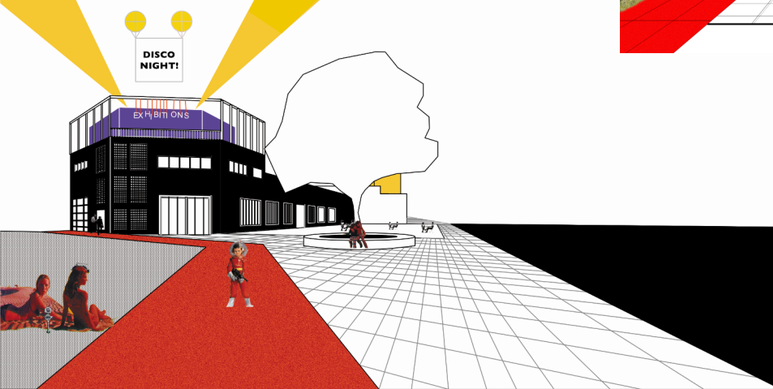


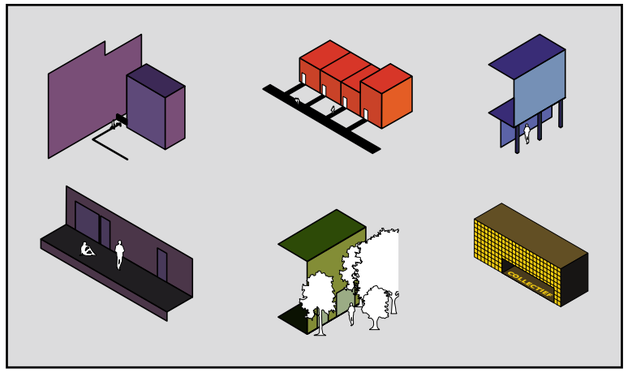


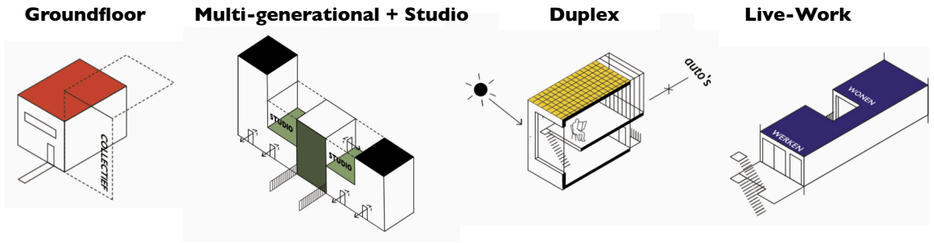


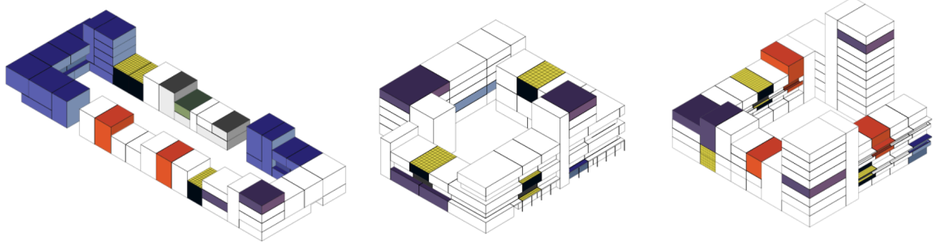








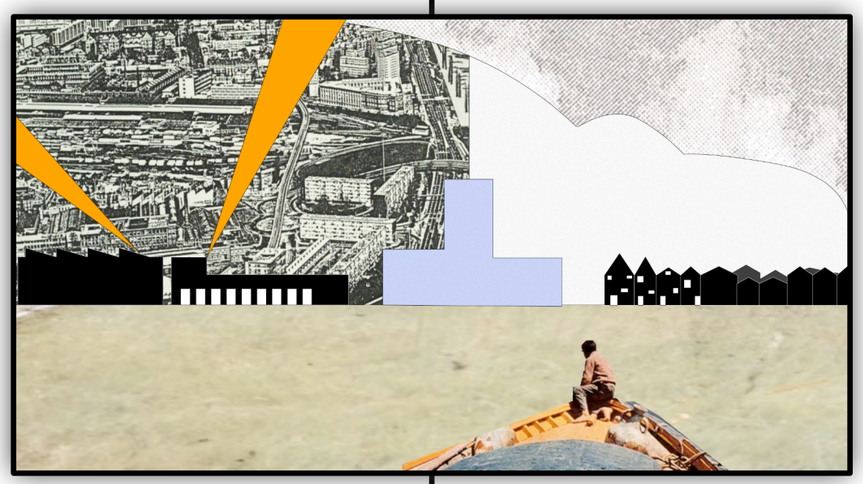




24% PUBLIC FUNCTIONS **15%** COLLECTIVE FUNCTIONS **61%** HOUSING FUNCTIONS

BIOWINKEL	FOODHALL/KANTINE	EVENEMENTENPLEK	BAKKER	COWORKING	WASBAR	COMMERCIEEL	BLOEMENWINKEL	KIOSK	PARKEERGARAGE	TUINHUIS	DAKTUINEN	ATELIER	FIETSEN	FITNESS	CIRCULATIE	GESTAPELD	WOON-WERK	GRONDGEBONDEN	COLLECTIEF
1400m²	1000m²	2000m²	1200m²		450m²	600m²			1500m²	1500m²		600m²			3400m²	5000m²	1500m²	3000m²	4000m²





▲
The duality question in the masterplan:

The building project should anchor itself in the site, complete the place as a natural part.

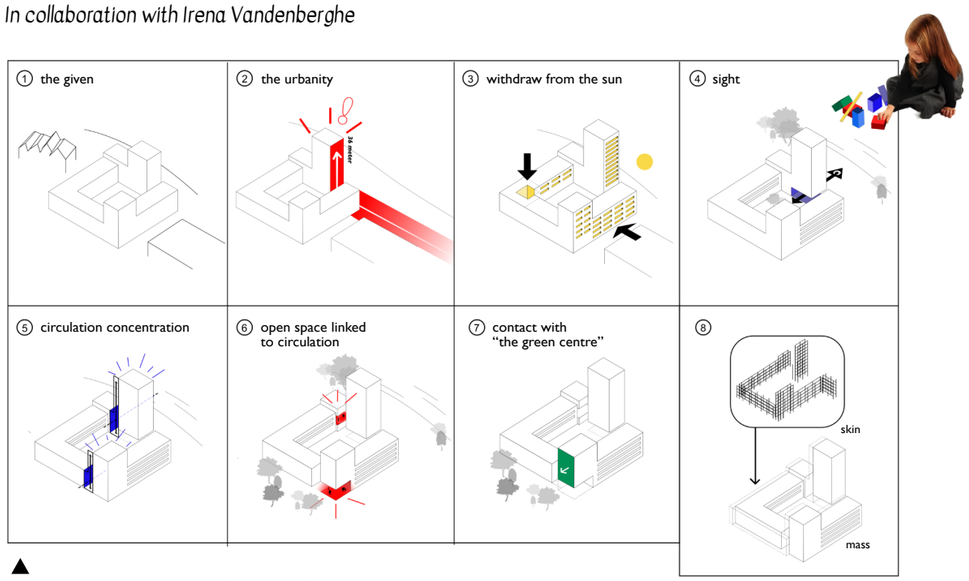
How does the building mediate between the past and the future? How does it reconcile the row house with the old harbour, the low with the high, the specific with the generic, complexity with clarity, the permanent with the changeable?

Space & Time - appartements

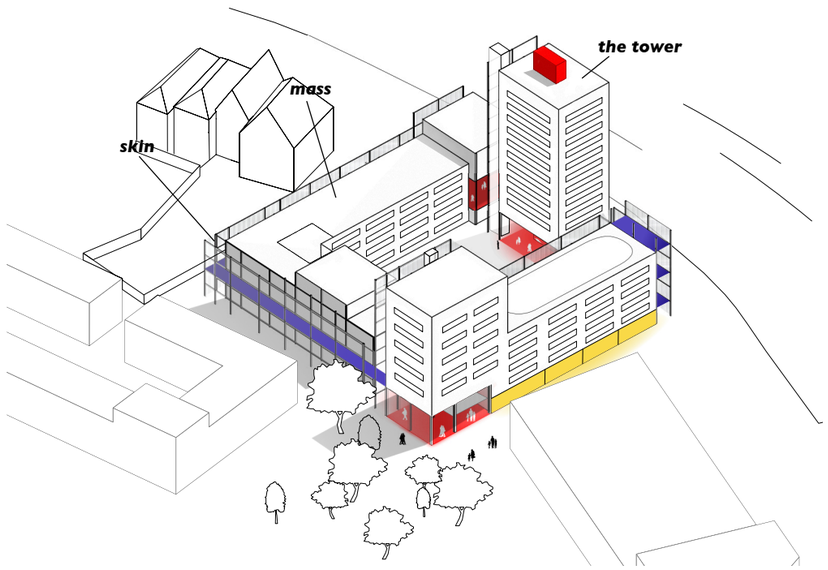
2022: 3rd Bachelor
Degree: 18/20

The project offers a critical look at the architect's role as author: the building block consists of a generic support of concrete columns and beams in which furniture, infill walls can be replaced and moved with the regularity of seasons, years, changing occupants. The crane on the tower concretises this conceptual vision of the building as a permanent yard.

In collaboration with Irena Vandenberghe



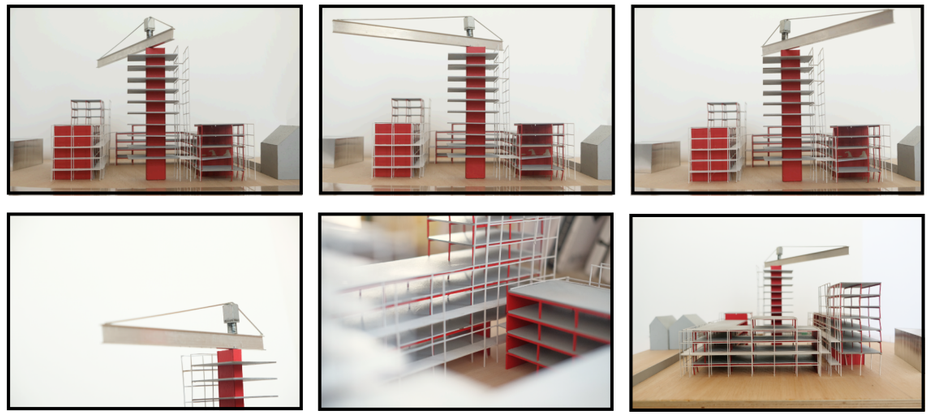
▲
the answer to the duality question: the elementary form



Read the whole magazine over here!



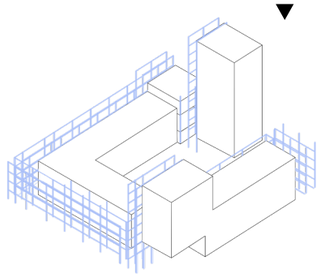
edition 11



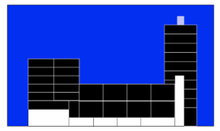
Alumni Engineering Prize

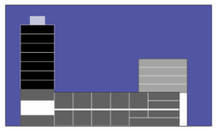
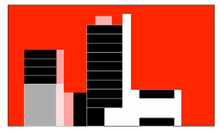


SKIN



facades: interplay of **LIGHT** and **MASS**

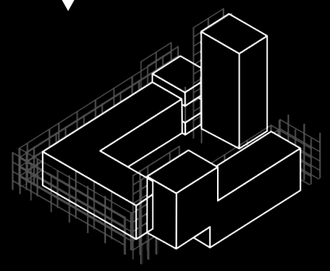


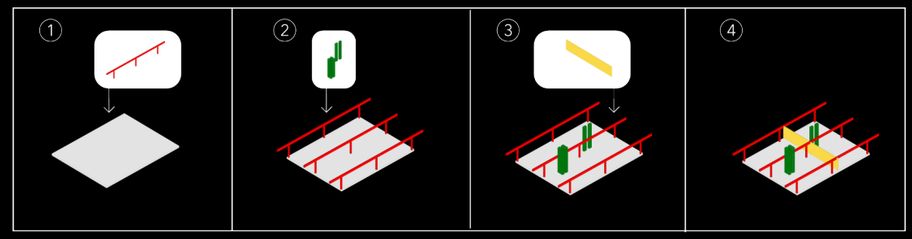



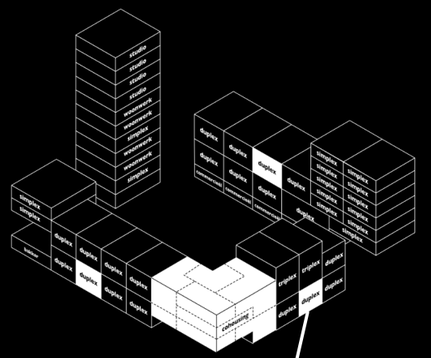


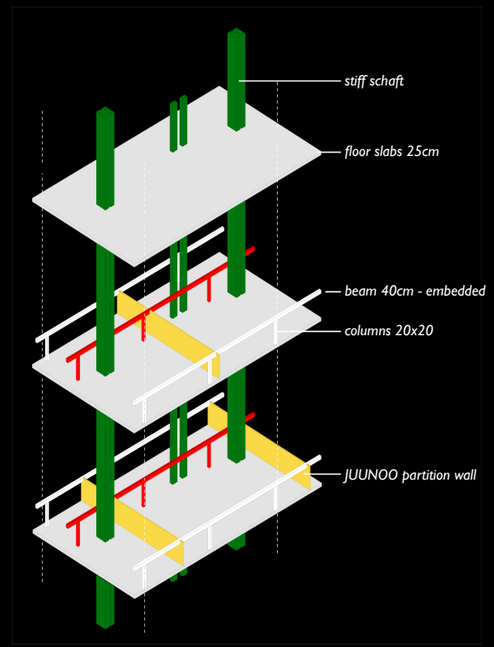


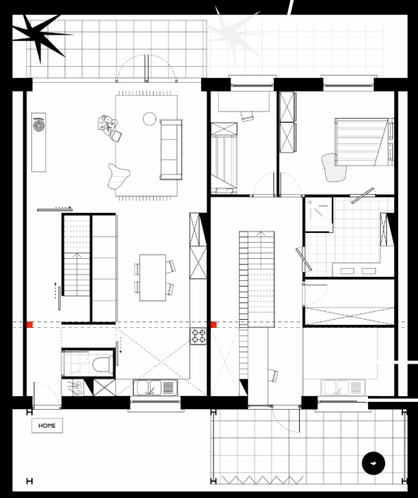

too ***boring***?









