

portfolio
architecture
selected works
2019-2024

.

václav
heglinger

content

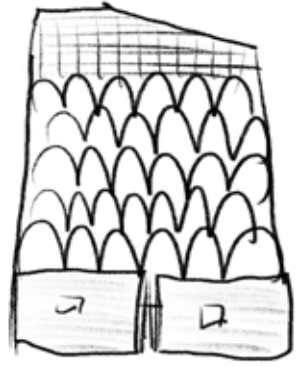
*Find your own voice.
Stay true to the voice and true to
the ideas, never turn down a good
idea, but never take a bad idea.*

David Lynch

- *soil and the void _ 1*
- *changes _ 11*
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-

soil and the void

advisors _ Johan Nielsen and Johannes Berry
 studio _ Roadside picnic
 period _ 10/2022–06/2023
 final Master thesis at KU Leuven



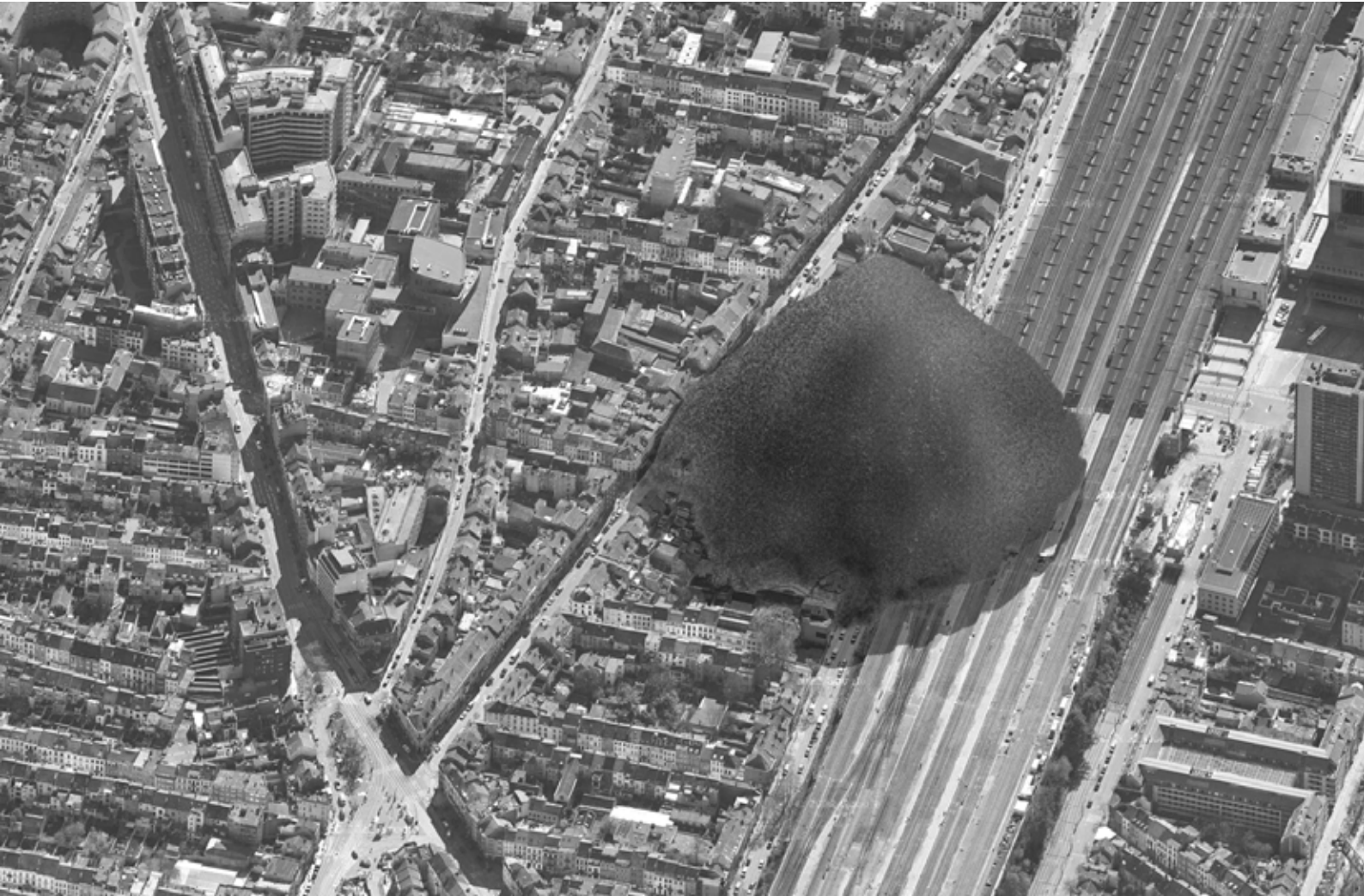
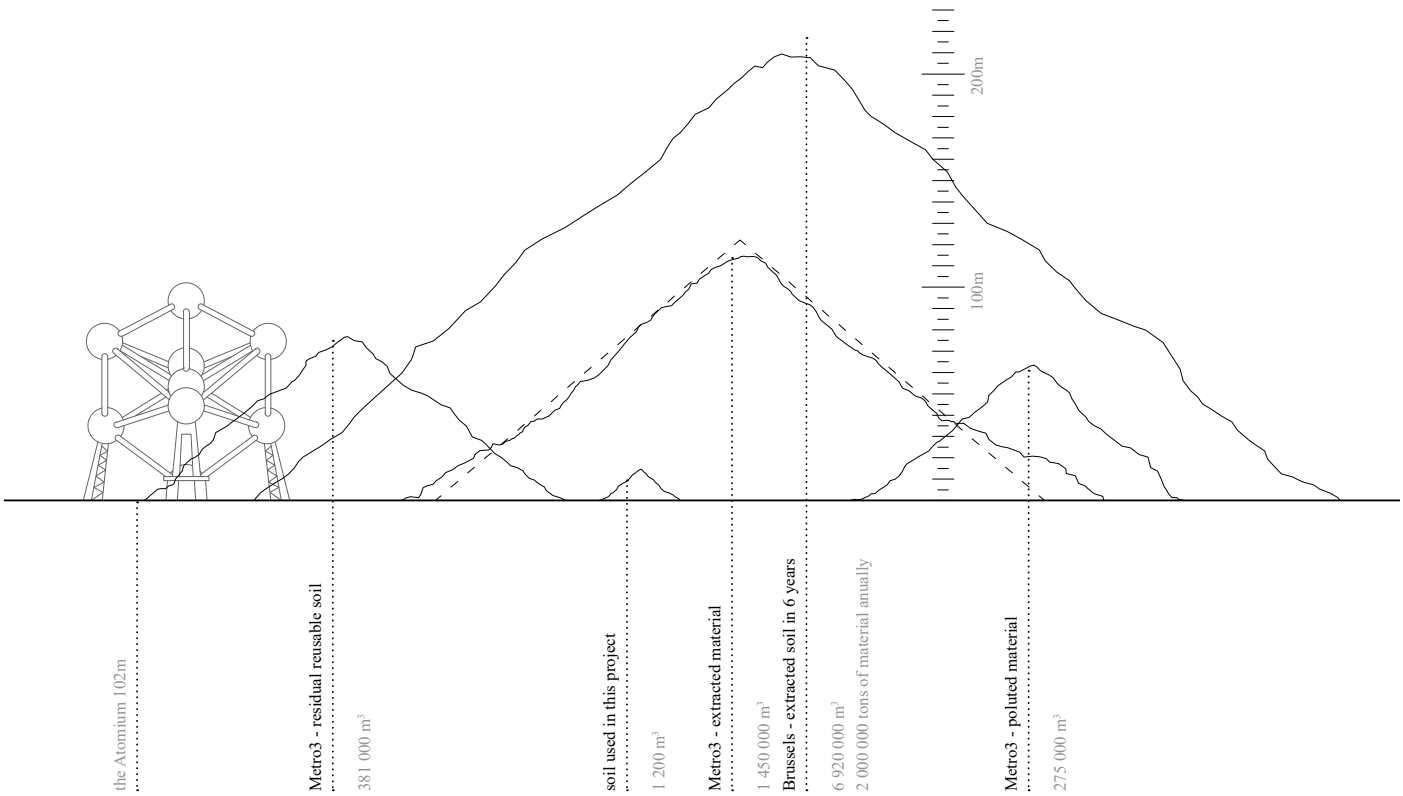
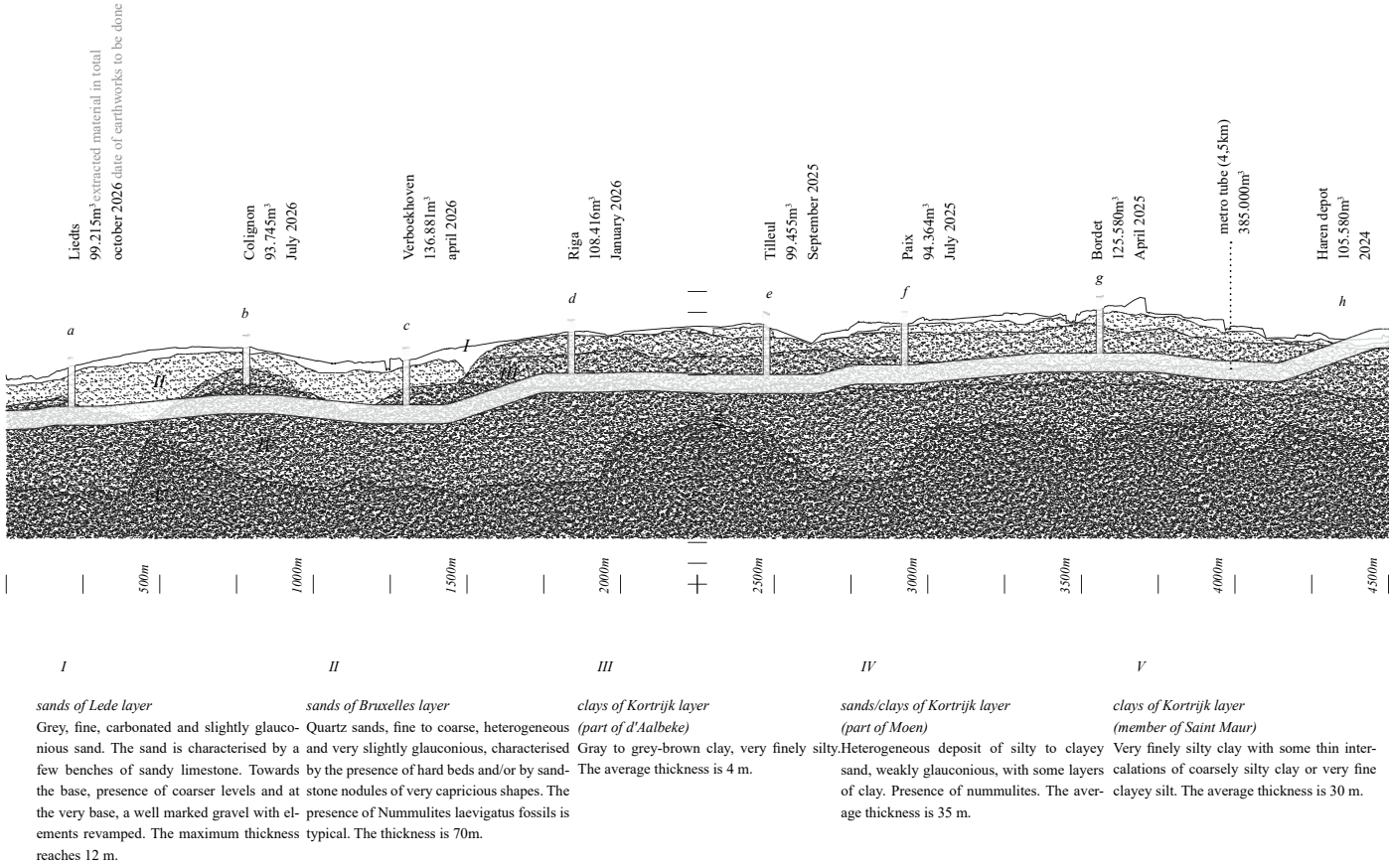
The city is a dynamic and ever-changing entity, continuously developing and redeveloping over time. One of the significant influences on the urban structure and processes comes from *infrastructural earthworks*. These projects involve vast quantities of materials extracted from beneath the city, essentially making it an *urban mine*, an abundant source of valuable material. The process involves digging up the soil, storing it, transporting it, and reusing it for various purposes. In this project, the focus is on exploring the potential *use and re-use of residual soil in the urban context*. By extracting soil from below the surface and bringing it to light, the project aims to raise awareness about the *consequences of human actions* on the environment. The chosen location for this intervention is rue d'Aerschot, a forgotten void within an urban block that holds great potential to benefit the local community.

