

HERBOUWHUIS



List of principles

Herbouwhuis increases the contact surface between **leftover materials** and **agents**.

Herbouwhuis doesn't just celebrate craftsmanship over industrialisation, but pleads for **reuse** over production.

Herbouwhuis strives for a world without **building waste**.

Herbouwhuis facilitates **reuse craftsmanship** development.

Herbouwhuis connects **students**, **residents** and **professionals**.

Herbouwhuis educates **architects**, **project managers** and **building contractors** to become **collaborating** reuse craftsmen.

Herbouwhuis offers **education on site**, moving through the urban landscape.

Herbouwhuis values buildings as **sponge** and **sponsor** of building elements and values.

Herbouwhuis reconfigures **playfully**, but respects all **time layers**.

Herbouwhuis stimulates **autonomy** within **cooperation**.

Herbouwhuis formulates guidelines, but leaves space for **improvisation**.

Herbouwhuis reflects the **transdisciplinary position** of architecture in between arts, crafts, ecology, technology and economics.

Herbouwhuis acts throughout the **full building cycle** from demolition to storage, construction and maintenance.

Herbouwhuis builds **entangled reconfigurations** that remain part of the urban landscape.

Herbouwhuis is an **ongoing project**.

SCENARIO

Building Herbouwhuis from fixation to leftover reconfiguration

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Introduction

This scenario envisions a possible future for a collection of factory buildings located on the former can and rim factory terrain of Hoboken, Antwerp. Based on thorough research about leftover materials, reuse networks and reuse craftsmanship the scenario proposes the building of Herbouwhuis.

Herbouwhuis is a reuse cycle centre, consisting of:

- Herbouwschool: reuse cycle school
- Bureau Herbouw: architecture, building and research office
- Herbouwateliers: ateliers for reuse artists

The proposal of Herbouwhuis fits within the design of a 300.000 m² masterplan that centers around Lageweg. The masterplan approaches the site as part of Antwerp's social, cultural and material ecosystem. Inspired by the pioneering community at Blikfabriek, it proposes a strategy of reconfiguration, building on existing qualities of the industrial heritage and material flows. Using time to its advantage, the plan aims to establish a culture of care by reusing discarded materials the city produces. The masterplan operates as a demolition contractor, recycling centre and thrift shop at once. By focussing on exchange points at the edge of industry and neighbourhood it increases the contact surface between materials and residents.

The scenario consists of three acts, each representing a different phase.

Act 1 elicits the methodology, taking the existing situation as a serious starting point and using reuse craftsmanship and improvisation to intervene and open up.

Act 2 shows what the building site would look like on a bigger scale and how the methodology leads to an architecture that tries to connect to its neighbouring developments.

Act 3 envisions Herbouwhuis in operation. It illustrates how the architecture of Herbouwhuis facilitates materials and agents to flow through, interact and go their own way.

The design of Herbouwhuis went together with the design of a curriculum for Herbouwschool. This curriculum was derived from a manifesto and education programme for Bauhaus by Walter Gropius. **Appendix 1, 2 and 3** offer more information about this curriculum.



ACT 1
The existing
opening up

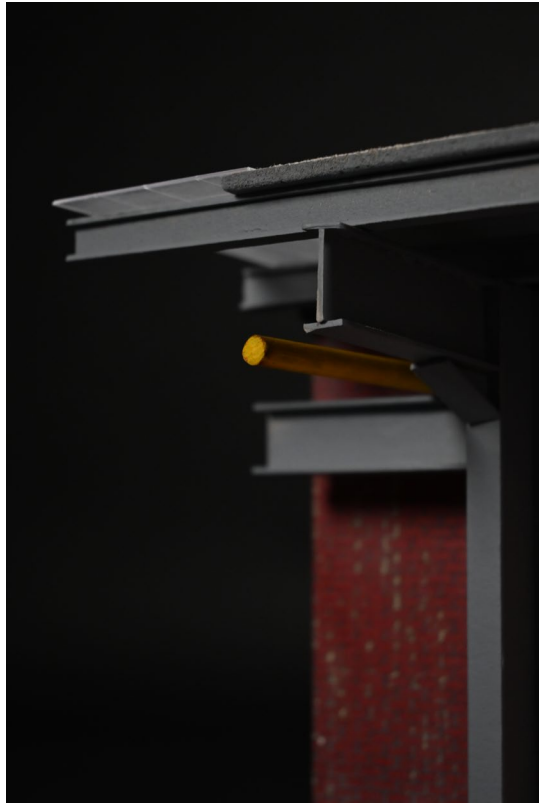
starring
Joris Goorden
Elke Lemmens

A fragment of the existing situation.

An abandoned factory hall in which they originally used to poor copper.

The layered history of the building is reflected by eclectic building details and expressive graffiti.







“Herbouwhuis values buildings as **sponge** and **sponsor** of building elements and values.”

~ from the list of principles ~

Joris Goorden and Elke Lemmens from Blikfabriek see the high sponge value of the former copper hall and bring in materials from the Opalis reuse network. Maybe these can once come in handy when something needs to be built. In the meantime the industrial hall could be a good storing facility.

Let’s open the door!



On the other side of the door, there’s not as much space as expected though. Concrete building blocks have been built in to create some kind of office space. Unfortunately, Joris and Elke won’t be able to stall all their precious goods here.

“Abuse the existing.”

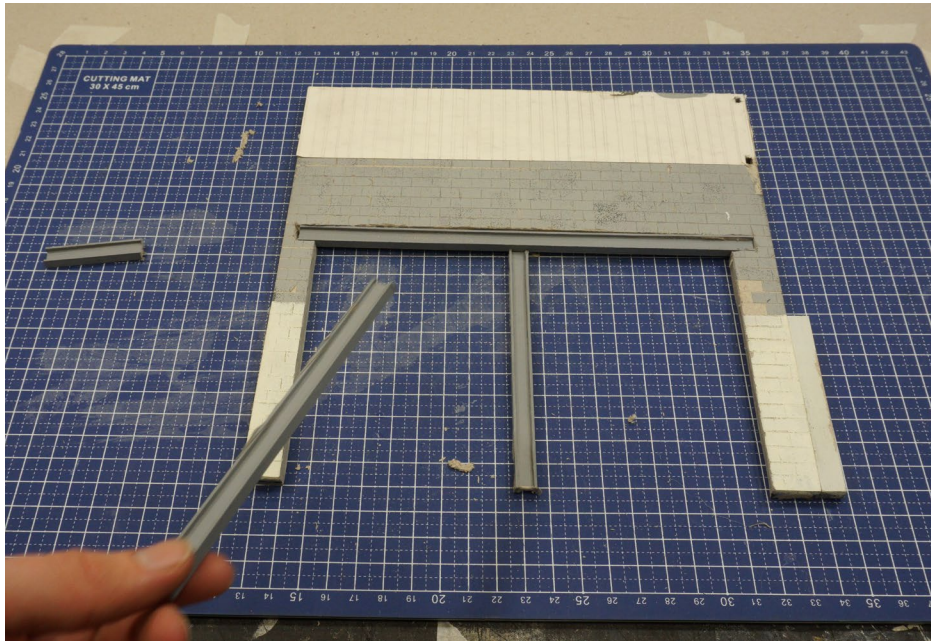
~ Jo Taillieu ~



“Herbouwhuis formulates guidelines, but leaves space for **improvisation**.”

~ from the list of principles ~

By removing part of the partition wall, Joris and Elke open up space for the reused materials to enter the building.



“Herbouwhuis reconfigures **playfully**.”

~ from the list of principles ~

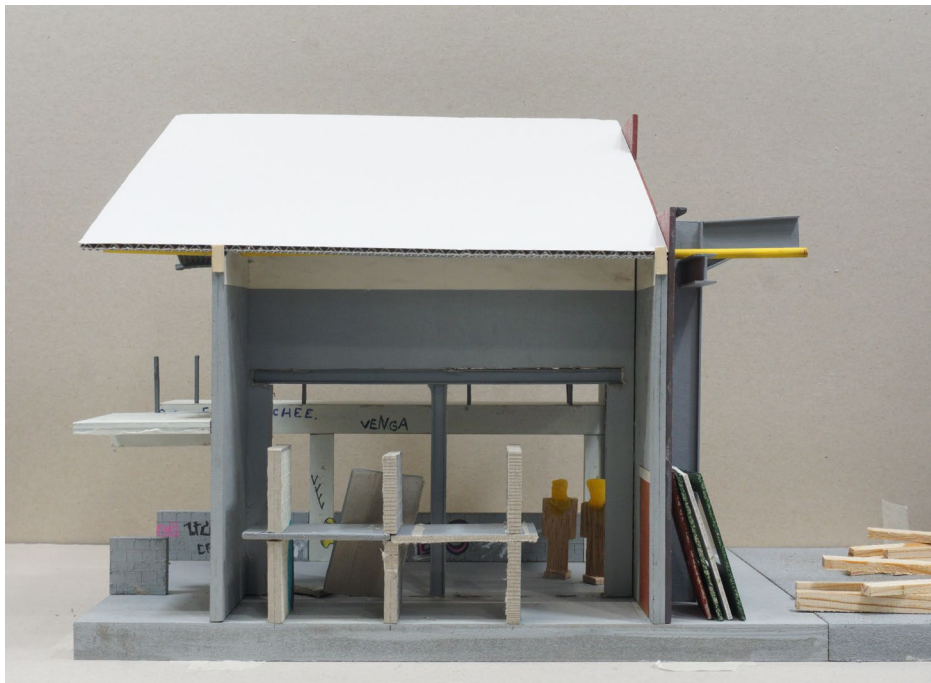
The steel beams of a roof that was dismantled right next to the former copper factory form a lintel and a new column to bear the concrete blocks above the new opening.



The remains of the partition wall are split up in fragments and combined with the roof sheets to make a cabinet for the materials from the Opalis network.

“Herbouwhuis strives for a world without **building waste.**”

~ from the list of principles ~



Joris and Elke construct the cabinet in the space that just opened up.

“Herbouwhuis doesn't just celebrate craftsmanship over industrialisation, but pleads for **reuse** over production.”

~ from the list of principles ~

The fragment after the improvised reconfiguration.

By using tools and materials from the site itself, the building has opened up.

The new space stores leftover materials for future projects.



"Herbouwhuis acts throughout the **full building cycle**; from demolition to storage, construction and maintenance."