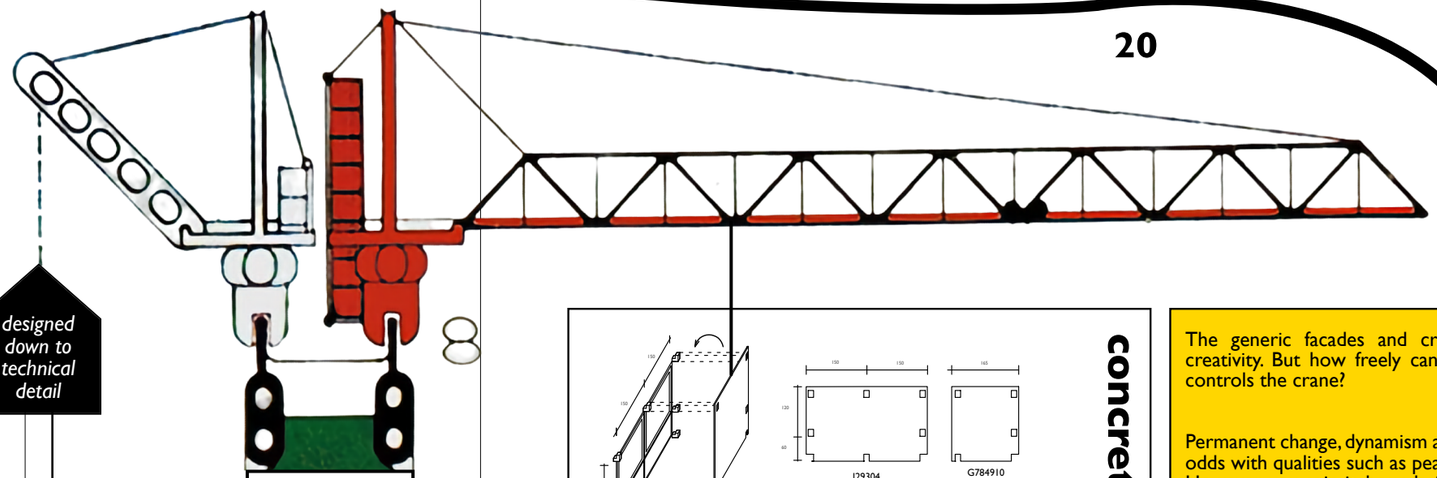


Duplex | 2 slpr | 133m2

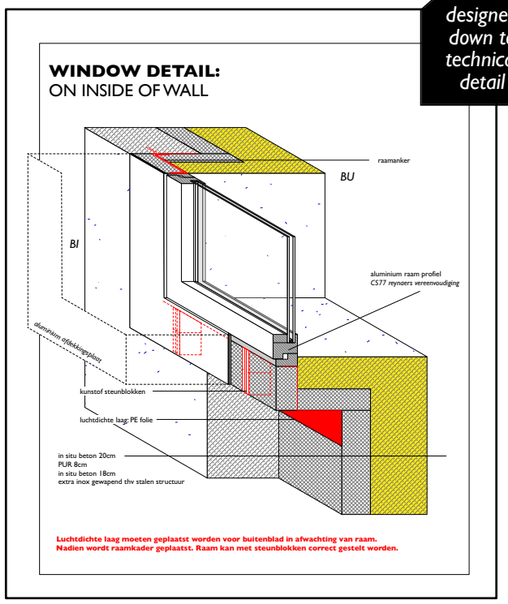
Vide as expansion option

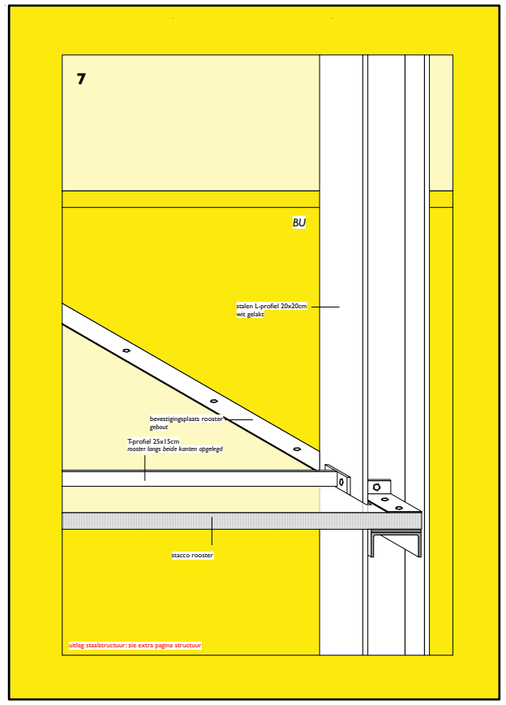
Generic window distribution

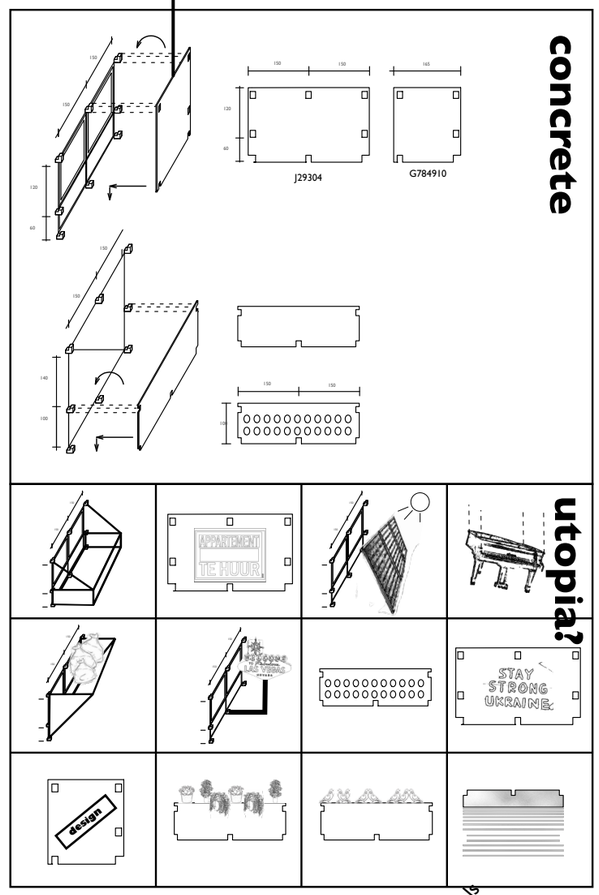
the tower goes **beyond!**



designed down to technical detail







The generic facades and crane give carte blanche to creativity. But how freely can this game be played? Who controls the crane?

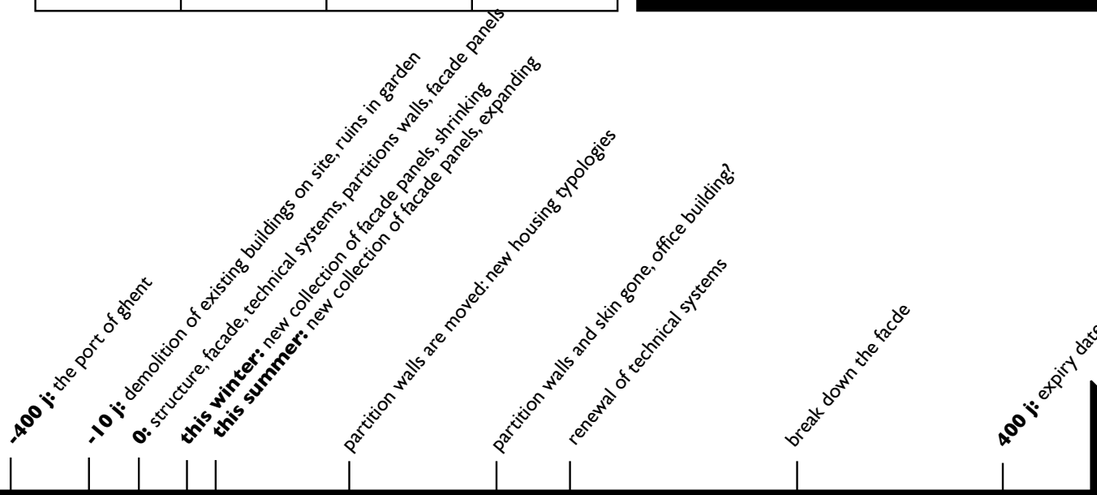
Permanent change, dynamism and flexibility are inevitably at odds with qualities such as peace, tranquillity and harmony. However you spin it, boundaries and rules are inherent to living together.
Therefore, we are forced to impose **game rules** on utopian changeability.

Every season, a catalogue of different materials and colours is produced. In summer, there is more supply of shading and extension; in winter, the focus is on closing and shrinking.

However, not every change should be seasonal. When a new phase of life requires a new layout and a toilet is added to the window, for example, this part of the façade can be concealed.
Each collection thus ensures a certain coherence in the façade. A coherence that does not rely on aesthetics or 'design', but on a commitment to your neighbours.