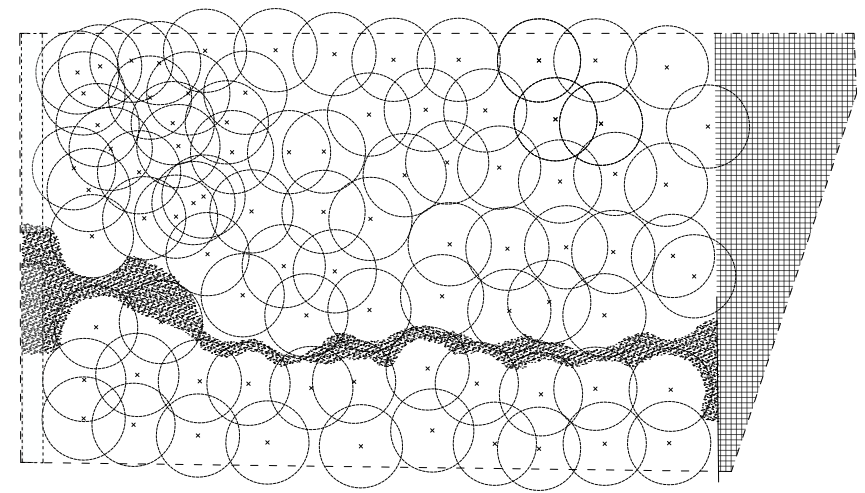
To achieve this, I have selected the context of a *new metro line construction in Brussels*, which generates substantial quantities of soil. By using a portion of this earth, I propose to fill the void at rue d'Aerschot, creating a new quality space for the community. The proximity of the void to the metro construction site allows for quick and easy transportation of the soil. The intervention itself is relatively simple, bringing the material on-site and *filling up the void* gradually, using one truck as a measuring unit. Piles of earth are methodically placed to fill the void, giving rise to a new type of space in the city - *the third landscape*.