~ from the list of principles ~



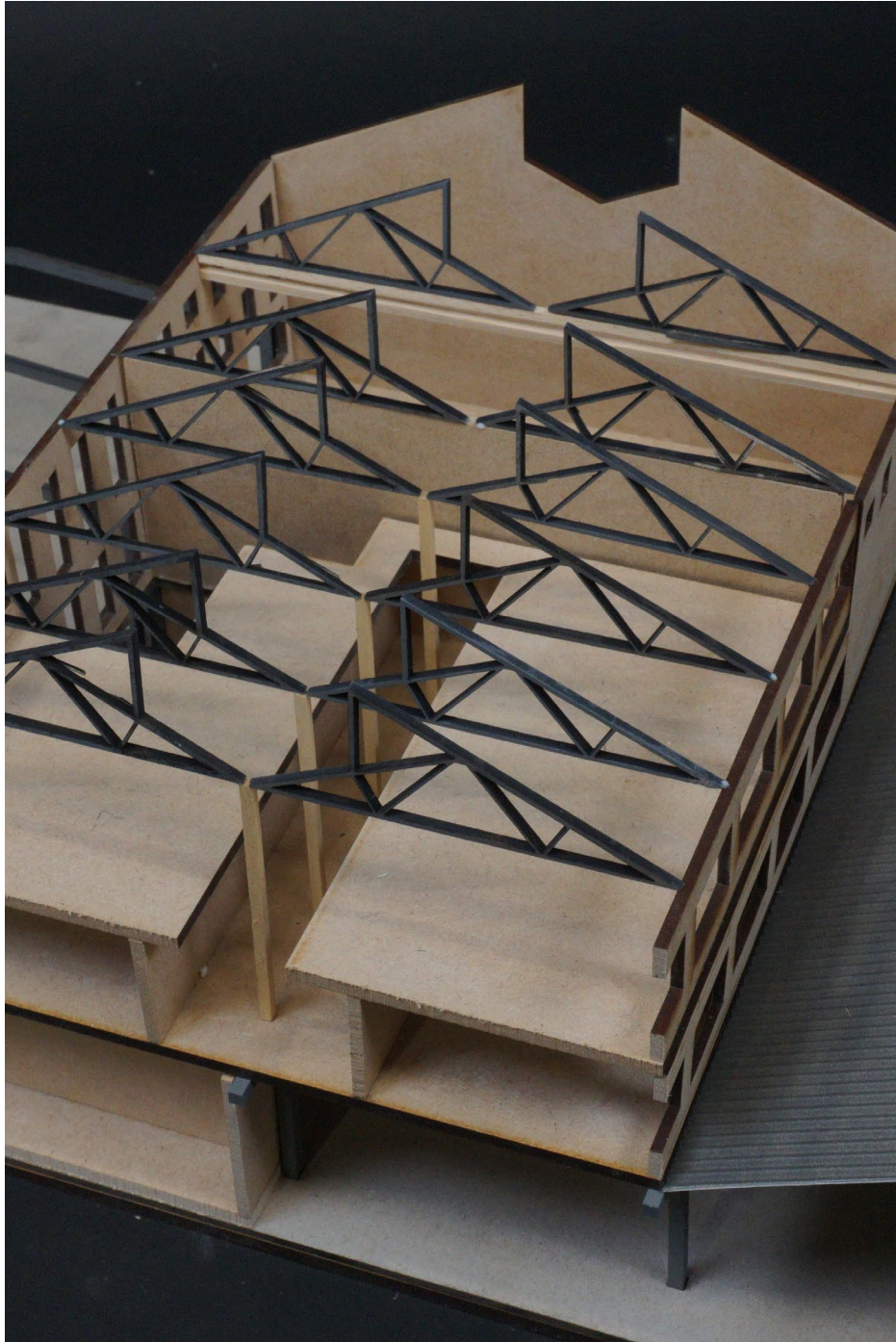
The materials from the Opalis reuse network fit well within the new cabinet. Apart from the materials of the 'original site', the building now hosts materials from the reuse network. A next intervention could be build with a mixture of both.

→
The leftover piece of the partition wall aligns with the fragments that are now part of the cabinet. When looking closely, the details tell information about the materials' origins.

↘
The intervention adds yet another layer to the complex palimpsest of the former copper factory. It offers new perspectives on existing materials.

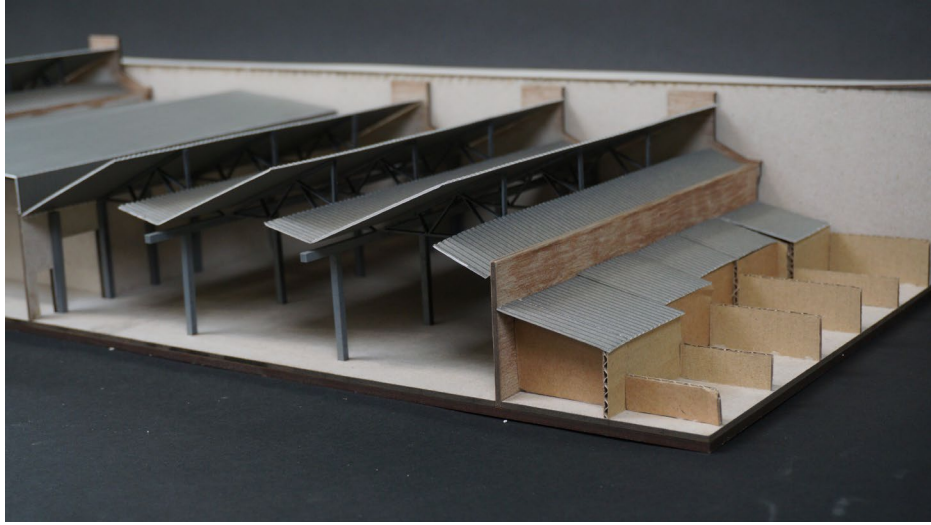






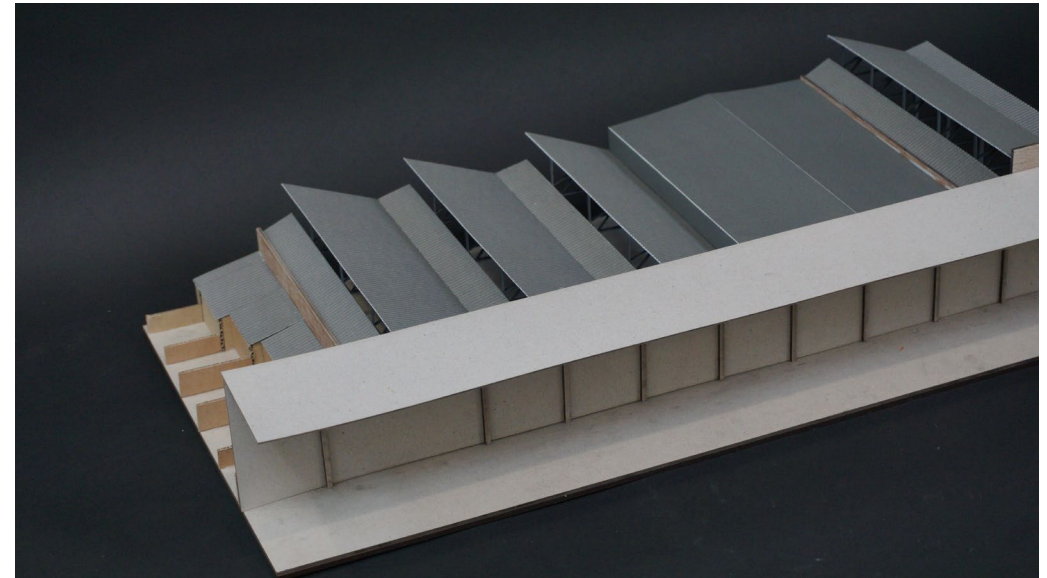
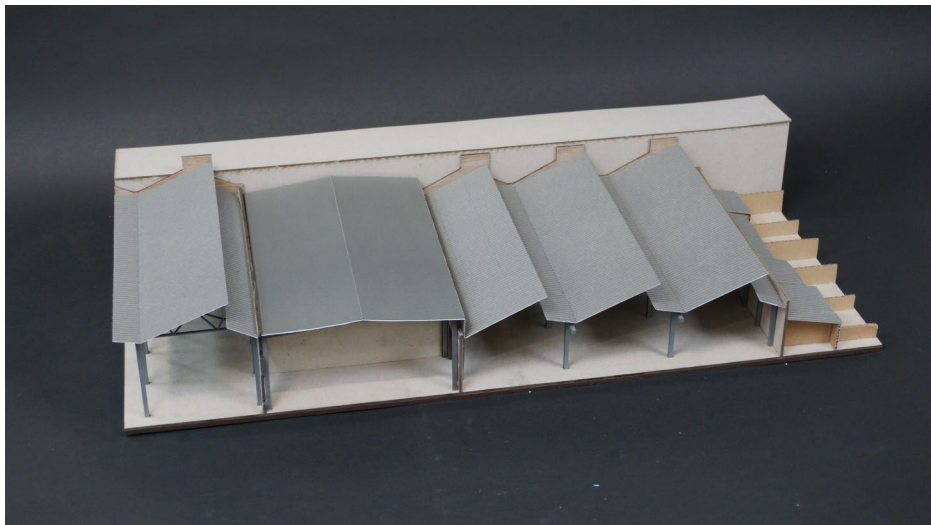
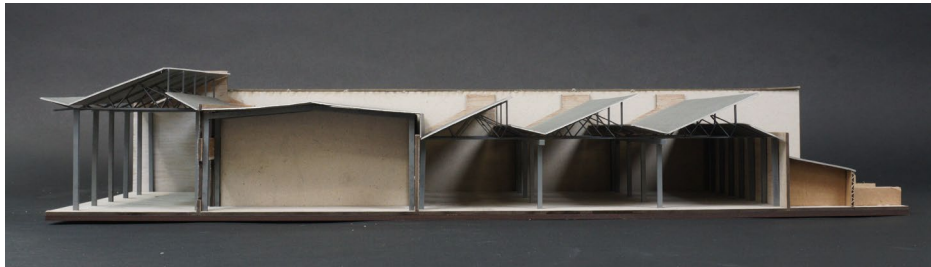
ACT 2
Building Herbouwhuis
a playful reconfiguration

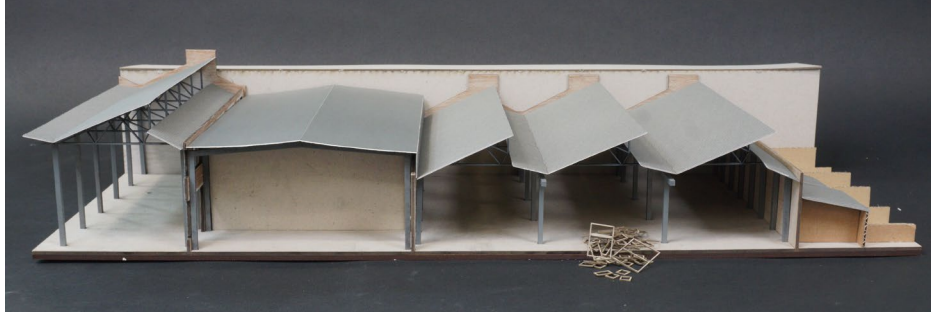
starring
Thruss 1-12
Window frame 1-64
Concrete building block 1-36



A slightly bigger fragment of the other side of the former copper factory (from now on Opslaghal) and its surroundings. The building is built in from every side by various developments. On the west side by little garden sheds, on the south side by a more modern factory hall and on the east side by a big canopy structure covering a volume of concrete building blocks. At the other side of the canopy there's the former construction hall (from now on Constructiehal), a bigger brother of the copper factory.