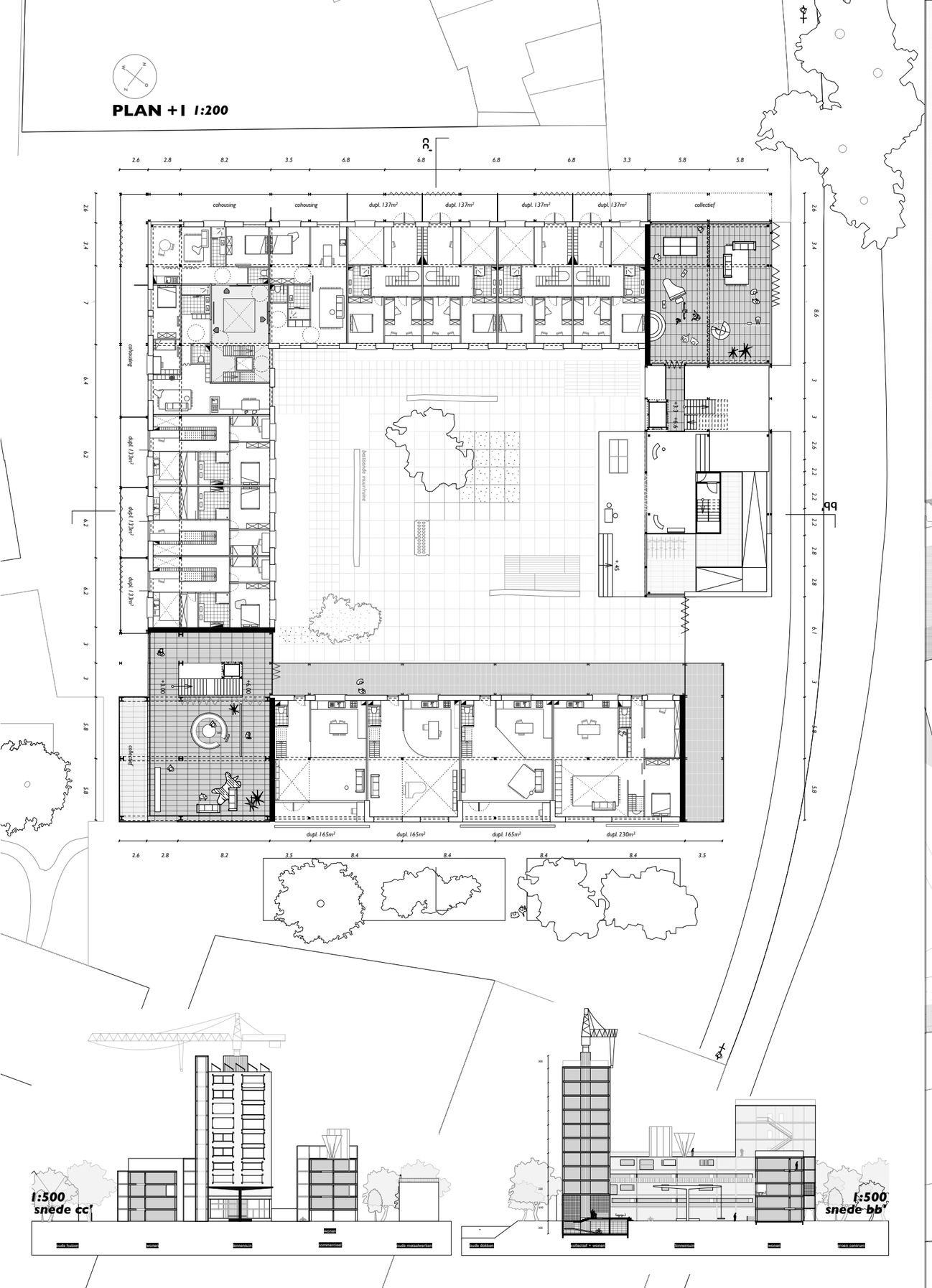
the year 2022: Irena & Faber





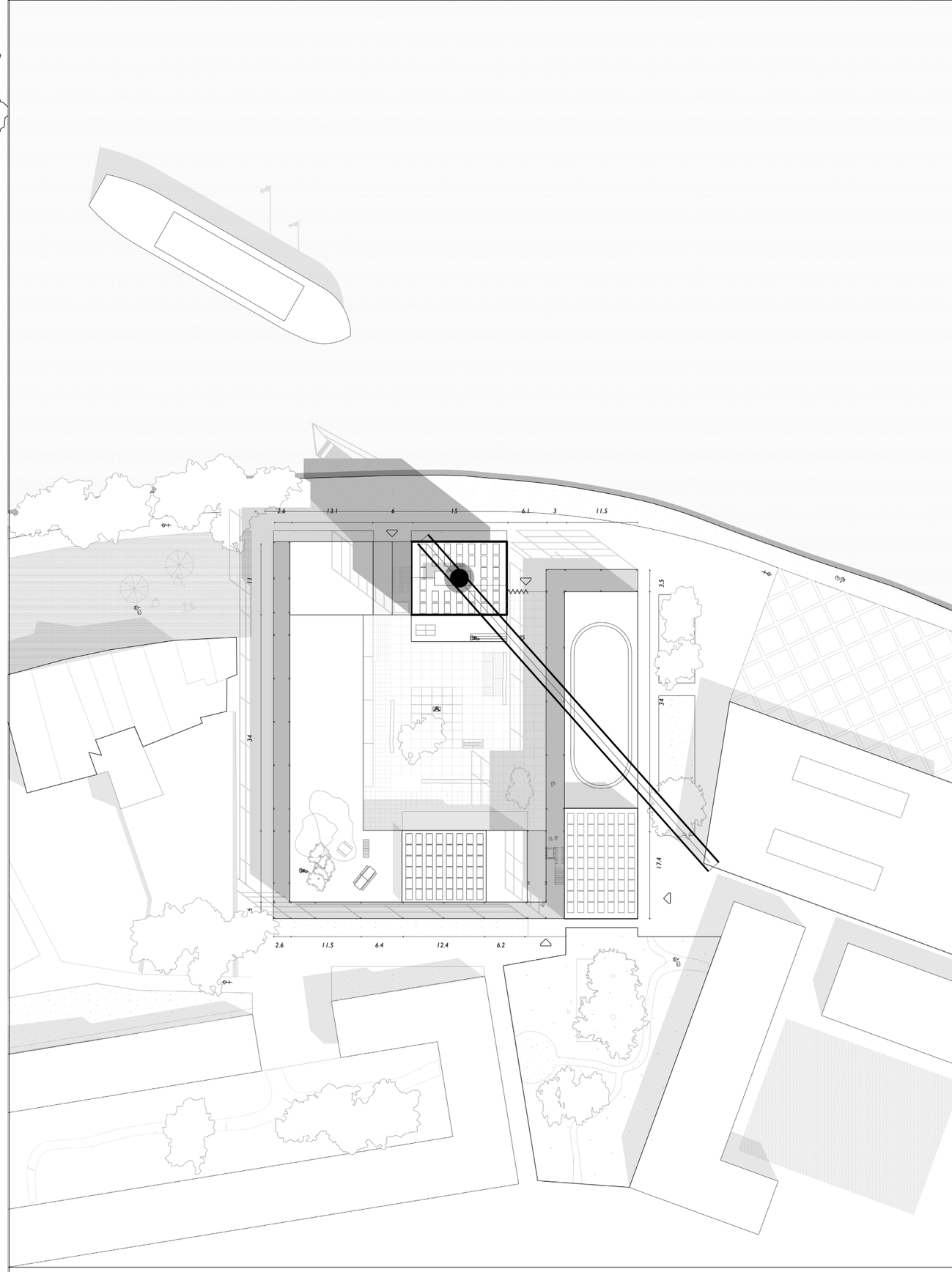
flexibility timeline

PLAN +1 *1:200*



1:500
snede cc'

1:500
snede bb'



1:500

ROOF PLAN



Molens Van Orshoven

Molens Van Orshoven

RENOVATION

2023: 1st Master
Degree: 17/20

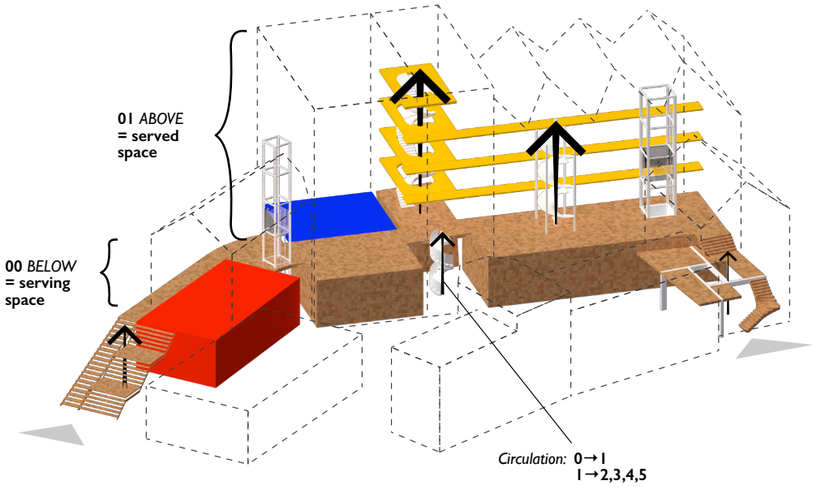
The Assembly Line: raised public ground level as catalyst for cohesion and productivity.

The variation of heights in the section of the Mills intrigues and inspires, in contrast to the typical 3.15m floors of the developments around it. The ambition is set to underline this variation as an all-encompassing quality and that it should not imply incoherence. The red line in the so far fragmented narrative is a platform at +1. This forms a backbone that ties everything together horizontally while splitting vertically into serving space (below) and served space (above). Together with a denser programme, the platform creates a budget-friendly backbone towards future growth phases. Towards a future in which the Van Orshoven Mills entity can once again stand for a cohesive, unifying and productive factory.

In collaboration with Irena Vandenberghe

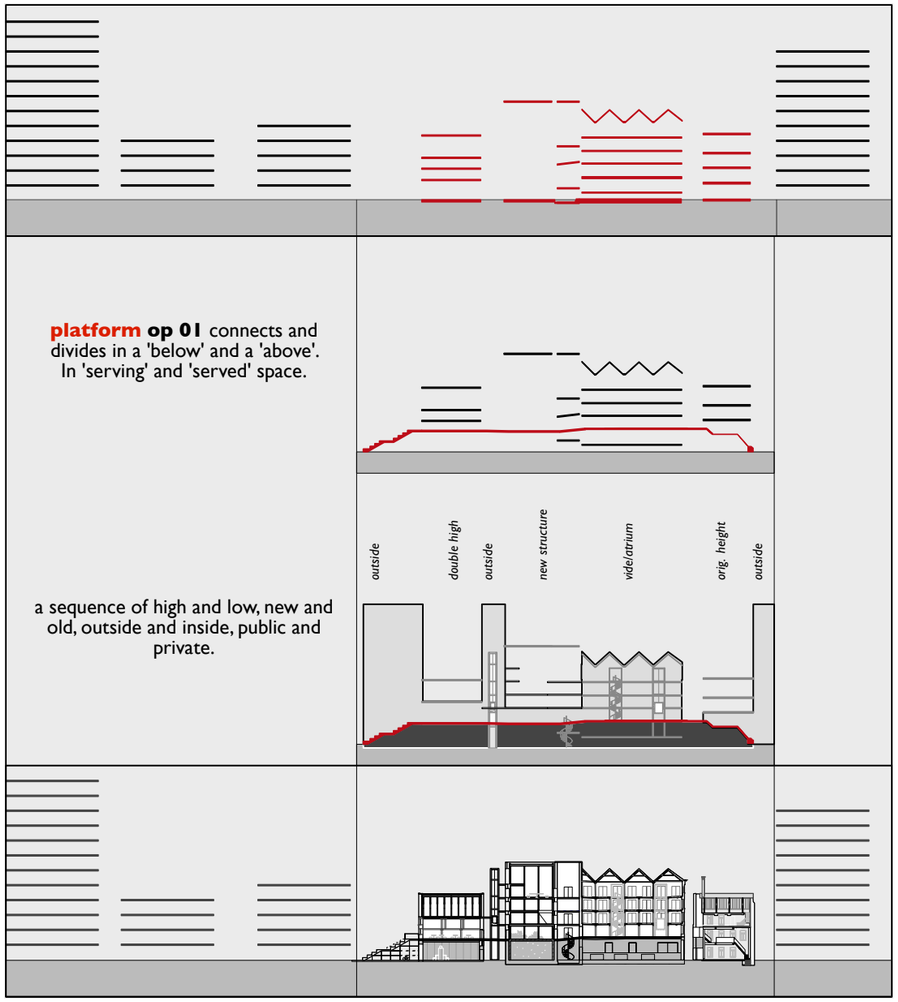


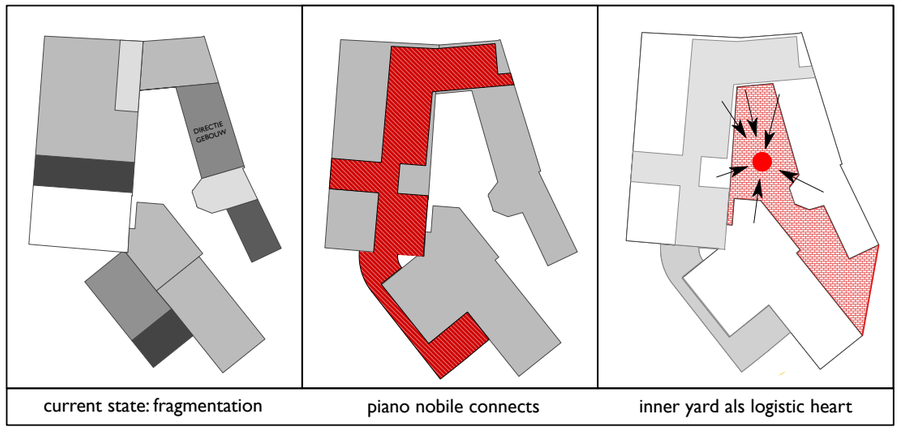




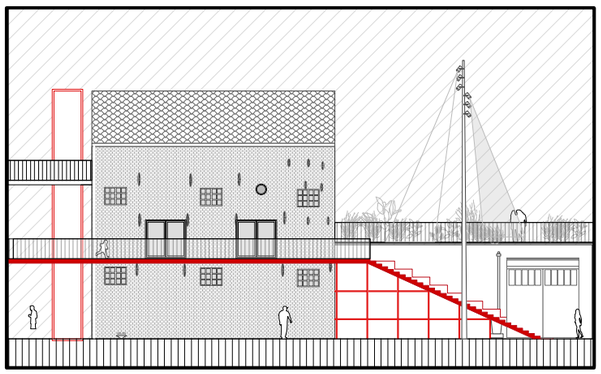
Read the whole magazine over here!