As time passes the site will see the emergence of plant life, adding a touch of green to this transformed urban space. This project exemplifies the potential of utilizing residual soil in a sustainable and meaningful manner, demonstrating how cities can benefit from their own resources while promoting ecological awareness. *Life finds a way...*

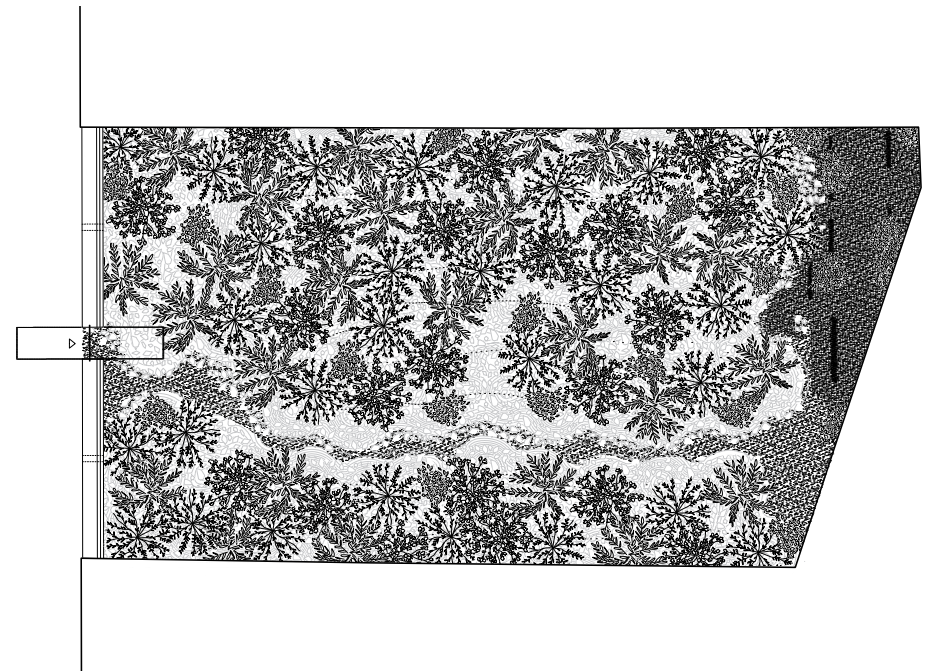
raw soil dumped on the site creating a landscape full of heaps_1
 route of new metro line on the north of Brussels_2
 section through the geological layers_3
 the amount of soil visualized through heaps (angle of repose is 40°)_4
 view on the void, now filled with a heaps and wall_5
 layout of the soil heaps estimation counts with 90 heaps of soil_7
 site plan of the void_8
 original tiles_12
 entrance to the garden_13
 physical model of the proposal_14