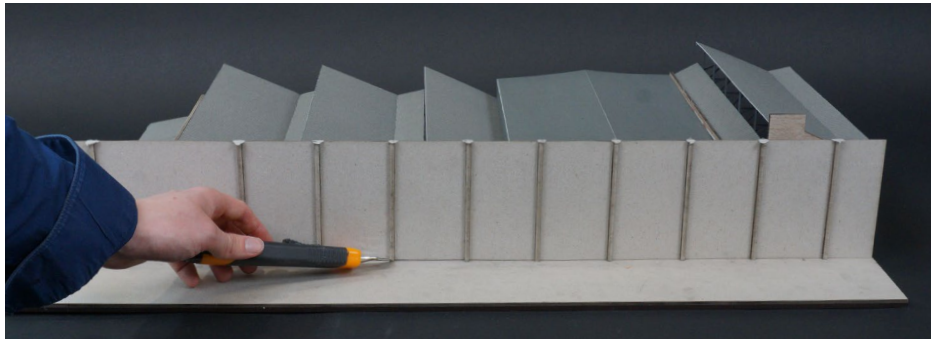
All these structures seem to turn their back towards each other, facing inward instead of connecting outwards. The ensemble is clogged and doesn't offer a lot of quality. The water has nowhere to go.





An impulse! Following the start in Act 1, a collection of window frames from the Opalis reuse network enters the factory hall. The incoming materials carry a certain potential and spark just enough joy to put in motion the long awaited developments.

Let's give the building some space!

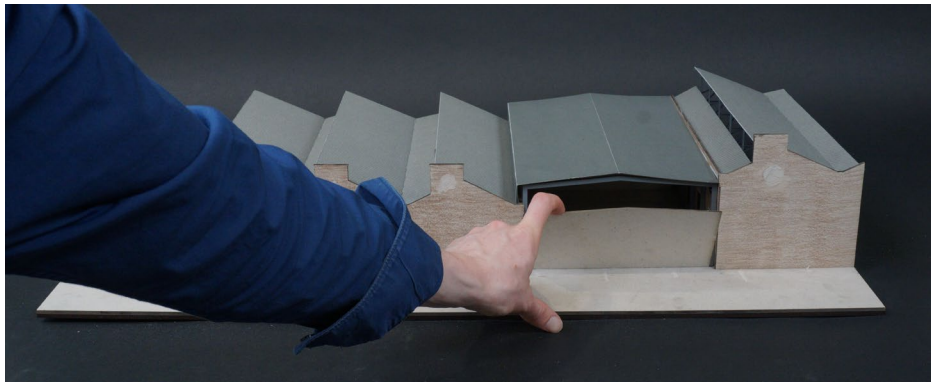


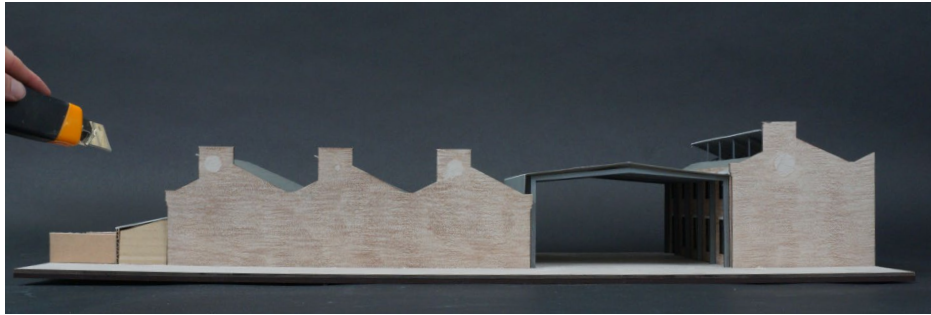
←

Start by dismantling the longitudinal Garrincha hall on the south.

↙

And the volume of concrete building blocks under the canopy.





Facades appeared. After dismantling some existing structures, a new street is running along the buildings. Since its original construction in 1924, these facades have been blind.



Let's give it a new face by precisely cutting into the existing with a diamond saw, using reconfigured steel lintels to support the voids that are yet to be filled with reused window frames.

Also the closed off windows along the canopy are cut into and partly reopened. Here, the concrete lintels suffice to bear the voids.





At least the factory halls are now enriched with some extra light.

New doors in Constructiehal improve the connection between the two halls and the space under the canopy.

The big open spaces are unconditioned. Most of the year it's too cold to stay inside in a static position for too long.

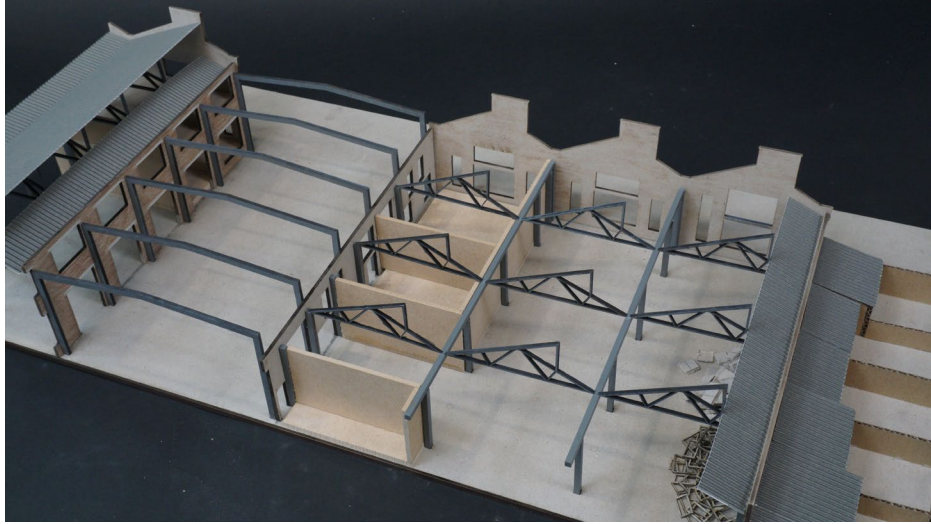


Wooden timber frame elements are selectively built in to create climatized zones within the big volume.

The climatized zones are lower and therefore it's possible to fit an extra floor under the existing roof of Constructiehal.

But don't lose the quality of the existing. Big parts of the factory halls are kept high as they are.

These spaces will be suited for physically intense activities. Where thermal comfort is not a necessity.

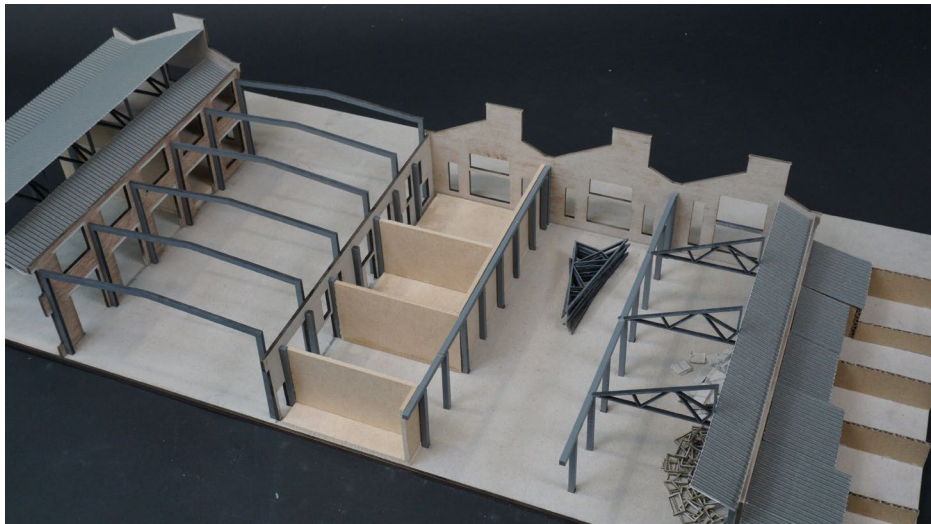


Opslaghal is too small to fit an extra floor in the conditioned spaces.

It results in spacious climatized rooms along the edge of the factory hall.

The canopy in between Opslaghal and Constructiehal has been taken off in the meantime.

A big intervention is coming.

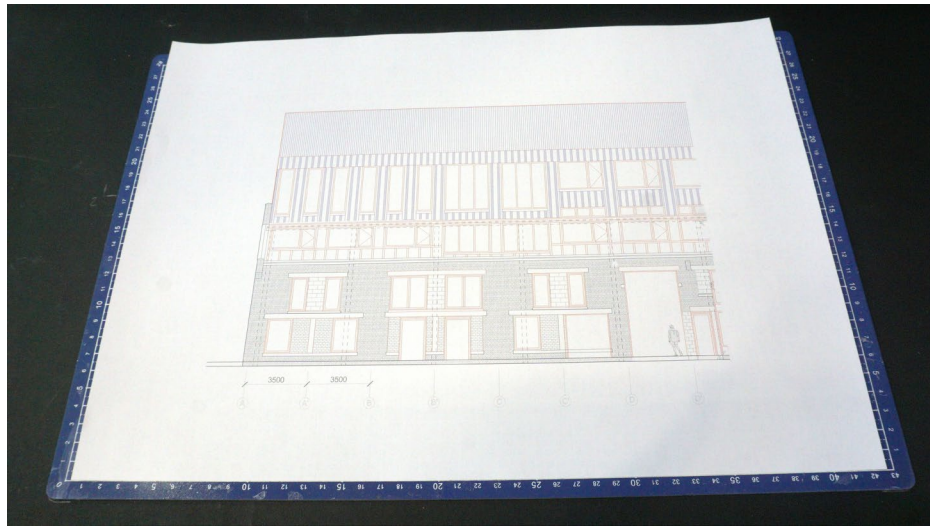


Inside Opslaghal, extra steel columns are added on the old grid.