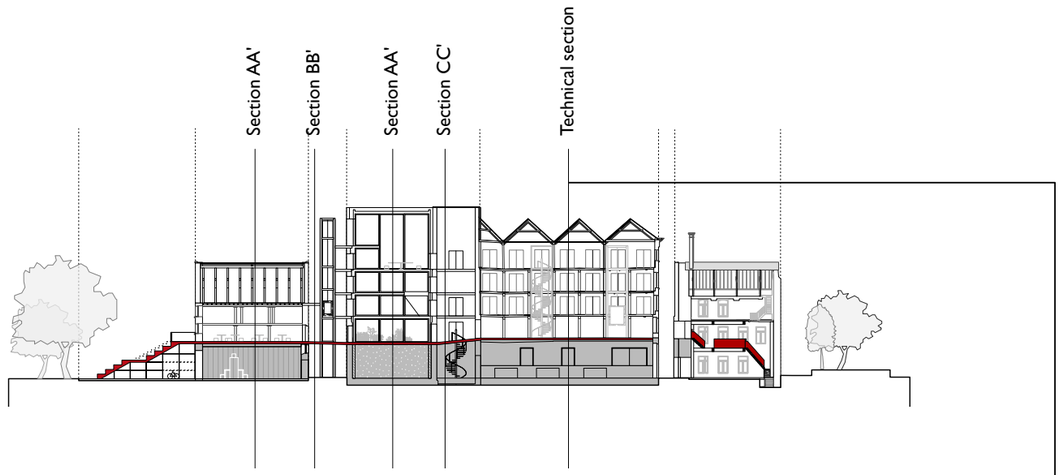


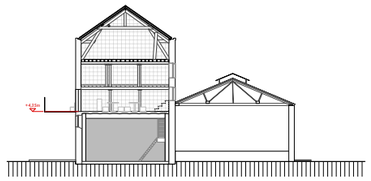


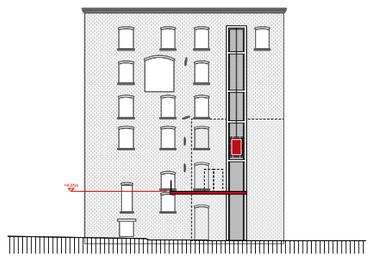


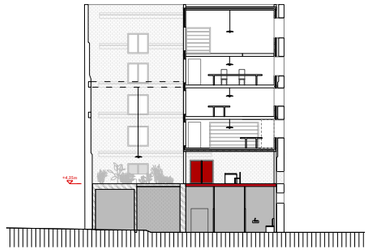

AFTER

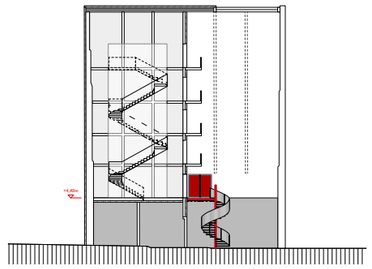

BEFORE


Section AA'
Section BB'
Section AA'
Section CC'
Technical section









designed down to technical detail

1 MIRA 2022-2023

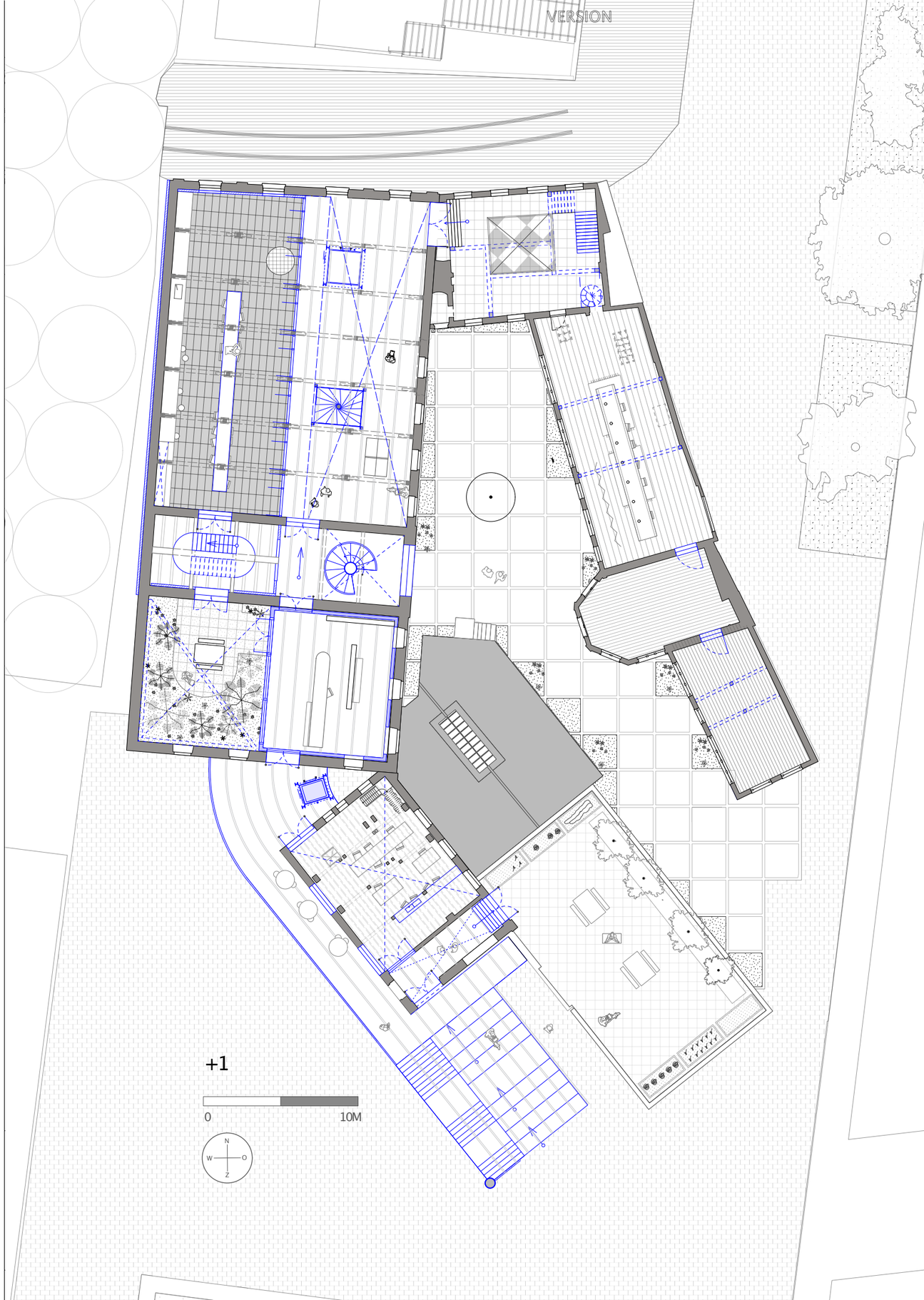
ANNEX I

DETAILSTUDY
the warehouse





Irena Vandenberghe & Faber Van Driessche





Library Haasrode

Library Haasrode

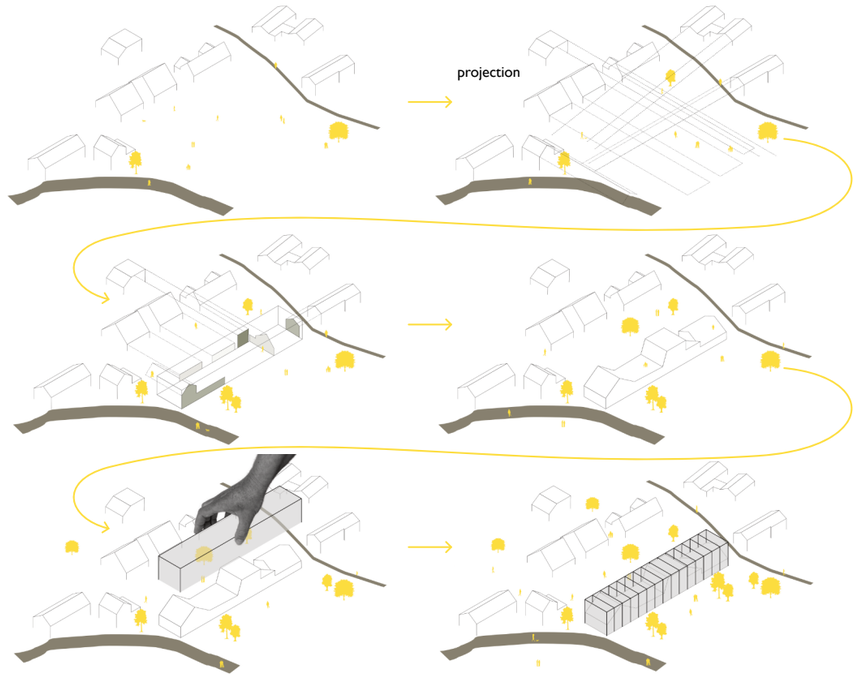
2021: 2nd Bachelor

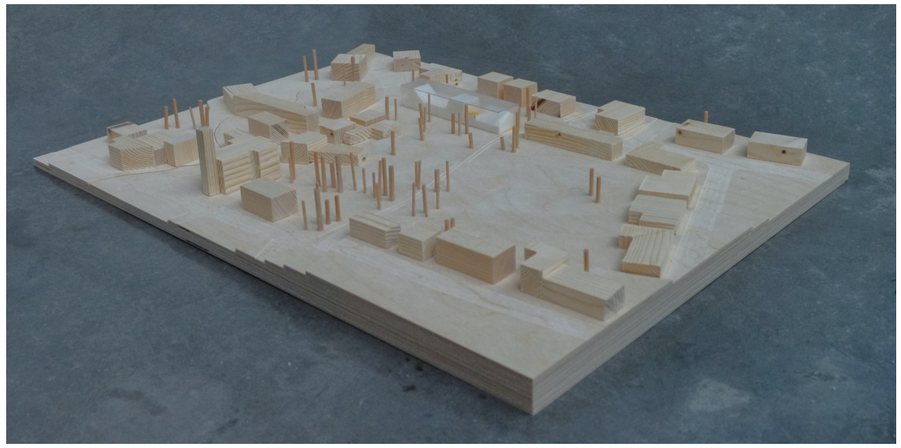
Degree: 18/20

The Haasrode project revitalizes a small Flemish village by integrating diverse functions—library, event spaces, offices, and public areas—while preserving its distinct character. The design respects the village's scale, using the existing urban grain as a template and adding a translucent outer shell. This shell serves as a buffer for thermal and acoustic insulation, while maintaining visual connections to the surroundings. Inside, the program balances light and mass, with vibrant circulation zones and spaces tailored for quietude, such as the sunken library. The design emphasizes community connection through preserved pathways, framed views, and dynamic spatial transitions.