7



8



changes

advisor _ Leen Scholiers
studio _ Exhibit's elective
period _ 02/2022–06/2022

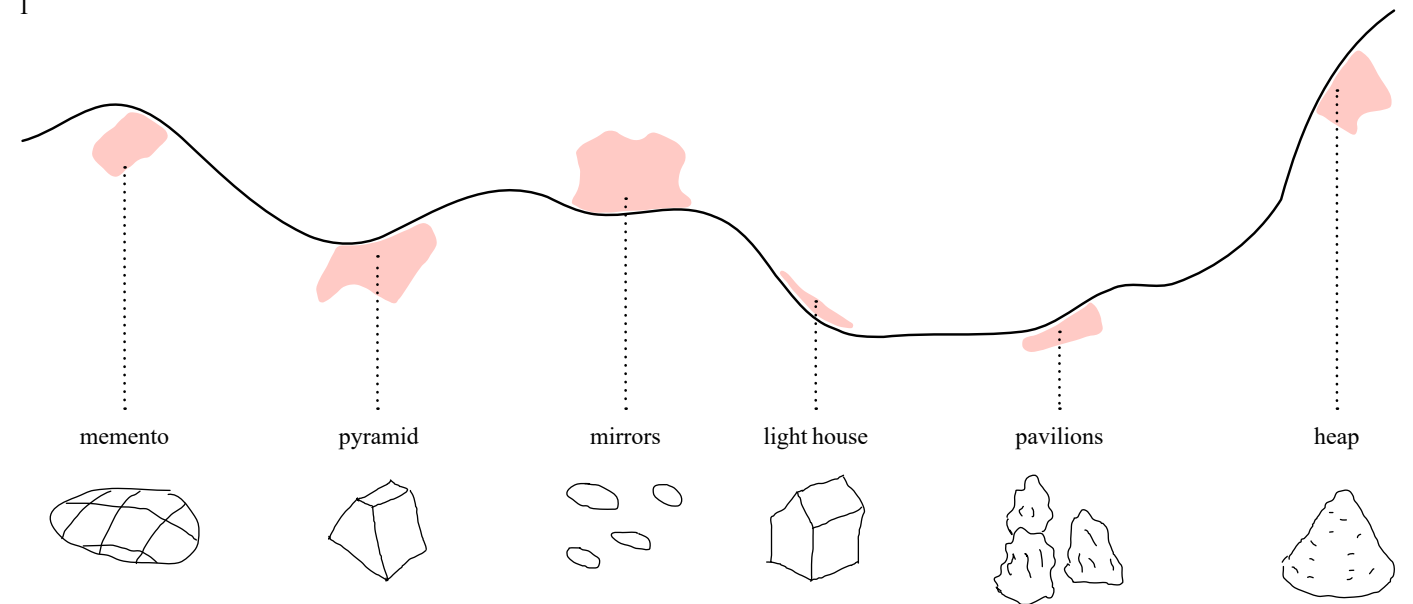


Over the past 50 years, the area between two cities, Orlová and Karviná, has experienced a significant transformation. Historically known for its heavy industry and mining facilities, this region's local weather, natural resources, and landscape have been visibly affected. A notable issue that emerged in the 1960s was *ground collapsing*, resulting in hills turning into valleys and villages and cities into dust and rubble. This phenomenon has compelled people to relocate, leaving behind a *changed cultural landscape*.

In response to these challenges, a speculative vision has been developed to reimagine the main road connecting Orlová and Karviná as an **art gallery**. Multiple *interventions along the motorway* now reflect the region's history, the struggles of its local inhabitants, and the current *post-human character of the landscape*. Each intervention is akin to a piece of art, inspired by well-known artists from abroad, but deeply linked to the area's context.

While driving along this transformed road, locals can now admire these artistic interventions and learn more about them through a special radio frequency. Some of the interventions are designed as pavilions, offering a unique experience where visitors can stop their cars and enter to explore an additional layer of the project. The primary aim of this initiative is to attract people to engage with the landscape and its story, particularly the story of coal and miners. As a result, *the landscape seems to breathe again, infused with new life and meaning*.

1



2



schematic diagram of each
intervention along the road_1
position of the road within the land-
scape of Karvina coal region_2
current state_3
after the intervention_4
in total this project consists out of
7 site specific interventions_5

3



4



5



mirrors along the road reflecting the sky above



thick slab of concrete reflects the vanished neighborhood



inflatable pavilions used for expositions



floating barrels constructed in a shape of mastaba

corbu again!

advisor _ Livia de Béthune and Johan Nielsen
collaboration _ Hugo Gómez Borrego
studio _ Open up the city!
period _ 09/2021–01/2022



The Rotier building is situated on the outskirts of Brussels and dates back to the 1960s. Its architecture is a striking representation of the *modernistic approach*, characterized by a *solid block amidst lush greenery*.

But is that enough?

This project aims to take this modernistic philosophy further by drawing inspiration from Le Corbusier’s five points of architecture. The goal is to refine and *adapt the principles* of modern architecture to suit the *demands of the 21st century* reacting also on the *post-covid period*.

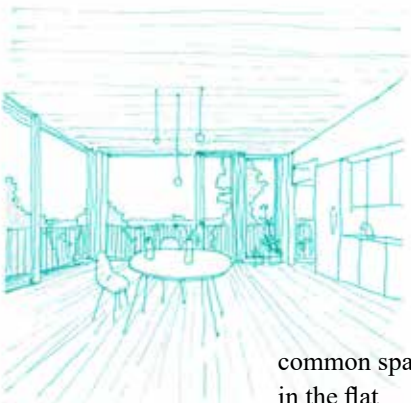
The entire building is undergoing a comprehensive refurbishment to incorporate new communal spaces. Each flat’s layout is being redesigned, integrating fresh materials and spatial qualities. The apartments primarily consist of private rooms, with a central technical core. Additionally, a spacious *common area merges the kitchen, living, and dining room*, fostering a sense of togetherness among the residents. Throughout this process, careful consideration is given to preserving the original load-bearing structure.