The bearing capacity that was already present in the foundation, is now extended above the ground.

The roof and spans are dismantled and temporarily stored.

Working carefully for future use.



Given the structural potency of the existing and the need for more square metres to fit in the desired program, that slowly takes form, the architect proposed a vertical extension on top of Opslaghal.

The drawing shows a two storey extension on top of the existing. The big door on the right leads to the storage while the smaller doors give access to the conditioned spaces.

The top of the canopy structure (from now on Expohal) dissects the facade of the new volume. The lower part is showing its uncladded wood, whereas the higher part is made of the reconfigured trapezoidal sheets of the old roof.

The windows in the vertical extension follow the logic of what's behind. Stressing verticality at the staircases and the auditorium on the left, more horizontal at the classrooms and ateliers on the right.

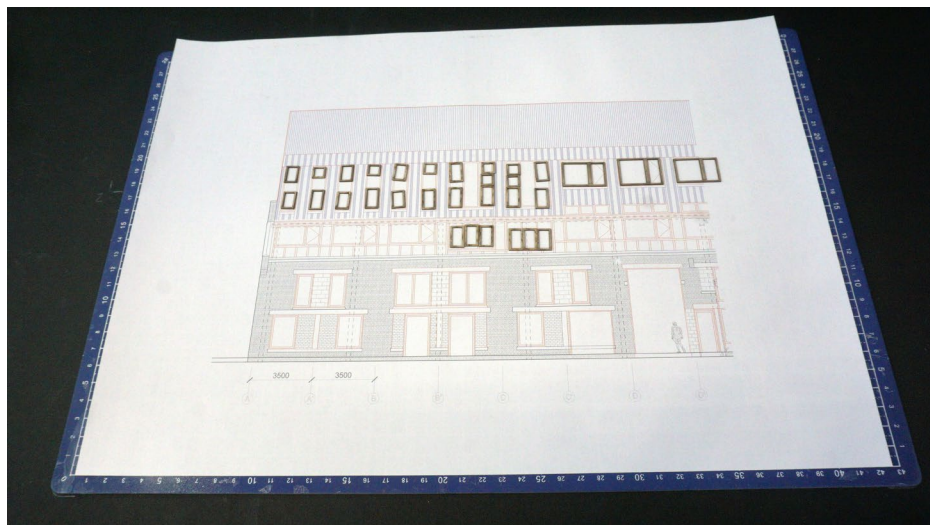
“Herbouwhuis formulates guidelines, but leaves space for **improvisation**.”

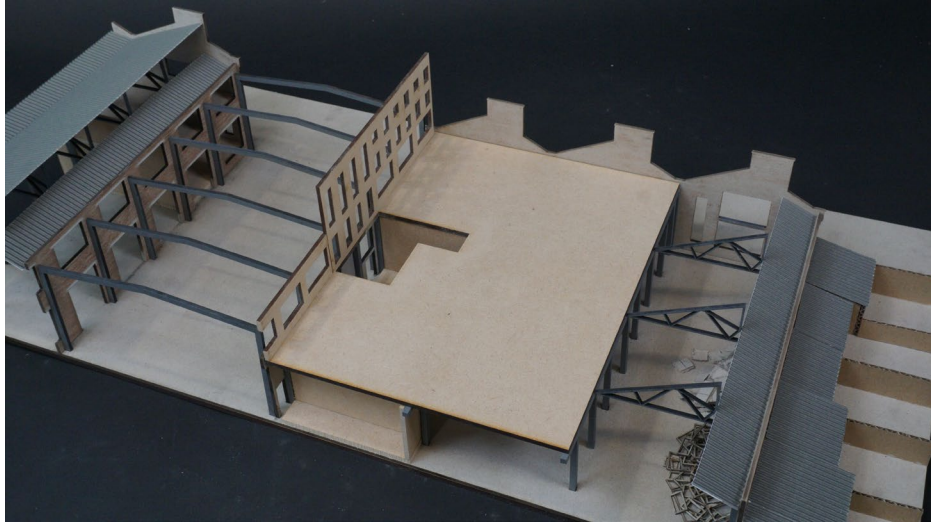
~ from the list of principles ~

But when do the leftover materials in the storage come into play? Using these materials asks for a different kind of building process. A building process in which the architectural drawing is an intent. But on the building site, the design is retrofitted in accordance to the flows of materials that become available.

The leftover window frames from the Opalis network enter the elevation drawing of the architect. By connecting the wooden frames the new window composition is close to the one in the initial drawing. This way, they let in sufficient daylight to light up the spaces inside.

The drawing proves to offer enough tolerance to work with reused materials.



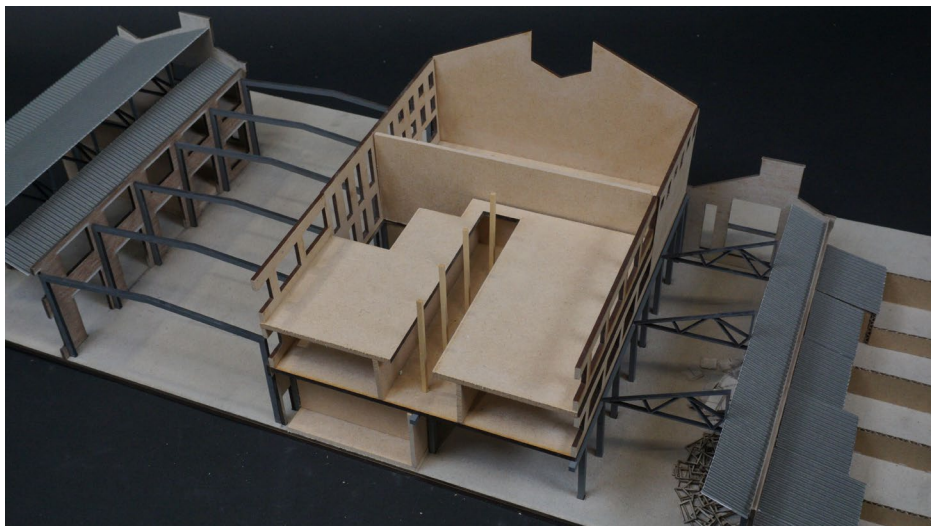


Let's build!

A light wooden construction is connected to the steel and brick existing underneath.

The wooden timber frame facade elements are handcrafted and follow the logic of the window frames from the Opalis network.

The measuring and making takes some time, but a lot of material, money and emissions are saved.



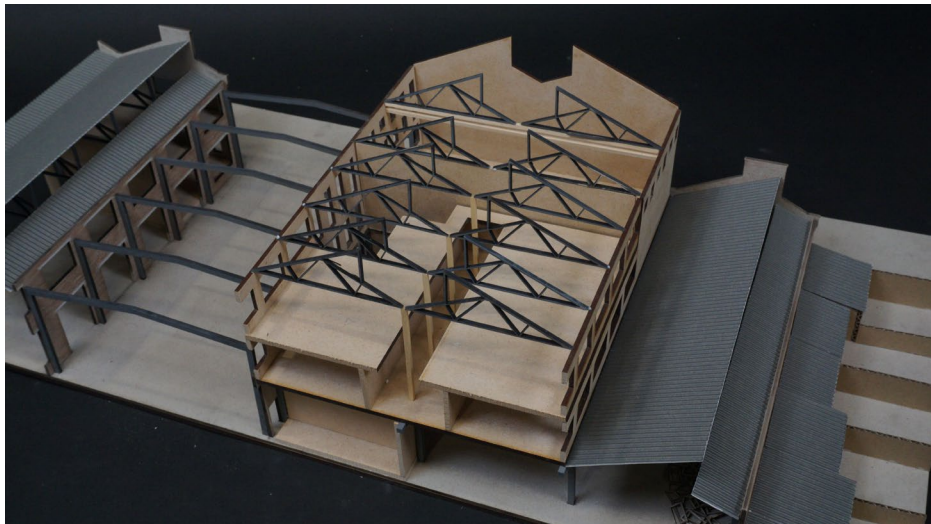
The facade on the end side shows a remarkable monumentality.

A second floor is added. In the middle, a 2,5-metre wide void remains on the location of the corridor. Circular wooden columns are placed here and follow the rhythm of the steel columns on the ground floor.



The steel thrusses enter the play!

After residing in Opslaghal for some time, it's their time to shine.



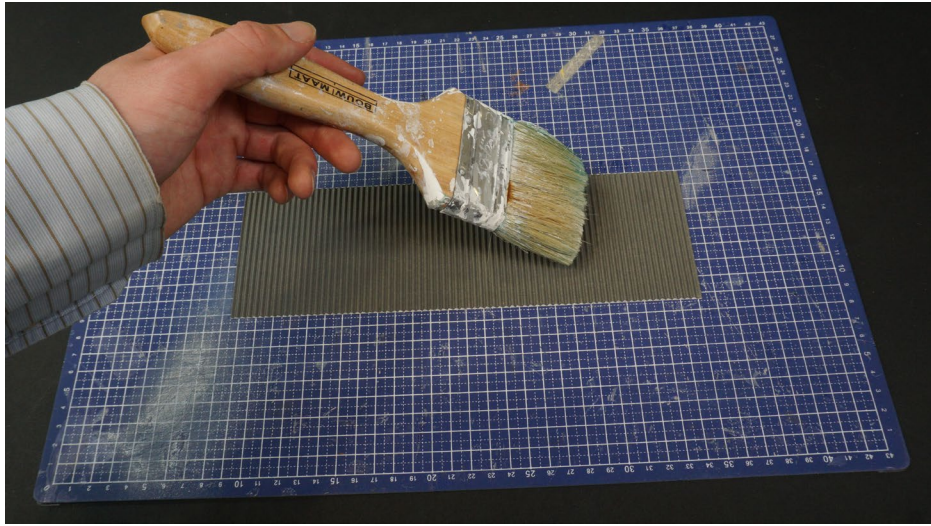
The right row of spans is flipped in relation to the original situation.

It creates a symmetry in the vertical extension, offering light from both sides to the spaces on the second floor.

The thrusses are connected to old mooring posts from the Opalis network.