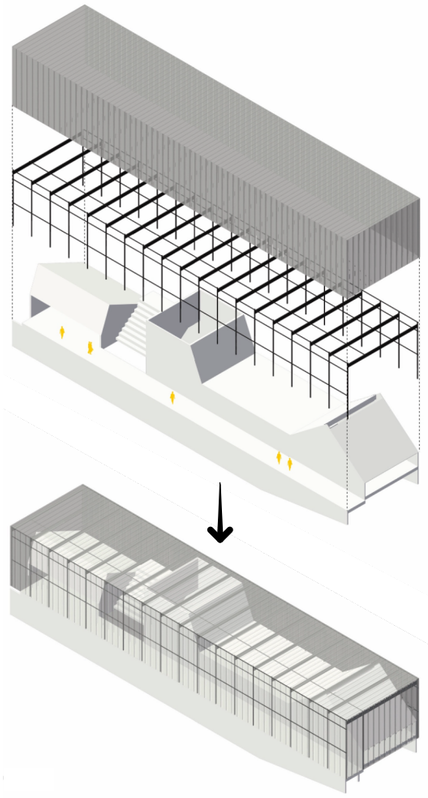




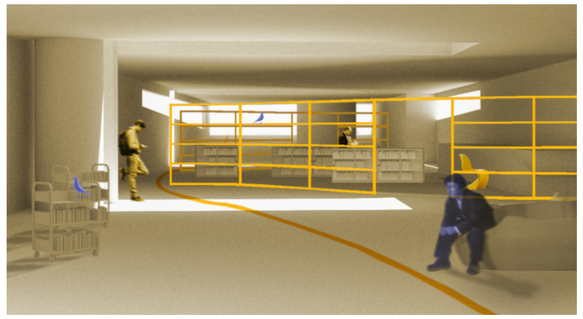




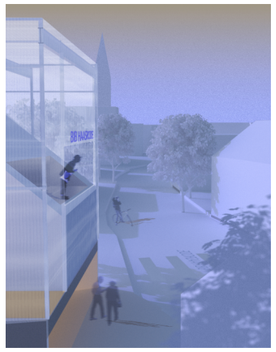


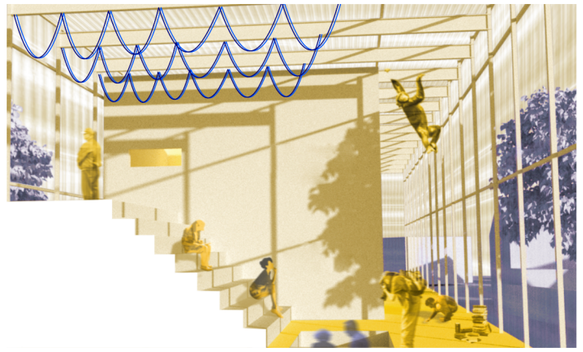


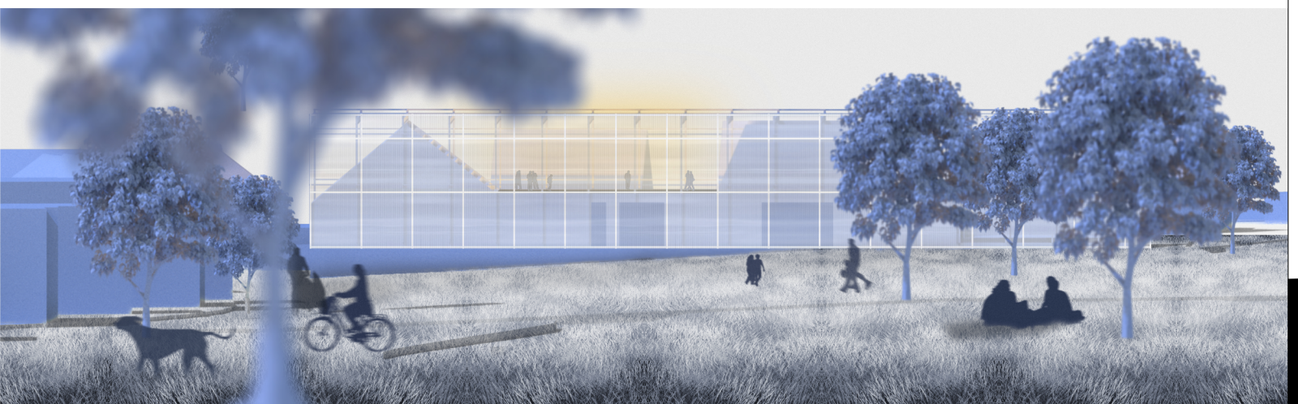




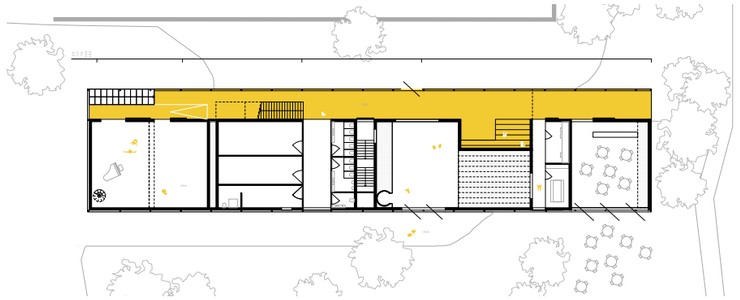


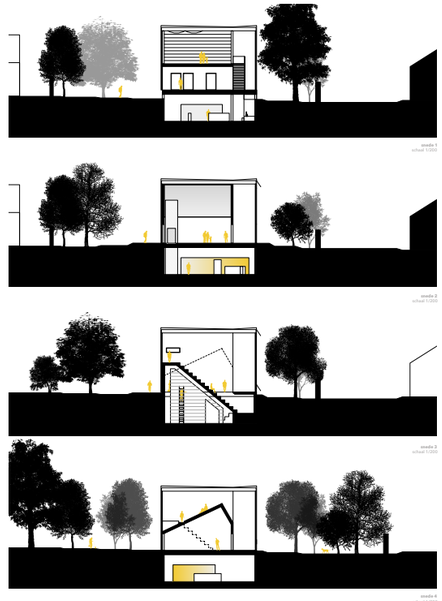




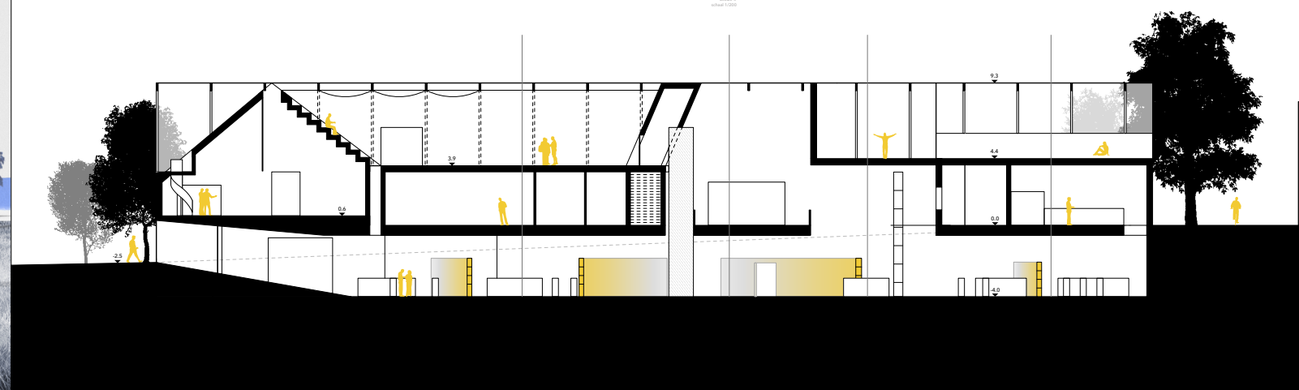




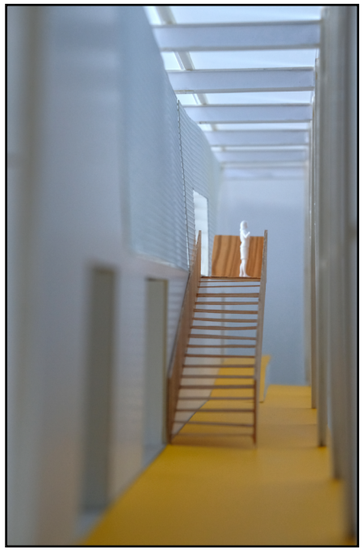




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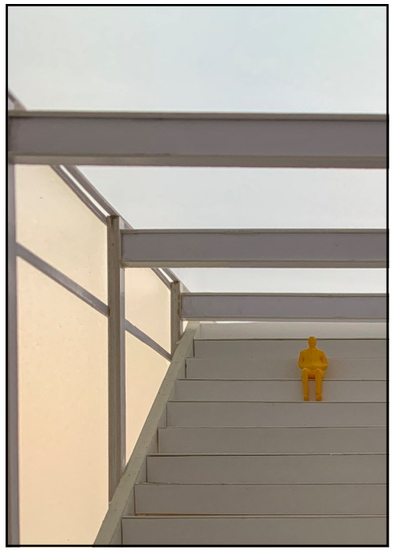


















CLIP it ON!

CLIP it ON!

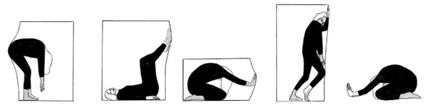
2023: 2nd Master
Degree: 17/20



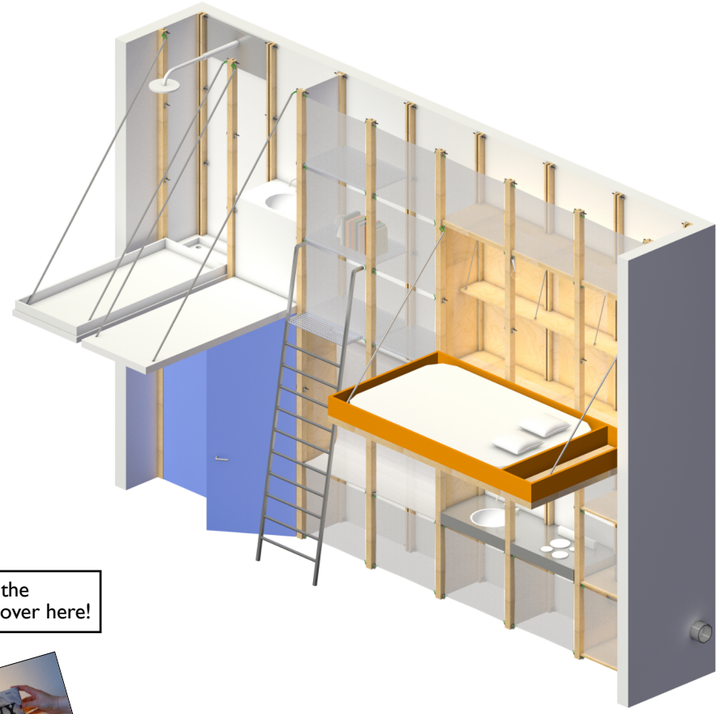
In which way can housing still be qualitative on a surface of less than 25 m²? Can a dismountable and removable design, consisting of off-the-shelf, easy removable and bio-based materials create a adaptable living situation?

This project is inspired by the tools used by alpinists. The basic idea is a cabinet that fills the complete wall of the small space. This cabinet is equipped with all standard functions: shower, kitchen sink, bed, storage ... In addition, it forms the basis for a second layer residents can create by themselves.

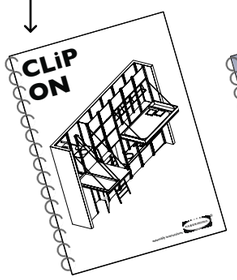
The global structure is detailed in such a way that all kinds of small tools, as well as furniture, can be attached to the wall hence using carabiners and anchors. In this way a very flexible space is created, adaptable to the particular and evolving needs of the residents.



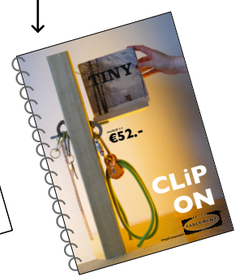
In collaboration with Irena Vandenberghe



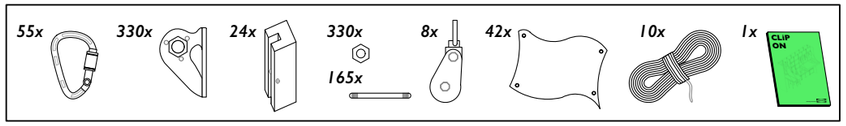
Read the **manual** over here!

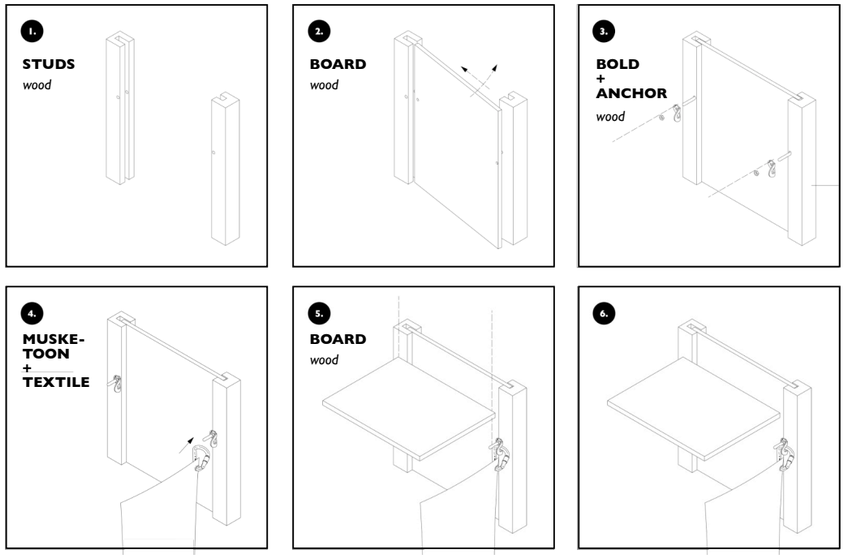


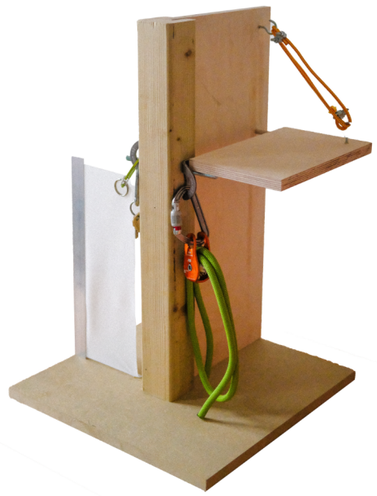
Read the **catalogue** over here!

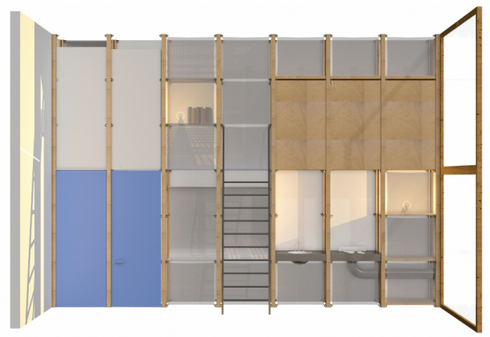


what's in a box?