Furthermore, the project includes the addition of ten new flats within the *new upper structure*. To support this extension, *vierendeels truss and four massive columns* run through the building’s core to its base. This structural setup allows for the creation of open and inviting terraces for the inhabitants. The space between the beams offers a large communal area, contributing to a vibrant and engaging living environment for the whole family.

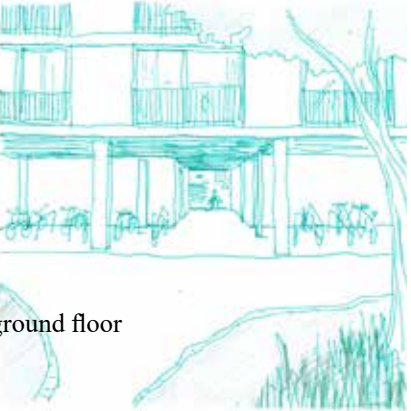
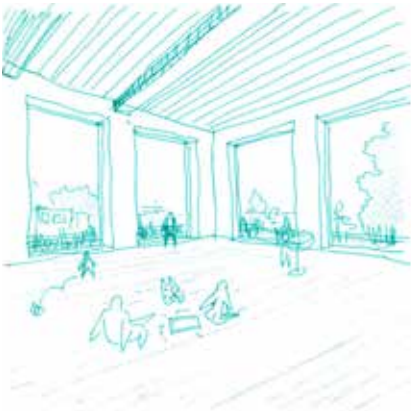
- drawings of the buildings interior and exterior_1
- diagram explaining the structural system behind the addition_2
- facade_3
- ground floor_4
- floor 1-7 with apartments_5
- common hall and a roof terrace_6
- floor 9-12 in the new structure_7
- roof terrace with an small garden_8
- detailed floor plan of the spatial conditions in the flat_9
- photos of a current building_10
- photos of a building with an extra added upper structure_11