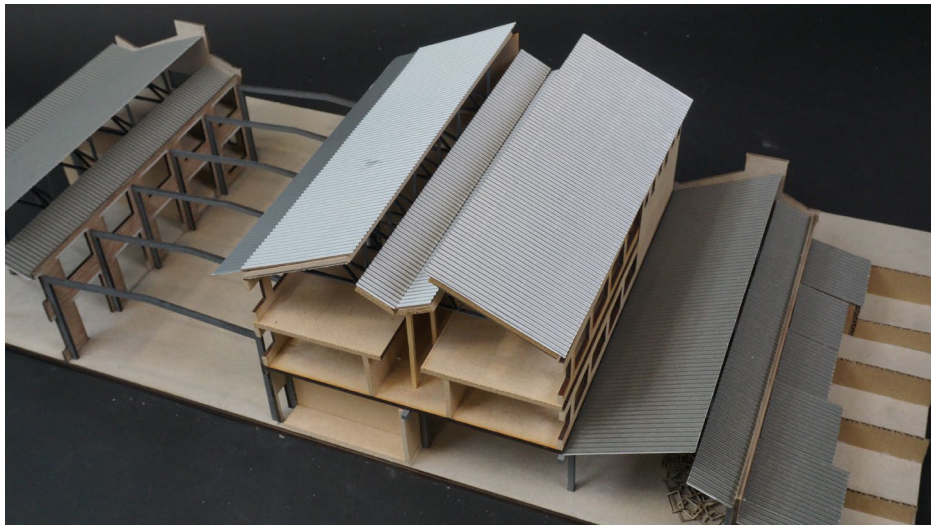
The mooring posts now function as beams and bridge the 3,5-metre gap between the wooden columns.

Seven metres higher than before, the thrusses are ready to go back to what they do best: carrying the roof and letting in daylight.

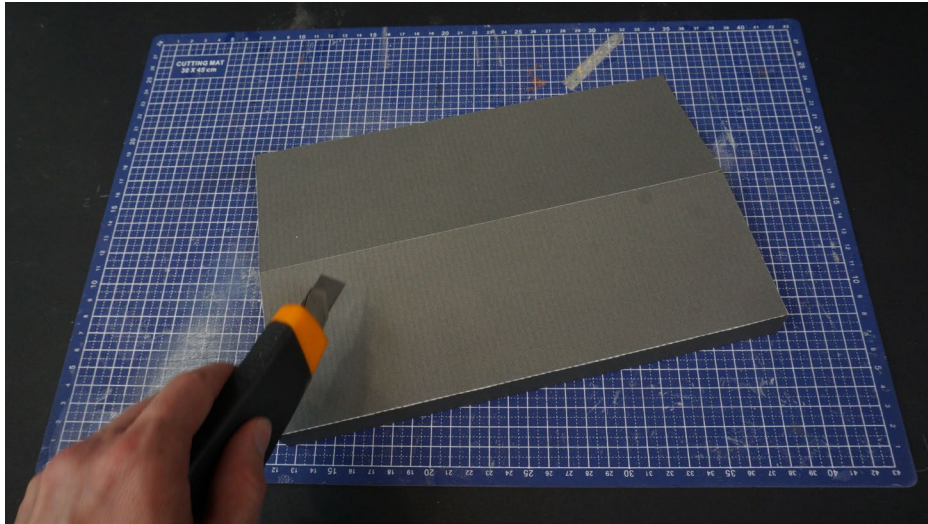


The old roof of Opslaghal could use a bit of care.

The corrugated sheets are cleaned, tested and re-coated with a shiny coating.



And find their way on the wooden roof of the vertical extension.



The old roof of Expohal is taken from Opslaghal to Constructiehal.

The roof consists of trapezoidal sheets and undergoes a similar procedure as the corrugated sheet of Opslaghal.

Most pieces stay completely intact.

Some are sawn in accordance to the facade composition.

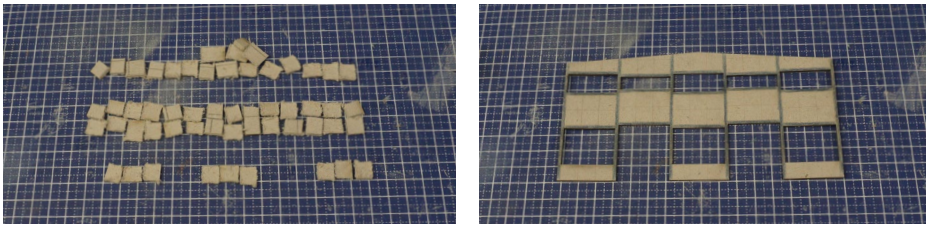


With great care, they are montaged on the timber frame facade elements.

The new facade material creates an interesting play with the existing brick below.

The vertical lining of the trapezoidal sheets in contrast to the horizontal bricks.

The symmetrical contour of the vertical extension facade rising above the industrial language of the existing.



The 1x1m fragments of the concrete building blocks make their way from Opslaghal to Constructiehal.

In order to form a new facade, they are re-bricked.

And put into a framework of steel I-profiles, coming from an adjacent factory roof.

The horizontal rhythm of the new facade is strict, but varies in height to adapt to the dimensions of the reuse window frames from the Opalis network.

The facade is placed two grid sizes inwards and forms the official entrance of Expohal.

It adds a third architectural language to the intriguing play that evolves.

A surface that's mainly built up of materials that were reconfigured on site.

Right next to an existing facade that was subtly transformed by making incisions.

And that now bears a new wooden volume, clad with reconfigured metal, its openings filled in with windows from the reuse network.



Now that the building has taken shape, it's time to work on its direct context.

The new street that appeared after removing the factory hall at the start of the process is called Hollebeekstraat, but the historic Hollebeek is still hidden under layers of concrete and stone.

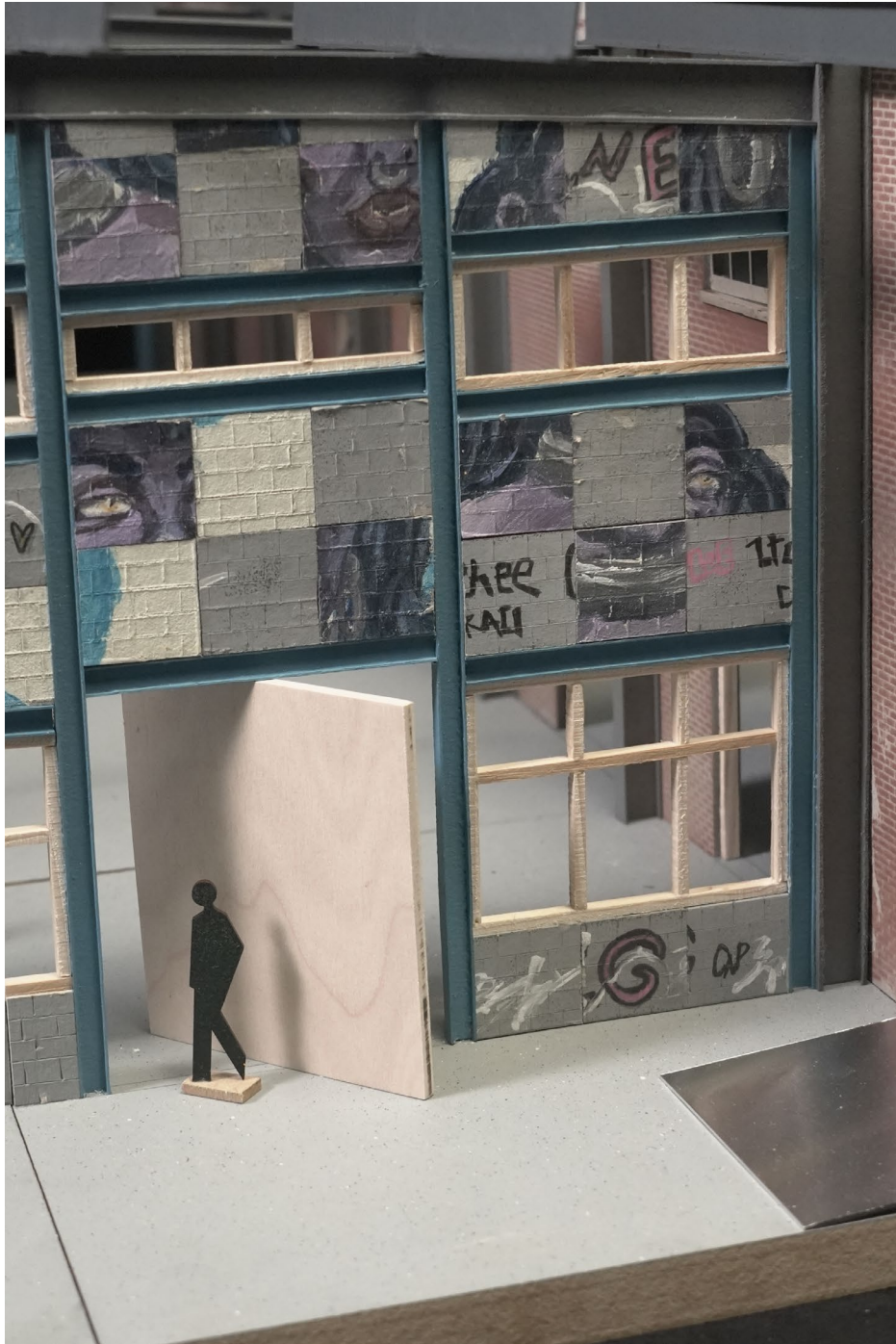
Let's unseal!

After unsealing Hollebeekstraat, non-human agents use time to their advantage to slowly appropriate the permeable ground.

Plants start growing and the Hollebeek starts flowing.

Herbouwhuis is an ongoing project, but is now built and fully in operation.