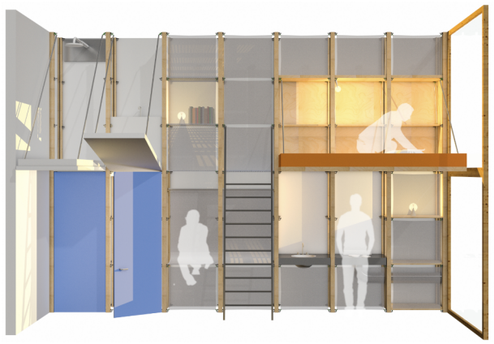




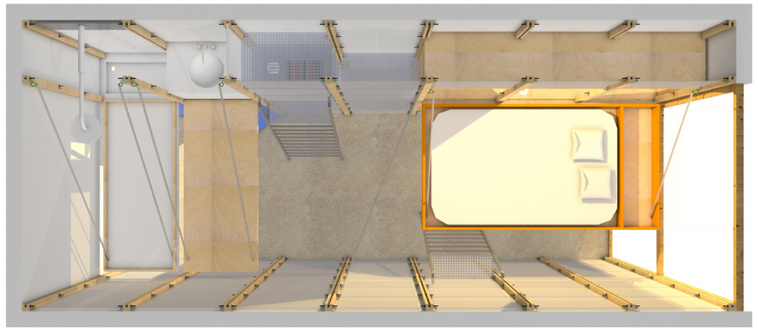


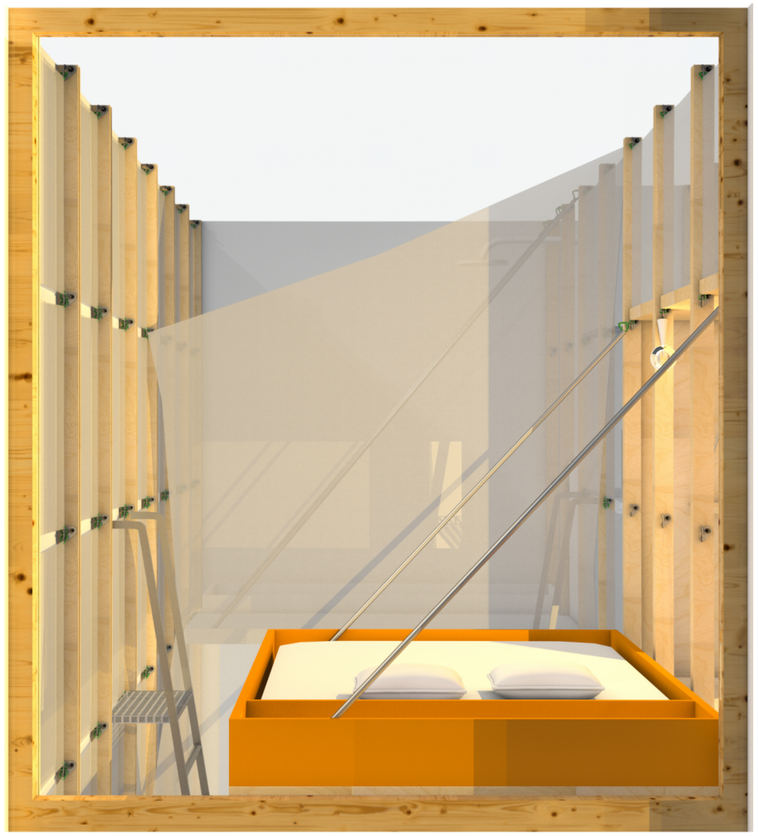


◀ collapsed



◀ open



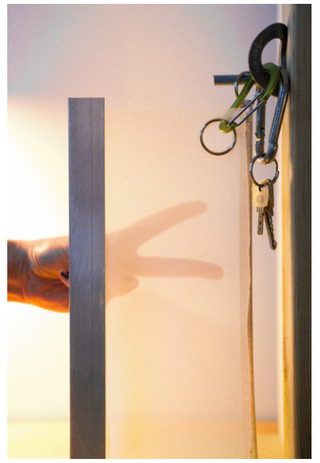




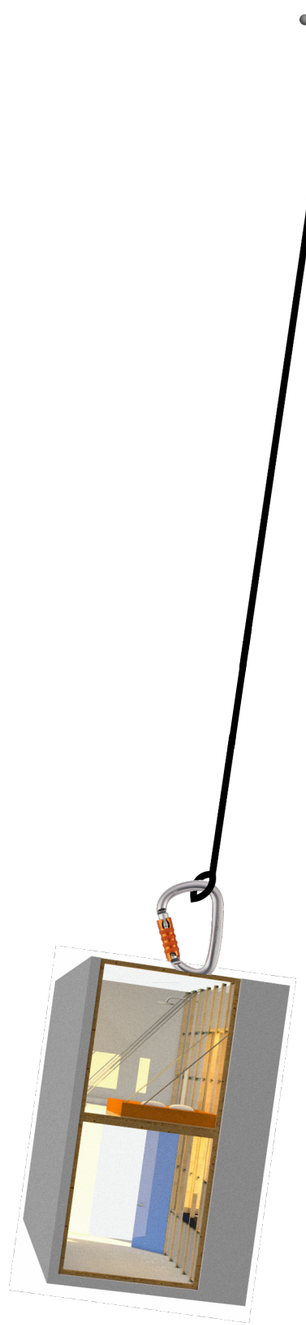




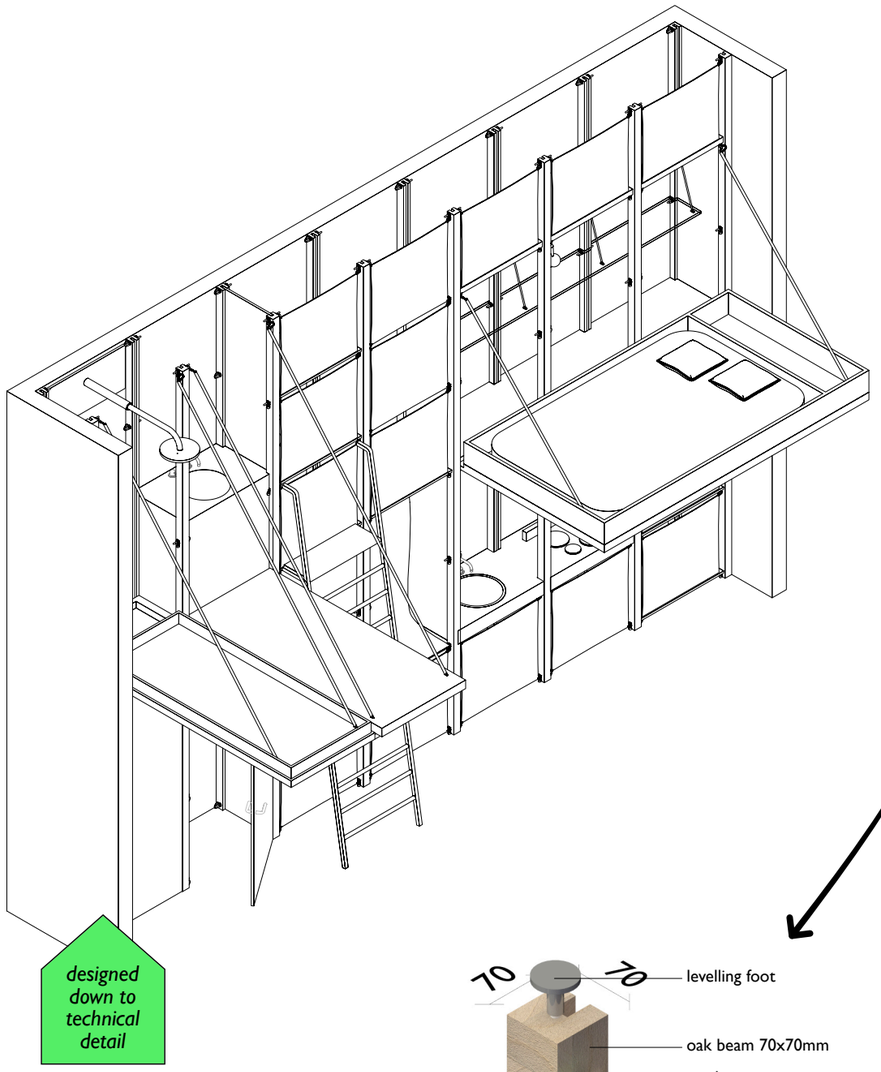




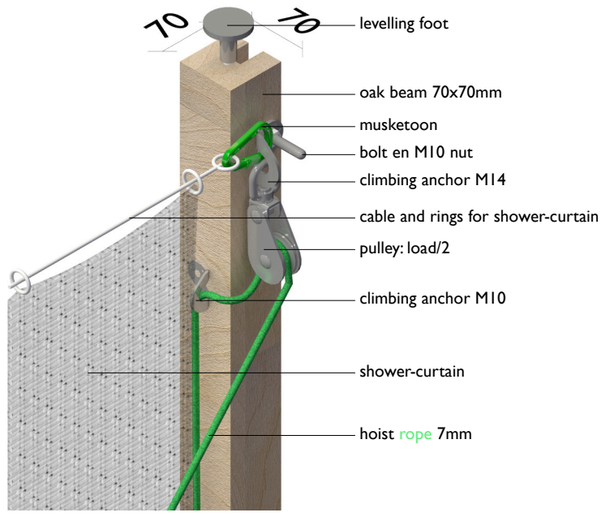




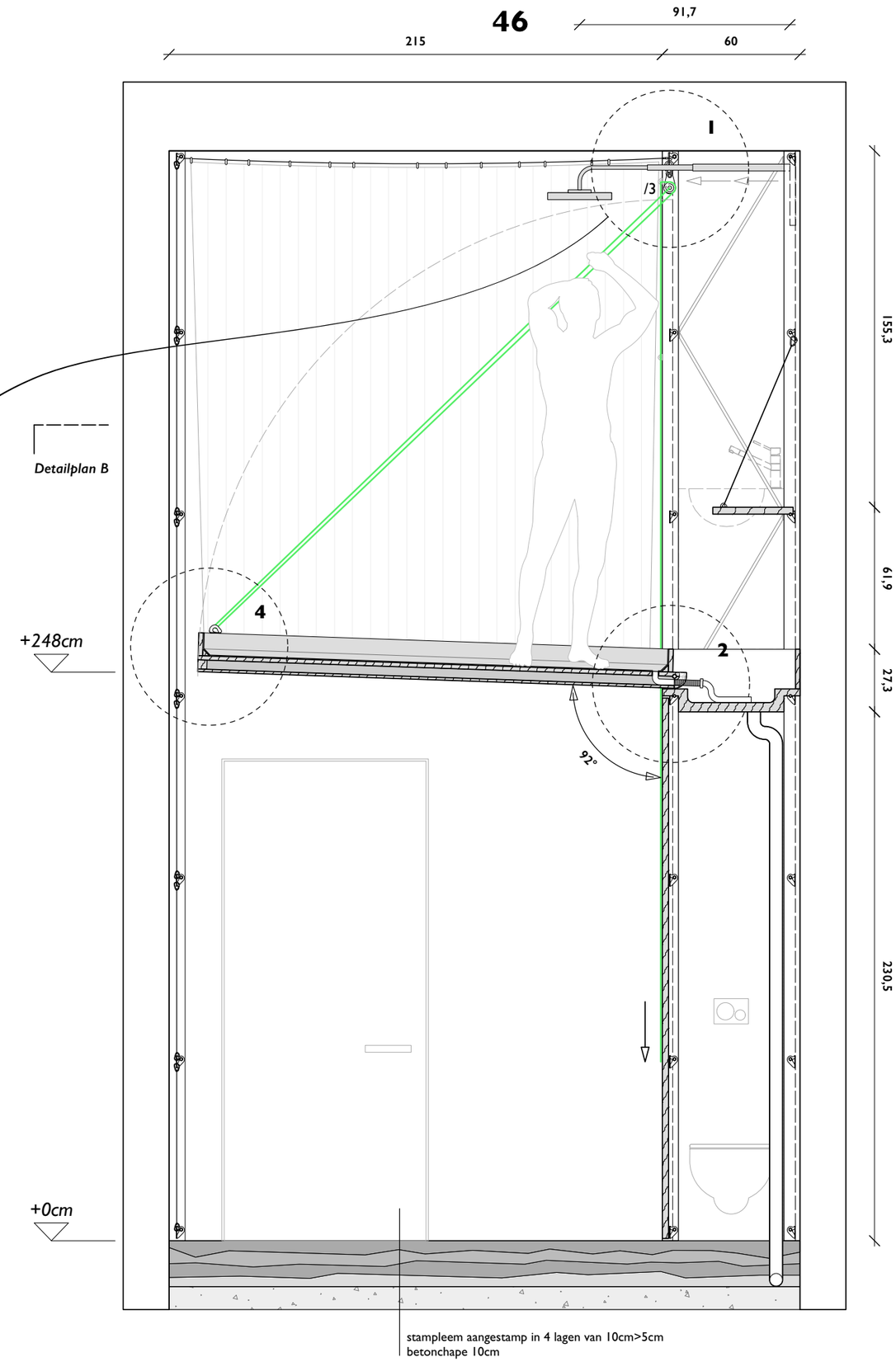
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Symbiose