terrace roof



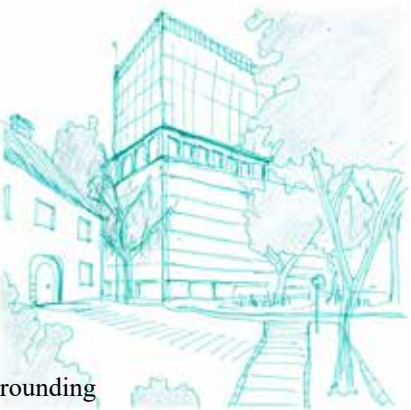
common space in the flat



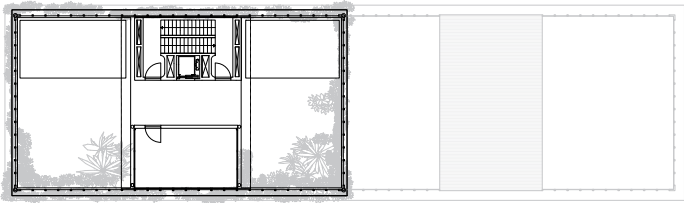
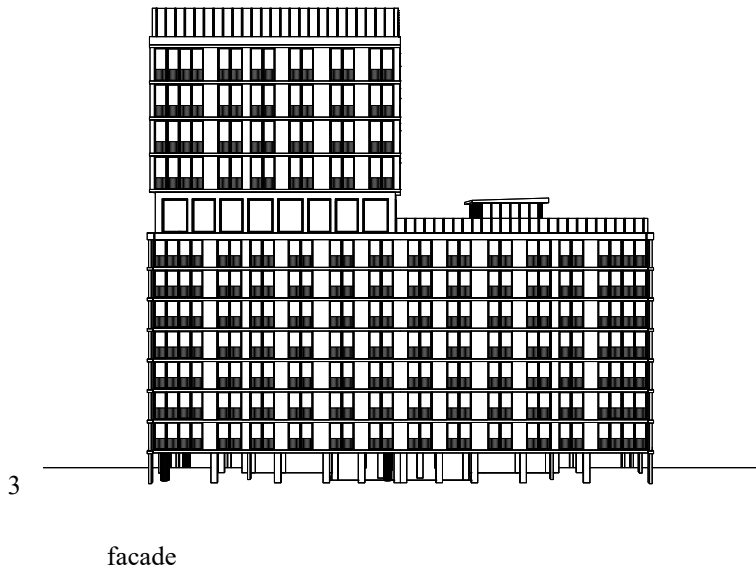
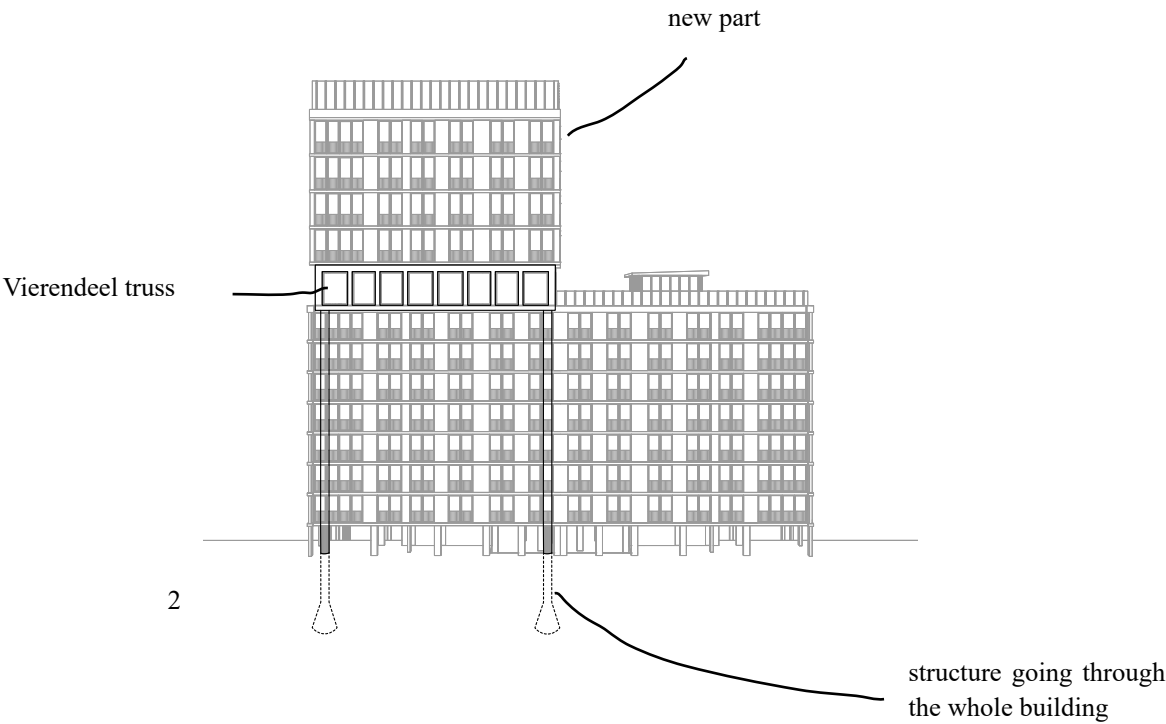
ground floor