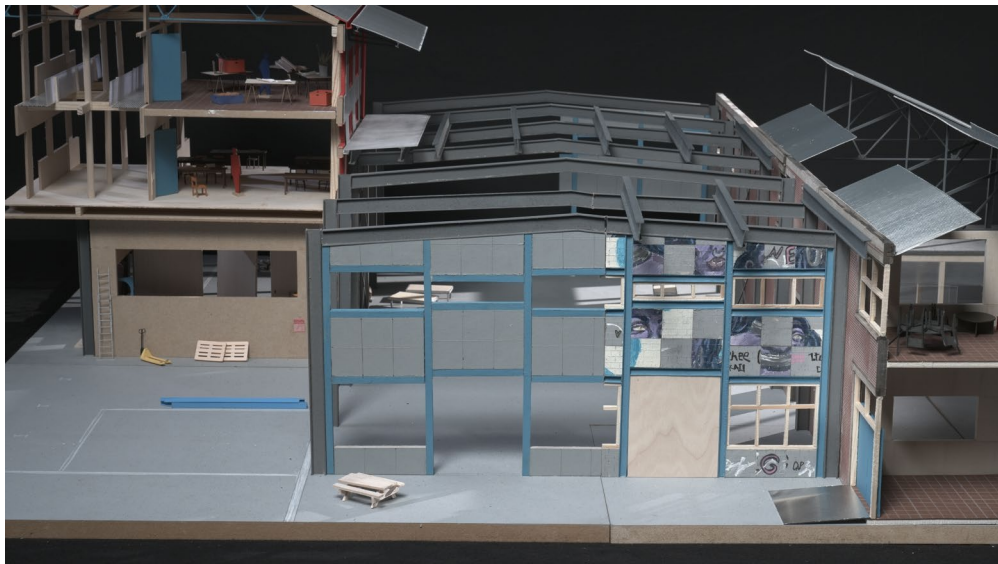
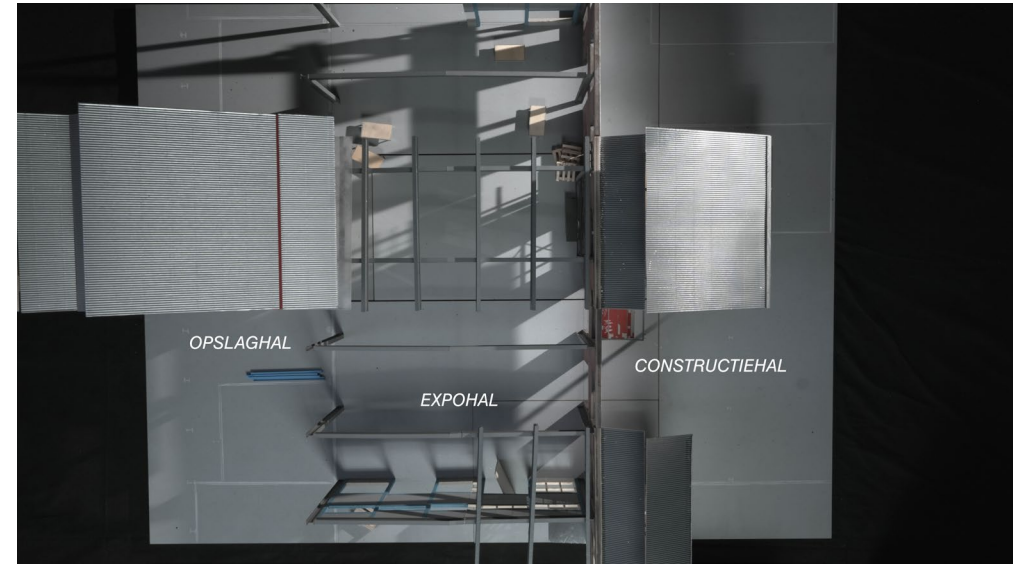




ACT 3
Herbouwhuis in operation
inspiring entanglements

starring
Lance Schroten
Marianna Angelini
Raf van Oosterhout
Herbouwschool students
Hoboken residents

Scene 1 Early morning at Herbouwhuis



“It’s very early at Herbouwhuis and the building is slowly waking up.”



“The entrance to Expohal at Hollebeekstraat, often one of the busiest places of the building, is still closed. Just like the entrance to the canteen.”

“Herbouwhuis reconfigures **playfully**, but respects all **time layers**.”

~ from the list of principles ~



“However, reuse artist Lance Schrotten is already working hard in his atelier, making sketches for his most recent project. High up on the second floor, in one of the Herbouwateliers he’s living his best life. With 50 square metres, it’s the most spacious atelier space he ever owned. The original steel span that was lifted from the original structure reminds him of the industrial history of the place. Light is coming in from both the northwest facing roof windows and the south east facing facade windows. The fixed sun screening, that follows the angle of the roof makes sure the strong summer sun is blocked. When it rains, Lance is pleasantly reminded of his favourite element: water.”

“Herbouwhuis stimulates **autonomy** within **cooperation**.”

~ from the list of principles ~



“One floor lower, architect and professor Raf van Oosterhout is shifting the tables. He doesn’t like to teach in a classic table organisation, but prefers the U formation. Luckily, the classroom is big enough for some experimentation. On the ceiling, the reflected light of the green house roof elements above Expohal brings a happy start of the day. Raf looks out of the window onto Expohal and sees the first students gathering together. It’s almost 9am. He should start making his way down. He leaves the classroom and enters the wide corridor that leads him to the staircase.”

“Herbouwhuis connects students, residents and professionals.”

~ from the list of principles ~



“Ah, deze hier en dan die daar. Dan is hier mooi genoeg plaats voor alle spullen. En waar laat ik dit dan? Och, dat staat hier wel goed. Ik hoop dat ze er een beetje zin in hebben. En dat ze een beetje kunnen verfen. Vorige keer liep het helemaal in de soep. Toen zat er overal verf aan het eind van de dag. Nou gelukkig, zijn de platen multiplex toch hergebruikt.” - Marianna

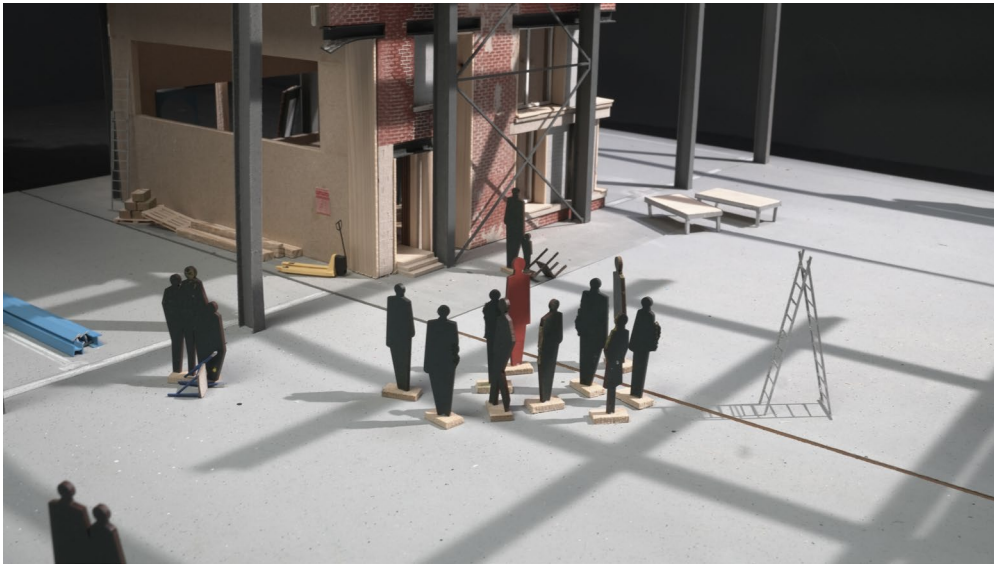
“While Raf heads towards his students, Marianna is preparing the repair café for her workshop about appropriation by domestic objects. The repair café is located on the ground floor, in between the storage and Expohal and very close to the workshops. Unlike the most surrounding spaces on the ground floor, it’s a conditioned zone. The insulating timber frame elements have a wooden finishing from the inside, transferring a warm and homey feel in this former factory. An ideal location to fix some chairs!”

Scene 2 Herbouwhuis gets to work

“After making his way down from the classroom, Raf meets his students in the Expohal. Meanwhile, residents from the neighbourhood arrive at the repair cafe. As Marianna asked, they brought domestic objects that need a make over. Lance figured out his plan and walks towards Constructiehal. In his hands, he carries a piece of leftover corrugated sheet.”

“Herbouwhuis doesn't just celebrate craftsmanship over industrialisation, but pleads for **reuse** over production.”

~ from the list of principles ~



“Students of Herbouwschool spend one day of their week on corvee. Here, they work on the 1:1 scale. Usually on the buildings of Herbouwschool itself, sometimes at buildings in its close vicinity.”

“Herbouwhuis educates **architects**, **project managers** and **building contractors** to become reuse craftsman.”

~ from the list of principles ~



“The ground floor facade of Expohal doesn’t conceal its patina. One of the steel lintels in the old brickwork badly needs replacement.”

“Herbouwhuis is an **ongoing project**.”

~ from the list of principles ~



“The residents all arrived in the spacious repair cafe. Sunlight falls onto the high windows. Marianna loves giving this workshop, since it reminds her of her own graduation project. She also likes that it gathers people from the neighbourhood in this transformed building that houses so many materials.”

“Herbouwhuis increases the contact surface between **leftover materials** and **agents**.”

~ from the list of principles ~

“Welkom allemaal, wat leuk dat jullie zijn gekomen naar de workshop van vandaag. We gaan de prachtige spullen die jullie hebben meegebracht nog een stukje mooier maken. Voordat ze dan weer mee gaan naar huis, worden ze hiernaast in Expohal tentoongesteld. Maar wees vooral niet zenuwachtig, ik ga jullie er doorheen leiden.” - Marianna



“Raf and his students finally get to work. They get a ladder and dismantle the damaged lintel. To prevent the facade from collapsing, they then place a temporary column.”

“Herbouwhuis acts throughout the **full building cycle** from demolition to storage, construction and maintenance.”

~ from the list of principles ~



“Lance works on some 1:3.3 fragment models of the water purification building nearby. It’s the building he designed some years ago, when he still worked as an architect. The workshop is equally lit by the roof windows. Machine cabins are placed within the high space. In here, artificial lighting offers steady sawing circumstances.”

“Herbouwhuis reflects the **transdisciplinary position** of architecture in between arts, crafts, ecology, technology and economics.”

~ from the list of principles ~



“Students, artist, architects. They all share the workshops. While Lance saws wood, the students of Raf discuss how to fix the dismantled lintel, laying on the table.”

“Herbouwhuis facilitates reuse
craftmanship development.”

~ from the list of principles ~



Scene 3 Lunchtime

“A well deserved lunchbreak simultaneously puts the three projects on hold. The light Expohal feels a bit like a covered street. Here, people meet and tell each other what they are doing.”



“The facade that separates Expohal from Hollebeekstraat shows a remarkable way of building with reused materials. The vertical rhythm is strict, but horizontally the measurements differ, depending on the reused windows that became available. Cut up 1x1m fragments of a concrete building block wall are framed by reconfigured steel I-profiles. With the graffiti steel attached, the facade forms a complex puzzle.”

“Herbouwhuis strives for a world without **building waste.**”

~ from the list of principles ~



“From the 1st floor of the canteen, the view into the workshop is impressive. It works very informing to take some distance and look at your work from above, although some people decide to relax for a bit.”

Scene 4 Back to work

“Some people sat outside along the Hollebeek and rejoin the group as they walk back into Expohal.”



“Herbouwhuis offers **education on site**, moving through the urban landscape.”