Symbiose

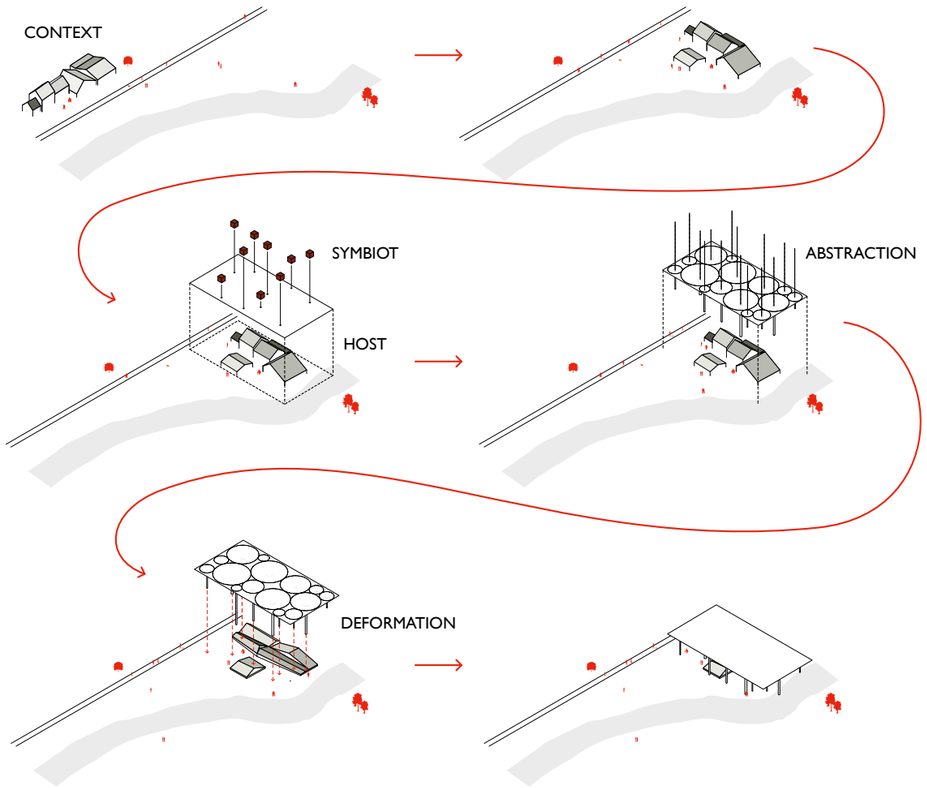
2020: 2nd Bachelor

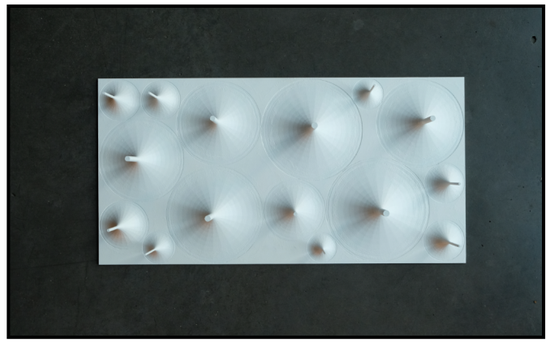
Degree: 16/20

A rectangular deconstructed surface in brown-red brick refers to the context: the typical Flemish village with masonry buildings. At the water's edge, it transforms into a function volume with access to the water.

Over the plane, a pure concrete canopy delimits the event location, with well-chosen pointed columns. Each column acts constructively as a funnel shell. The funnels rest against each other so that they do not fall over and are anchored on top by a thin roof plate which, with reinforcement on the edge, ensures that the outer columns are also balanced. By minimising the spans between the hoppers with maximum spans of 4.9 m, the 1800m² roof plate can be made thin and light.

In collaboration with Gommaar Van Reybrouck, Nathan Kolenberg and Constance Naessens





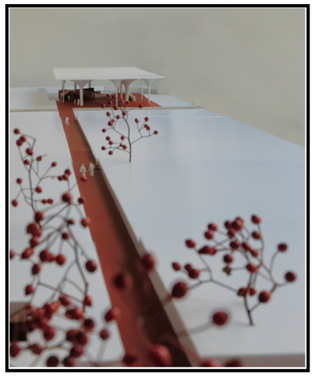


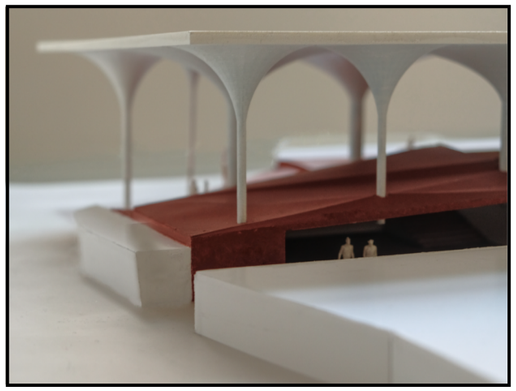


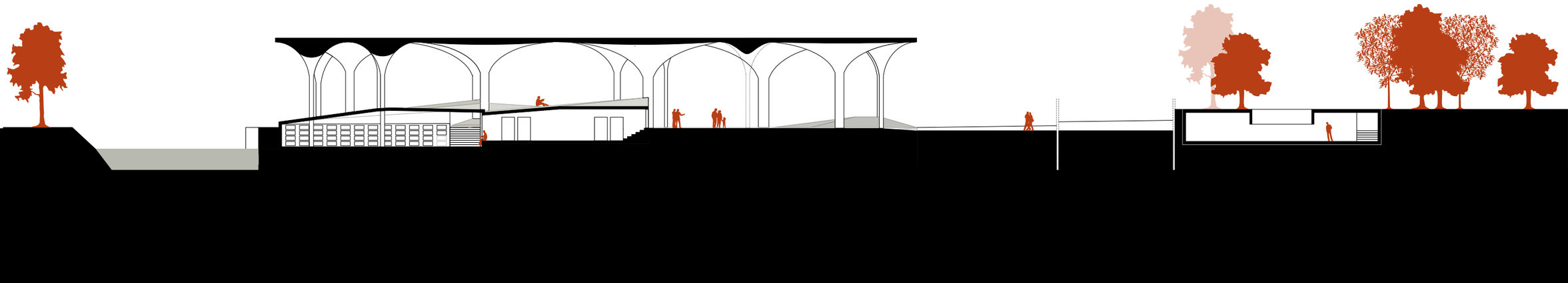














Little Beguinage

Little Beguinage

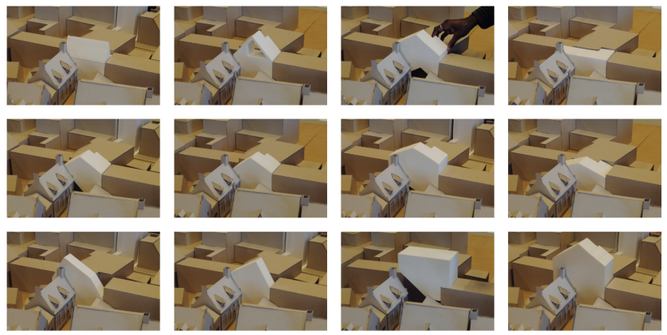
2020: 1st Bachelor

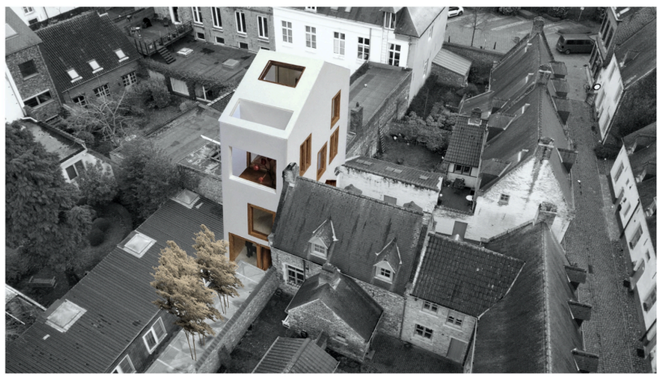
Degree: 17.5/20

The city is made up of a variety of personalities. Introverts and eccentrics. What if these opposites could be combined? What if a reclusive lifestyle in the small beguinage was united with an openness to people without shelter? The beguinage regains one of its original functions: services for others. Two types of individuals unite under one roof.

This roof takes the form of a beguinage as a link between the reinterpretation of the site and the modern home. Literally a roof over the head of the homeless. But make no mistake because the dwelling is more than this form, around the corner hides an unusual extension.







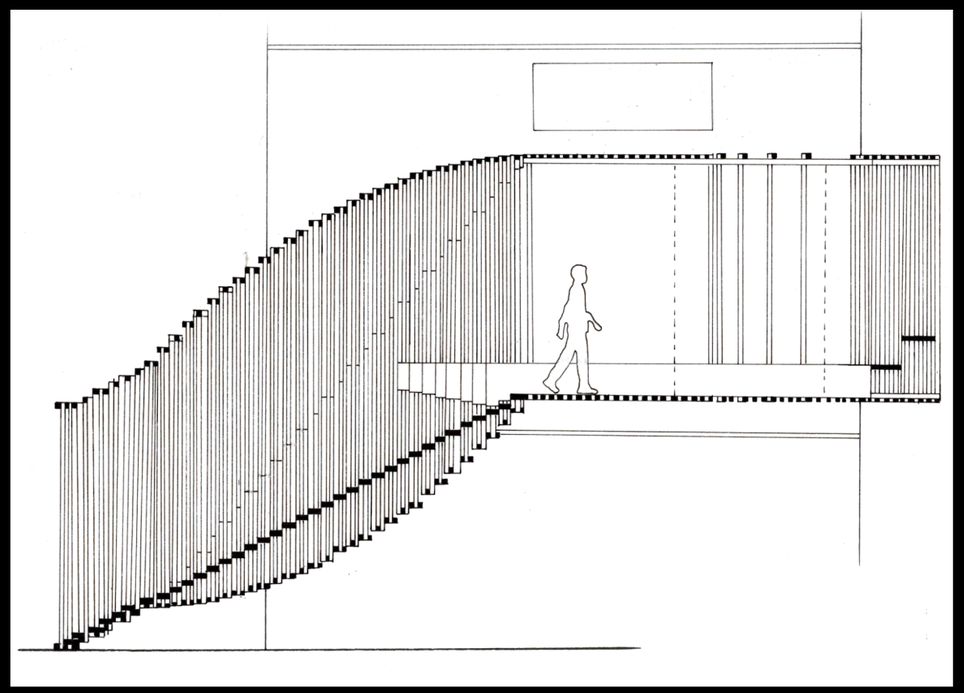








designed down to technical detail



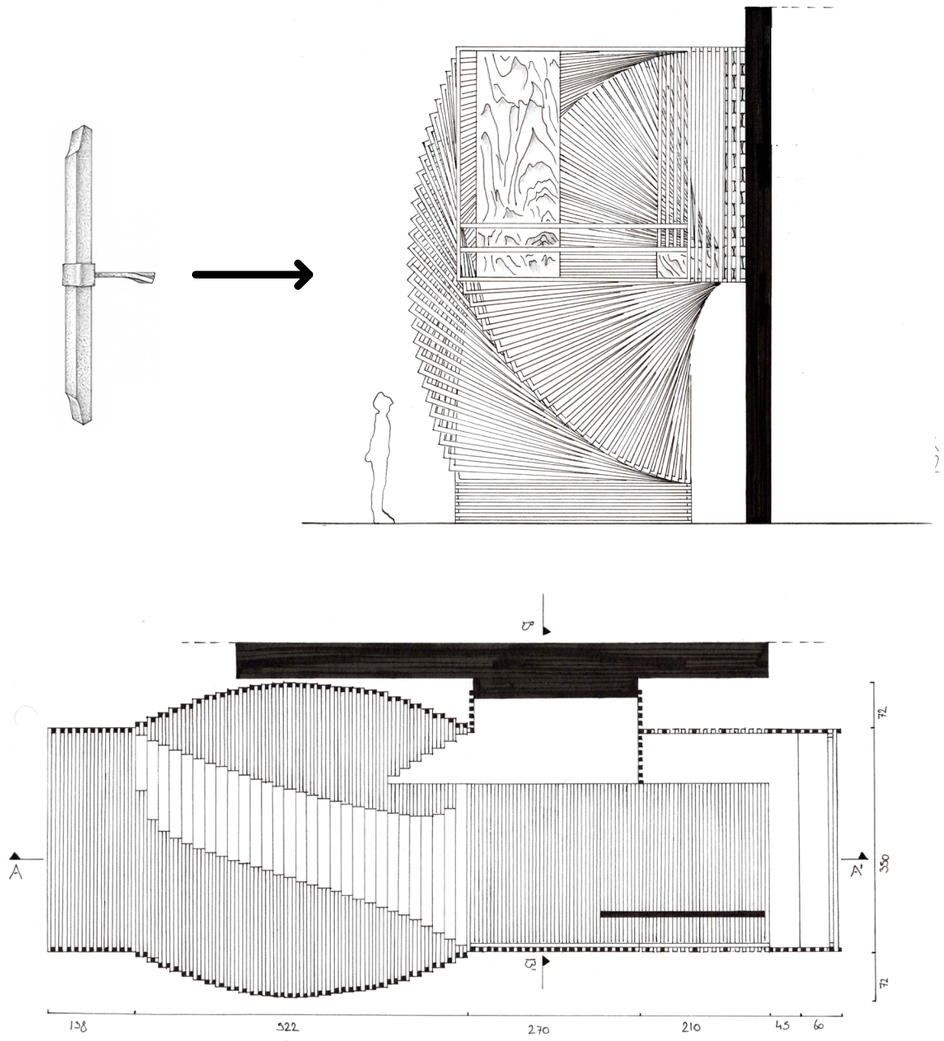
The Twist

The Twist

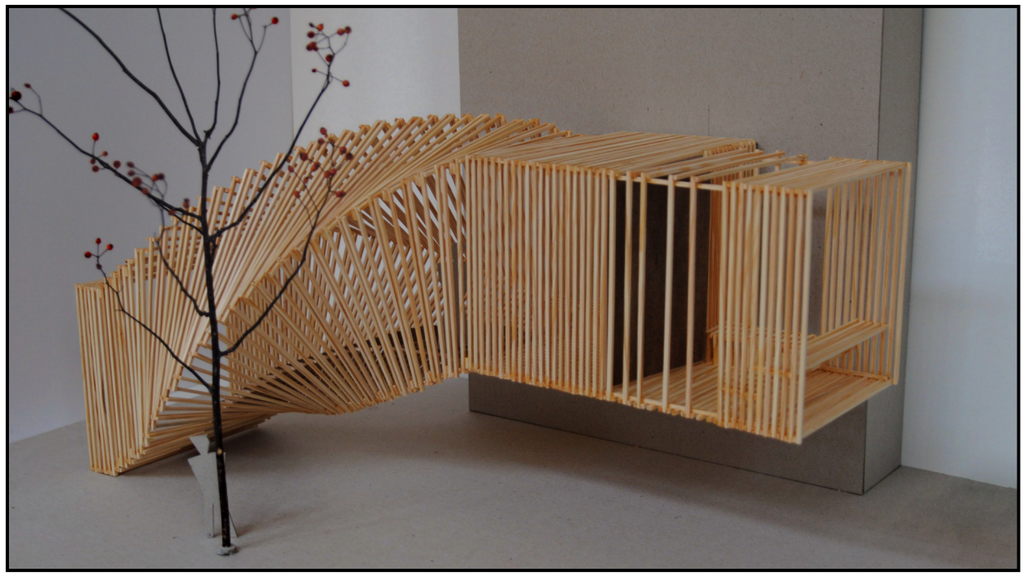
2019: 1st Bachelor

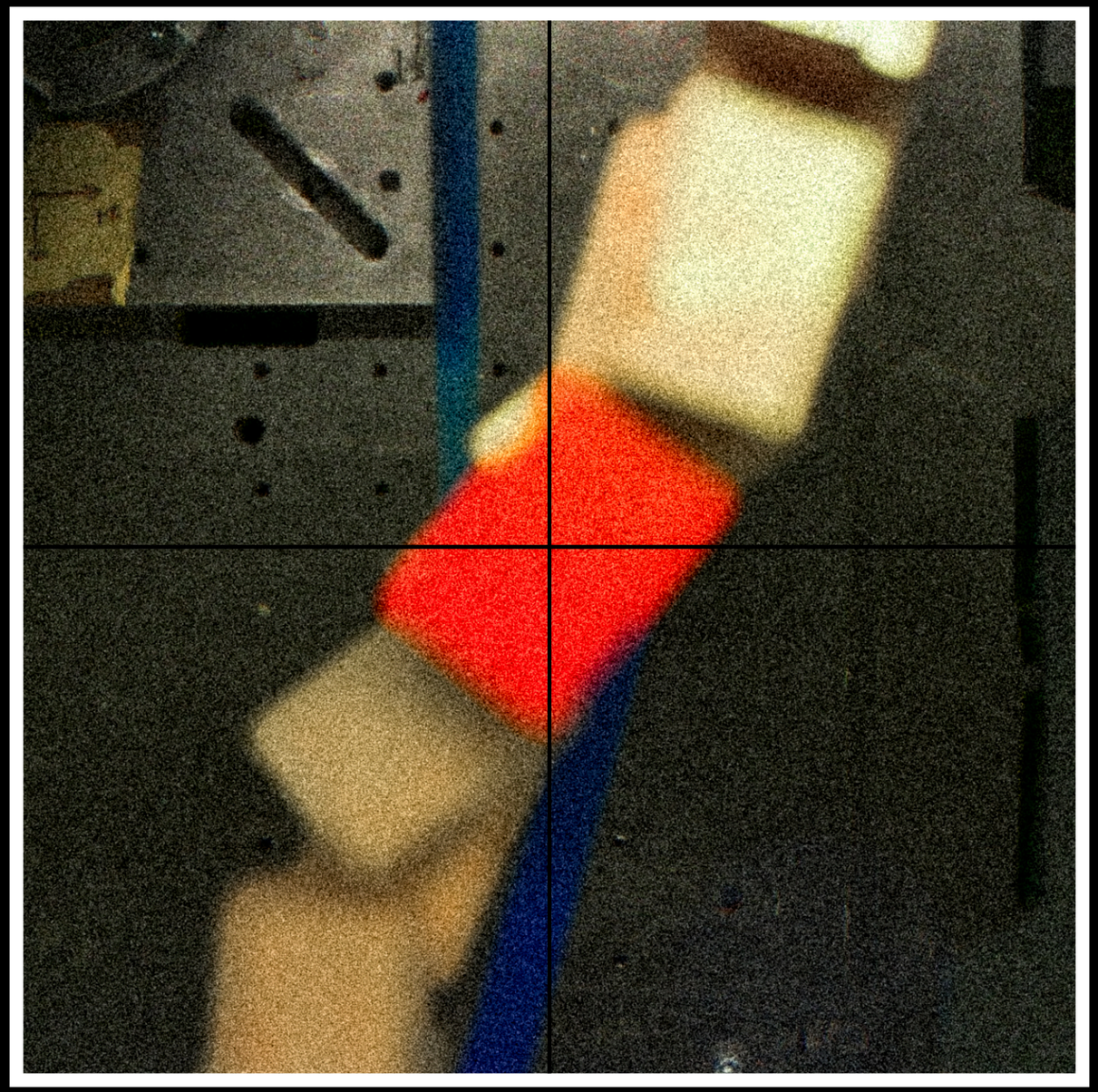
Degree: 17.5/20

Rooted in its context, the "Twisted Shelter" is suspended from the castle walls, echoing medieval wall anchors. Rotating wooden frames shape its striking, elongated form. The design flows seamlessly, dividing the space into two connected parts. Openings frame views of the brickwork, while a pivoting door defines privacy. Wooden elements and fastenings unify structure and aesthetics in a minimal, cohesive materiality.









MASTER THESIS

Combining Robot, Material and Human agency through an adaptive robot control algorithm in digital fabrication.

2023-2024: 2nd Master

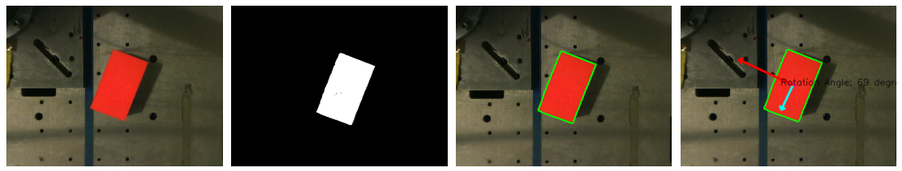
Degree: 16/20

ABSTRACT

The integration of industrial robots in the construction industry remains limited due to the one-directional robotic fabrication and parametric design workflows, often neglecting material behaviour and unforeseen disruptions during the building process. Designs stemming from robotic fabrication often exhibits a digital aesthetic, constraining material expression. In related fields, methods have shown promise in addressing similar constraints by integrating emerging agencies directly into the workflow. To offer an adaptive algorithm can enhance the integration of material, robot, and human agencies in digital fabrication.

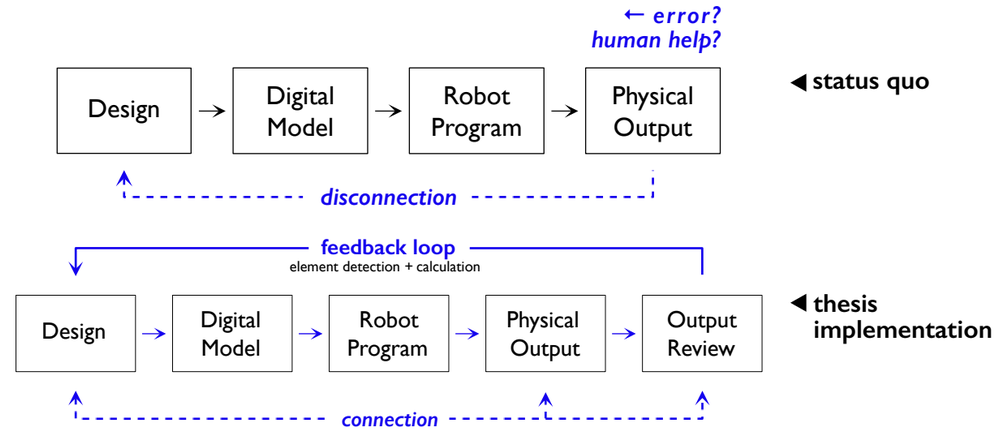
The research question posed is: how can an adaptive feedback loop in stacking elements open up a new creative and self-repairing design space? The research develops an Adaptive Algorithm that allows disruptions in wall construction. It visually detects changes in individual element poses and calculates subsequent actions based on the output of earlier iterations. The algorithm is coupled to a UR5 collaborative robot arm equipped with a camera and a gripper.

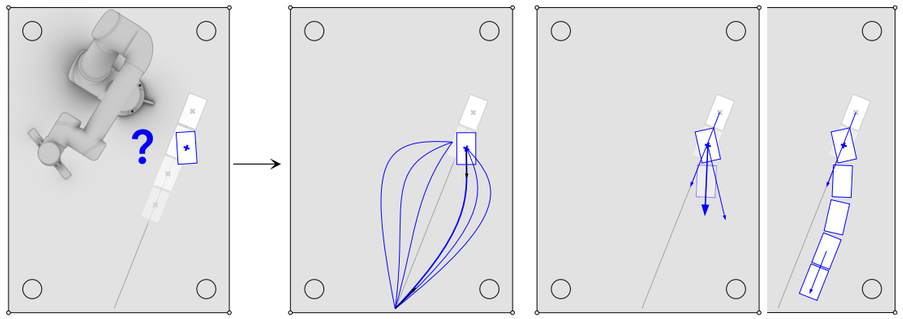
Through experimentation, the research establishes parametric and generative design bounds specific to stacking elements within the adaptive robot control algorithm. An iterative approach, allowing for the integration of disruptions while ensuring stability in the final structure, demonstrates that integrating material, robot, and human agencies within an adaptive algorithm significantly expands the creative design space in stacking elements using digital fabrication. Conceptually, the thesis provides guidelines for implementing adaptive algorithms in digital fabrication, highlighting the importance of human-in-the-loop processes to bridge generative and parametric design, enhancing the applicability of the algorithm in real-world construction scenarios. This research's architectural significance lies in its emphasis on human-robot collaboration, which aligns with the importance of architects maintaining a connection to the fabrication process and simplifying automation tasks.

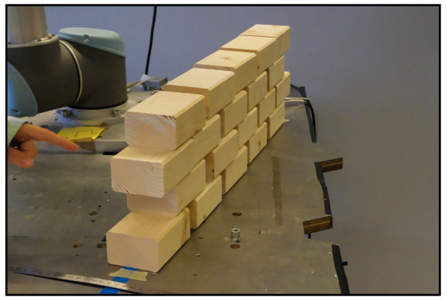


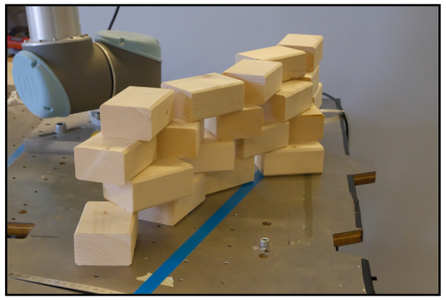


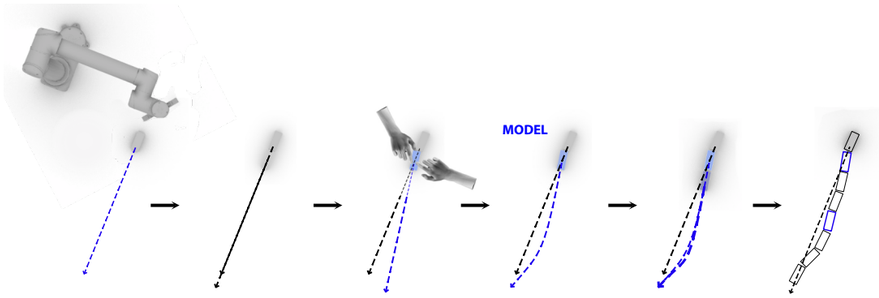
Read the whole **thesis** over here!











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