~ from the list of principles ~



“The corvee session will be concluded by a reflection in the classroom. Raf finds it incredibly important his students alternate between physical learning and theoretical learning. While the classroom on the first floor offers the perfect thermal and acoustic conditions to teach, Raf will always prefer days in which he takes his students to the building site.”



“The attention of the residents on the other hand, has reached its peak. They now start colouring the objects they brought to the workshop.”

“Het is belangrijk om de juiste kleuren te gebruiken voor de juiste spullen. Zo is geel een hele mooie kleur voor stoelen, maar moet je oppassen dat je de kleur niet teveel gebruikt. Je kan geel bijvoorbeeld heel goed combineren met donkergroen. Kijk maar naar de stalen constructie van Stellingwijk.” - Marianna

“Herbouwhuis values buildings as **sponge** and **sponsor** of building elements and values.”

~ from the list of principles ~



“Lance has started a final sprint and is furiously walking back and forth between Opslaghal and Constructiehal. When he passes the centre of the workshop, he stands still and looks around him. He’s amazed. All materials he sees, are reused! They all come from somewhere and are almost ready for their next life. Herbouwhuis really keeps on giving.



Scene 5 The exhibition

“The work is almost over at Herbouwhuis and residents are proudly placing their objects in Expohal, strictly curated by Marianna. The enormous space functions as material spill out, turns into a stage, an exhibition. With his last energy, Lance brings in his 1:3.3 fragment pieces. Raf and his students finished their reflection session and join the exhibition, which looks more like a festival at this point. The students start bringing in extra materials from Blikfabriek to complete the set. Some festive drinks are well deserved!”

“Herbouwhuis formulates guidelines, but leaves space for **improvisation**.”

~ from the list of principles ~



“Wat moooi Lance! En wat vind je van de ‘domestic props’? Ze waren vandaag zo hard aan het werk. Ik ben helemaal trots.” - Marianna

For today, the reconfiguration is complete. Not all objects on display in Expohal are beautiful or neat, but they did come about with care, time and sometimes love. Moreover, the people that worked on them, have become a little more skilled in reuse craftsmanship. The objects therefore display potency for future projects. From waste to gift and from ugly chair to colourful explosion. What will happen next?



Insane in Hoboken by VANGRAILS

*You want us to do a song about Blikfabriek?
Don't you know we loco?*

•Beat kicks in•

[verse 1]

*To the ones in Cantin, to all employees
Your drinks are awesome, cause they keep me keen
I mean, a good place to chill
and I will come back for a big refill*

*To the ones in the Maakfabriek
Their structures sound from base to peak
From waste to gift, it's crazy huh?
Making art in their own heterotopia*

*Oh, and what about Stelling?
Sailing 7 C's, in the quiet wing
Bro, let me entertain
And jump around, let's get insane*

*[chorus]
Insane in Hoboken,
In the Blikfabriek (4x)*

[verse 2]

*Urban architecture, got no time for a lecture
Move and raise the room temperature
Raise the ceiling, and move that wall
You know, my leporello says it all*

*Multidisciplinaria, making that heterotopia
Fuck the megalomania, I'm using old materials
Yeah, we're using stone and wood
Renovate this place into something good*

*We in Hoboken now, that's a living city
My designs are smart, they have something witty
Been working on my model, and it's gonna be pretty
But now we're here and its time to party*

*[chorus]
Insane in Hoboken,
In the Blikfabriek (4x)*

APPENDIX 1

Bauhaus transformation

In 1919 Walter Gropius wrote down his ambitions for the Bauhaus in a manifesto and a four-paged education programme. By treating this text as a transformation process, Herbouwhuis designs its own manifesto and curriculum. Reacting to the context of Gropius' Bauhaus it aims to:

- Keep relevant content

- Reconfigure content that needs adjustments to fit the new curriculum

- Dismantle obsolete content

- Add missing content

Manifesto by Walter Gropius:

The ultimate aim of all visual arts is the complete building! To embellish buildings was once the noblest function of the fine arts; they were the indispensable components of great architecture. Today the arts exist in isolation, from which they can be rescued only through the conscious, co-operative effort of all craftsmen. Architects, painters, and sculptors must recognize anew and learn to grasp the composite character of a building both as an entity and in its separate parts. Only then will their work be imbued with the architectonic spirit which it has lost as 'salon art'.

The old schools of art were unable to produce this unity; how could they, since art cannot be taught. They must be merged once more with the workshop. The mere drawing and painting world of the pattern designer and the applied artist must become a world that builds again. When young people who take joy in artistic creation once more begin their life's work by learning a trade, then the unproductive 'artist' will no longer be condemned to deficient artistry, for their skill will now be preserved for the crafts, in which they will be able to achieve excellence.

Architects, sculptors, painters, we all must return to the crafts! For art is not a 'profession'. There is no essential difference between the artist and the craftsman. The artist is an exalted craftsman. In rare moments of inspiration, transcending the consciousness of his will, the grace of heaven may cause his work to blossom into art. But proficiency in a craft is essential to every artist. Therein lies the prime source of creative imagination. Let us then create a new guild of craftsmen without the class distinctions that raise an arrogant barrier between craftsman and artist! Together let us desire, conceive, and create the new structure of the future, which will embrace architecture and sculpture and painting in one unity and which will one day rise toward heaven from the hands of a million workers like the crystal symbol of a new faith.

Transformation:

The ultimate aim of building is a qualitative reconfiguration of the existing urban landscape! To reuse building elements was once common practice in a low tech contextual building world. Human agents stood in closer connection to their building materials, knowing about their provenance, structural qualities and shortcomings. Today buildings and their materials exist in isolation, from which they can be rescued only through the conscious, co-operative effort of all human agents (architects, project managers, building contractors, demolition workers, users, urbanists and landscape architects). Architects, project managers and building contractors must recognize anew and learn to grasp the entangled character of a building in its urban context. Only then will buildings fulfill their potential as both sponge and sponsor of building elements and values.

Schools of architecture and urban planning around the world are unable to teach these exchange moments; how could they, since interdependency cannot be taught. They must be merged with the workshop and the reality of urban dynamics and the reuse cycle. The mere drawing and rendering world of the architect and urbanist must become a world that builds again. When young people who take a joy in designing buildings begin their life's work by learning about reuse craftsmanship and urban ecologies, then the unsensitive 'architect' will no longer be condemned to tabula rasa architecture, for their skill will now be preserved for reconfiguration, in which they will be able to achieve excellence.

Architects, project managers, building contractors, we all must specialize ourselves in reuse craftsmanship! For building is not mere 'creation'. There is no essential difference between a demolition contractor and a building contractor. The demolition contractor turns into the building contractor when he harvested building materials in the urban landscape. Throughout the cyclic reuse process, building contractors must work closely together with project managers and architects. Reuse craftsmanship is essential to every architect, project manager and building contractor. Therein lies the prime source of creative reuse imagination. Let us then create a centre for reuse craftsmen without the procedural distinctions that raise a barrier between different disciplines in the building world! Together let us demount, store, construct and maintain the reuse structures of the future, which will embrace urban architecture, construction and management in one unity and which will continuously communicate the beauty of considerate and entangled reconfiguration.

Programme (curriculum) by Walter Gropius:

The Staatliches Bauhaus resulted from the merger of the former Grand-Ducal Saxon Academy of Art with the former Grand-Ducal Saxon School of Arts and Crafts in conjunction with a newly affiliated department of architecture.

Aims of the Bauhaus

The Bauhaus strives to bring together all creative effort into one whole, to reunify all the disciplines of practical art - sculpture, painting, handicrafts, and the crafts - as inseparable components of a new architecture. The ultimate, if distant, aim of the Bauhaus is the unified work of art - the great structure - in which there is no distinction between monumental and decorative art.

The Bauhaus wants to educate architects, painters, and sculptors of all levels, according to their capabilities, to become competent craftsmen or independent creative artists and to form a working community of leading and future artist-craftsmen. These men, of kindred spirit, will know how to design buildings harmoniously in their entirety - structure, finishing, ornamentation, and furnishing.

Principles of the Bauhaus

Art rises above all methods; in itself it cannot be taught, but the crafts certainly can be. Architects, painters, and sculptors are craftsmen in the true sense of the word: hence, a thorough training in the crafts, acquired in workshops and on experimental and practical sites, is required of all students as the indispensable basis for all artistic production. Our own workshops are to be gradually built up, and apprenticeship agreements with outside workshops will be concluded.

The school is the servant of the workshop and will one day be absorbed in it. Therefore there will be no teachers or pupils in the Bauhaus but masters, journeymen, and apprentices.

The manner of teaching arises from the character of the workshop:

Organic forms developed from manual skills.

Avoidance of all rigidity; priority of creativity; freedom of individuality, but strict study discipline.

Transformation:

Herbouwhuis resulted from a graduation project of an architecture student at TU Delft. The New European Bauhaus funded the development of this project, which ultimately led to the transformation of an old rim factory in Hoboken, Antwerp.

Aims of Herbouwhuis

Herbouwhuis strives to bring together skills and knowledge of various professional groups in the world of building, as inseparable components of a new reuse architecture. The ultimate, if distant, aim of Herbouwhuis is the full integration of architecture in the material reuse cycle. Towards a situation in which there is no building waste.

Herbouwhuis wants to educate architects, project managers and building contractors of all levels, according to their capabilities, to become competent reuse craftsmen. These professionals, of kindred spirit, will know how to organise and design reuse cycle architecture in its entirety - demolition, storage, construction and maintenance.

Principles of Herbouwhuis

A thriving city rises above all designs; in itself it cannot be created, but the culture of care that supports it can be, over a long time. Architects, project managers and building contractors are city builders in the true sense of the word: hence, a thorough training in reuse craftsmanship, acquired in Herbouwhuis and on experimental and practical sites, is required of all students as the indispensable basis for all city building. Our own building is to be gradually constructed, and apprenticeship agreements with outside reuse actors will be concluded.

Herbouwschool is an integral part of Herbouwhuis. Therefore there will be a constant exchange of reuse skills and knowledge between students, researchers, builders, residents from the neighbourhood and artists.

The manner of teaching arises from the character of Herbouwhuis:

Close relation between materials and agents by colliding flows of materials and human agents in the spacious structure of Herbouwhuis.

Collaboration of all agents in Herbouwhuis.

Master and journeyman examinations, according to the Guild Statutes, held before the Council of Masters of the Bauhaus or before outside masters.

Collaboration by the students in the work of the masters.

Securing of commissions, also for students.

Mutual planning of extensive, Utopian structural designs - public buildings and buildings for workshop - aimed at the future. Collaboration of all masters and students - architects, painters, sculptors - on these designs with the object of gradually achieving a harmony of all the component elements and parts that make up architecture.

Constant contact with the leaders of the crafts and industries of the country.

Contact with public life, with the people, through exhibitions and other activities.

New research into the nature of the exhibitions, to solve the problem of displaying visual work and sculpture within the framework of architecture.

Encouragement of friendly relations between masters and students outside of work; therefore plays, lectures, poetry, music, fancy-dress parties.

Establishment of a cheerful ceremonial at these gatherings.

Range of instruction

Instruction at the Bauhaus includes all practical and scientific areas of creative work.

A. Architecture,

B. Painting,

C. Sculpture

including all branches of the crafts.

Students are trained in a craft (1) as well as in drawing and painting (2) and science and theory (3).

1. Craft training - either in our own, gradually enlarging workshops or in outside workshops to which the student is bound by apprenticeship agreement - includes:

(a) sculptors, stonemasons, stucco workers, woodcarvers, ceramic workers, plaster casters;

(b) blacksmiths, locksmiths, founders, metal turners;

(c) cabinetmakers;

(d) scene-painters, glass painters, mosaic workers, enamellers;

(e) etchers, wood engravers, lithographers, art printers, enchasers;

(f) weavers.

Craft training forms the basis of all teaching at the Bauhaus. Every student

Collaboration between students from different years.

Avoidance of dogma; freedom of individuality and specialisation, but mandatory corvee on the buildings of Herbouwhuis.

Workshops by artists of Herbouwhuis.

Internships for students at Bureau Herbou and outside of the institute at like-minded studios and companies.

Contact with public life, with the people, through exhibitions, intermediate presentations, the repair café, the restaurant/canteen, public lectures in the auditorium, public workshops and other activities.

Research into the nature of the exhibitions, to solve the problem of communicating building processes and the reuse cycle.

Sufficient workplaces where students can work autonomously in each other's vicinity, to inspire and get inspired.

Workshops on demolition and building sites, getting out of Herbouwhuis, learning from professionals, experiencing material gradients, studying the fragment, reading the details.

Range of instruction

Instruction at Herbouwhuis includes all practical and academic areas of the building reuse cycle.

A. Architecture,

B. Project management,

C. Contractorship

Before the first year students choose one of the three directions, but all students are educated in reuse craftsmanship (1) as well as in circular networks (2), circular building theory and history (3) and scaled design and communication (4).

1. Reuse craftsmanship education in the workshops includes:

(a) wood working; sawing, sanding, removing screws, joinery, varnishing

(b) metallurgy; sawing, welding, soldering, rolling, powder coating

(c) stone working; masonry, chiseling, polishing

2. Education in circular networks includes:

(a) understanding urban ecologies

(b) excursions to companies that are part of the Opalis network

(c) workshops at building sites near Herbouwhuis

(d) workshops at Herbouwhuis by reuse professionals

must learn a craft.

2. Training in drawing and painting includes:

- (a) free-hand sketching from memory and imagination;
- (b) drawing and painting of heads, live models, and animals;
- (c) drawing and painting of landscapes, figures, plants, and still-lives;
- (d) composition;
- (e) execution of murals, panel pictures, and religious shrines;
- (f) design of ornaments;
- (g) lettering;
- (h) construction and projection drawing;
- (i) design of exteriors, gardens, and interiors;
- (j) design of furniture and practical articles.

3. Training in science and theory includes:

- (a) art history - not presented in the sense of a history of styles, but rather to further active understanding of historical working methods and techniques;
- (b) science of materials;
- (c) anatomy - from the living model;
- (d) physical and chemical theory of colour;
- (e) rational painting methods;
- (f) basic concepts of bookkeeping, contract negotiations, personnel;
- (g) individual lectures on subjects of general interest in all areas of art and science.

Divisions of Instruction

The training is divided into three courses of instruction:

- I. course for apprentices;
- II. course for journeymen;
- III. course for junior masters.

3. Education in circular building theory and history includes:

- (a) architecture history - not presented in the sense of a history of styles, but rather to further active understanding of historical building methods and techniques;
- (b) science of materials and reused materials;
- (c) anatomy - of the living city;
- (d) physical and chemical theory of colour
- (e) rational painting methods;
- (f) basic concepts of bookkeeping, contract negotiations, personnel;
- (g) individual lectures on subjects of general interest in all areas of the building world

4. Education in scaled design and communication includes:

- (a) free-hand sketching of the urban landscape;
- (b) technical architecture drawings
- (c) model making
- (d) democratize the process - explaining the building project to non professionals
- (e) audiovisual techniques - on how to make it move and sound

Divisions of Instruction

The education is divided into four years of instruction, building up in scale and complexity:

- I. small scale project
- II. medium scale project
- III. large scale project
- IIII. graduation project

Each year covers the full building reuse cycle, divided into four quarters:

- Q1. demolition
- Q2. storage
- Q3. construction
- Q4. maintenance

The instruction of the individual is left to the discretion of each master within the framework of the general programme and the work schedule, which is revised every semester. In order to give the students as versatile and comprehensive a technical and artistic training as possible the work schedule will be so arranged that every architect-, painter-, and sculptor-to-be is able to participate in part of the other courses.

Admission

Any person of good repute, without regard to age or sex, whose previous education is deemed adequate by the Council of Masters will be admitted, as far as space permits. The tuition fee is 180 marks per year (it will gradually disappear entirely with increasing earnings of the Bauhaus). A non-recurring admission fee of 20 marks is also to be paid. Foreign students pay double fees. Address enquiries to the Secretariat of the Staatliches Bauhaus in Weimar.

April 1919.

The Administration of the Staatliches Bauhaus in Weimar:

Walter Gropius

In the first three years, students are obliged to spend one day of each week doing corvee on Bouwhuis' buildings. Students from higher years have responsibilities over the lower year students. The first few years of Bouwhuis the corvee will be mainly focussed on demolition, storage and construction. After a few years, the balance will shift to maintenance and construction of developments in the vicinity.

For the graduation project, the student chooses a specialisation, such as heritage or dwelling. This year, corvee is not mandatory.

The education of the individual student is left to the discretion of each tutor within the framework of the general curriculum and the corvee schedule, which is revised every quarter. In order to give the students as versatile and comprehensive education as possible the corvee schedule will be so arranged that every architect-, project manager-, and building contractor-to-be is able to participate in part of the other courses.

Admission

Any person whose previous education is deemed adequate by Bestuur Herbouwhuis will be admitted, as far as space permits. The tuition fee is 1000 euros per year (it will gradually disappear entirely with increasing earnings of Herbouwhuis to become accessible for a bigger part of society). Address enquiries to Secretariaat Herbouwhuis.

April 2025

Administratie Herbouwhuis:

Raf van Oosterhout

APPENDIX 2

Curriculum scheme

Complexity - Autonomy - Freedom of choice

	Q1 Demolition	Q2 Storage	Q3 Construction	Q4 Maintenance
Year 1 small scale				
Theory	2 days per week			
Practice	2 days per week			
Corvee	1 day per week			
Year 2 medium scale				
Theory	2 days per week		1 day per week	
Practice	2 days per week		3 days per week	
Corvee	1 day per week			
Year 3 large scale				
Theo. and prac.	Electives (2 days per week)		Internship (3 days per week)	
Practice	2 days per week		1 day per week	
Corvee	1 day per week			
Year 4 specialisation				
Graduation	5 days per week			

APPENDIX 3 Reflection on Bauhaus transformation

In 1919 Walter Gropius wrote down his ambitions for the Bauhaus in a manifesto and a four-paged education programme. By treating this text as a transformation process, Herbouwhuis designs its own manifesto and curriculum. Reacting to the context of Gropius' Bauhaus it aims to:

- Keep relevant content

- Reconfigure content that needs adjustments to fit the new curriculum

- Dismantle obsolete content

- Add missing content

Appendix 3 contains a concise reflection on this transformation and highlights the most important resemblances and differences between Bauhaus and Herbouwhuis.

CRAFTMANSHIP

Like Bauhaus, Herbouwhuis stresses the importance of craftsmanship and collaboration of craftsmen. It aims to lift various professions out of their isolation and proposes a transdisciplinary approach. In an educational context, this also entails a strong connection between students and professionals, including practice in the curriculum to enrich the student's education with possible future realities. Both Bauhaus and Herbouwhuis highly value the contact with public life. To break out of the institute and exchange knowledge and experiences with residents from the neighbourhood. The buildings of Herbouwhuis therefore become public places where, apart from education and practice, all types of cultural creative activities take place.

REUSE

Herbouwhuis doesn't just celebrate craftsmanship over industrialisation, but pleads for reuse over production. It strives to bring together skills and knowledge of various professional groups in the world of building, to facilitate the development of reuse craftsmanship. Architects, painters and sculptors were the craftsmen of Gropius' Bauhaus. Herbouwhuis focusses on craftsmen most closely connected to the building cycle and therefore offers education to architects, project managers and building contractors. From Bauhaus to Herbouwhuis, 'the building' changes from the unified work of all visual arts into an assembled body, part of the building cycle and able to function as both sponge and sponsor of building elements and values.

LAYERED IMPROVED DEMOCRATIC

Gropius described how the school would serve the overall institute of Bauhaus and would one day be absorbed by it. Herbouwhuis steps away from the goal to create a uniform institute that keeps its students into its own realm. It values the autonomy within the cooperation of the different agents present in the Herbouwhuis buildings and visiting from outside. In relation to the position of architecture, Herbouwhuis doesn't classify architecture as the gathering point for all visual arts (Walter Gropius, 1919) nor does it describe architecture as a merely technical activity (Hannes Meyer, 1928). Herbouwhuis rather acknowledges architecture's unique position in between arts, crafts, ecology, technology and economics. This is spatially reflected by the architecture of Herbouwhuis, where various professions and programs come together.

ENTANGLEMENT

Bauhaus has been too static and linear in various aspects. The added content of Herbouwhuis' manifesto and curriculum is therefore mainly about movement, cycles and entanglement. This includes education on site, moving out of the institute to connect with the city and its materials. Education on audiovisual techniques offers ways to include movement in research and design processes. Materials move in cycles. An academic year covers the full building cycle from demolition to storage, construction and maintenance. By designing and building in accordance to this cycle, reuse craftsmanship results in entangled reconfigurations. These are never final and remain part of the urban landscape. By teaching, practicing and developing reuse craftsmanship Herbouwhuis increases the contact surface between materials and human agents. This ultimately results in a profound and healthy entanglement of human and non-human agents within the urban landscape.