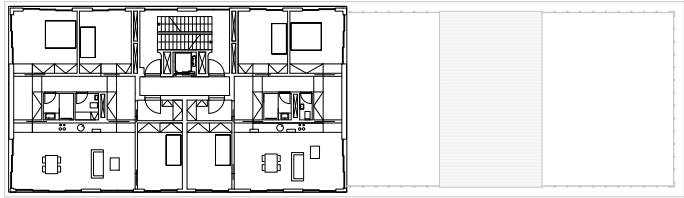
1



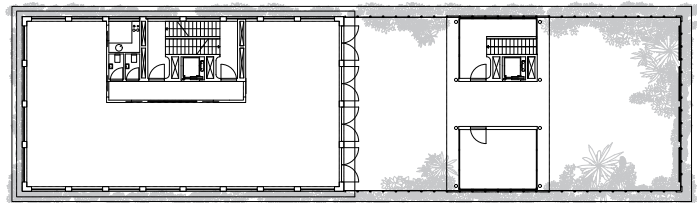
surrounding neighborhood



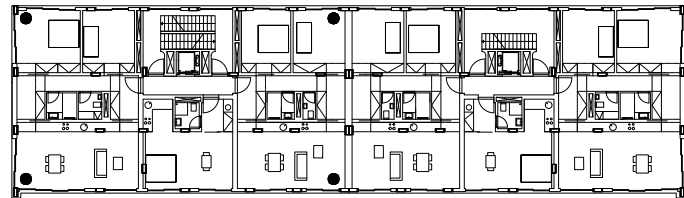
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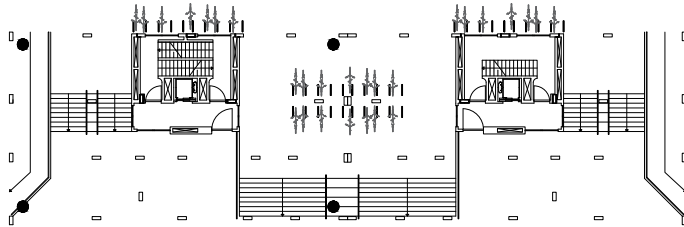
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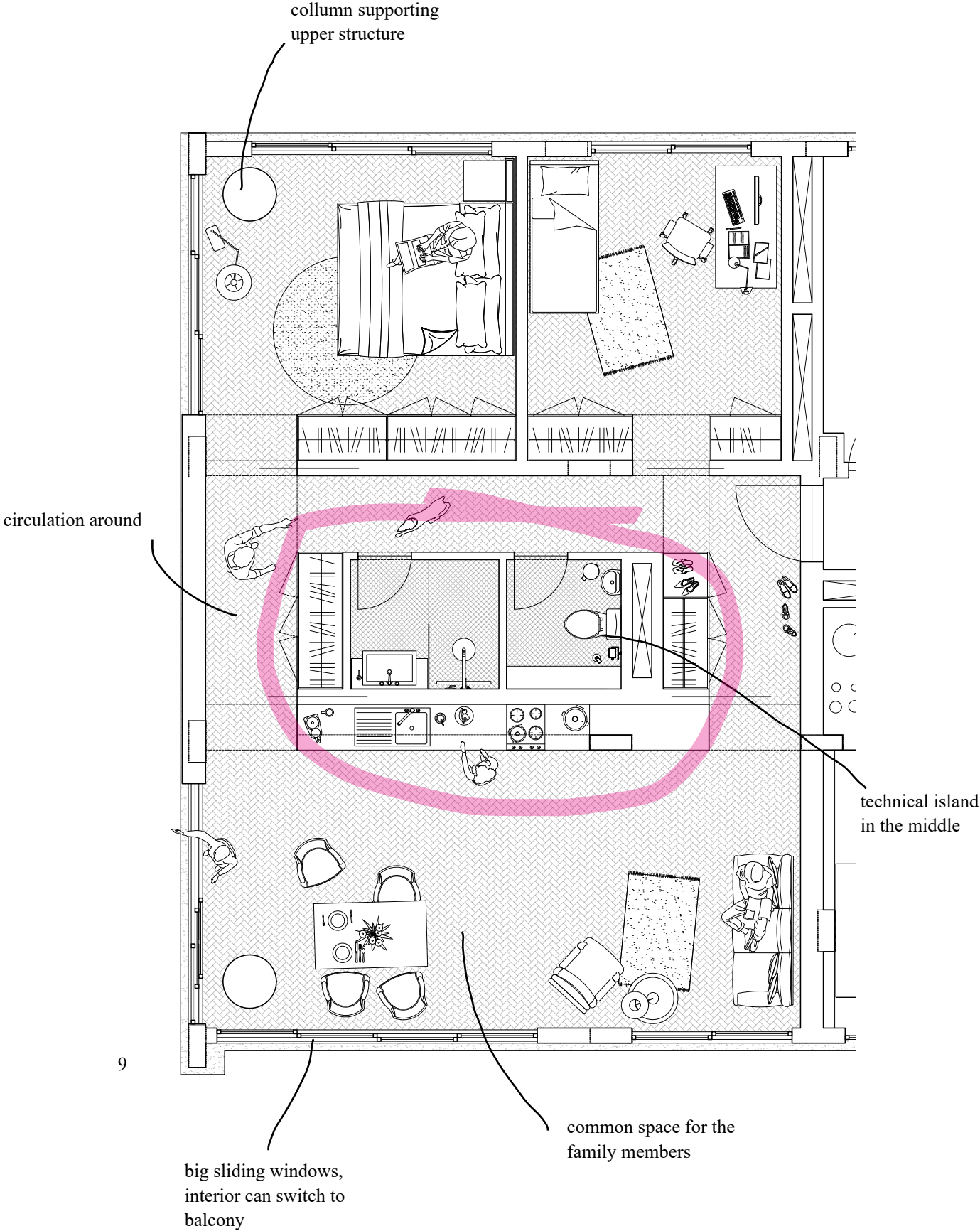
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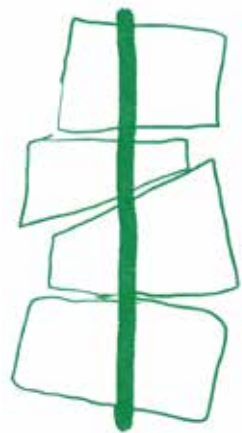


4



green enfilade

advisors _ Caroline Newton and Cecilia Chiappini
 studio _ Hypertransformations
 period _ 02/2022–07/2022



Belgium recently experienced abrupt heatwaves with temperatures soaring up to 40 degrees, followed by abnormal rainfall that caused flash floods in some regions. The weather in continental Europe is becoming increasingly extreme. In response to these *extreme weather conditions*, this project aims to address the issue on a large scale. The focus is on mitigating the severity of weather and *enhancing nature's resilience and stability*. The key lies in restoring the *water cycle* and *ecological succession* while creating connectivity along the *bike path between Tilburg and Turnhout*. This vast area between the cities is of utmost importance for implementing impactful changes, as the *urban landscape* significantly affects the local climate.

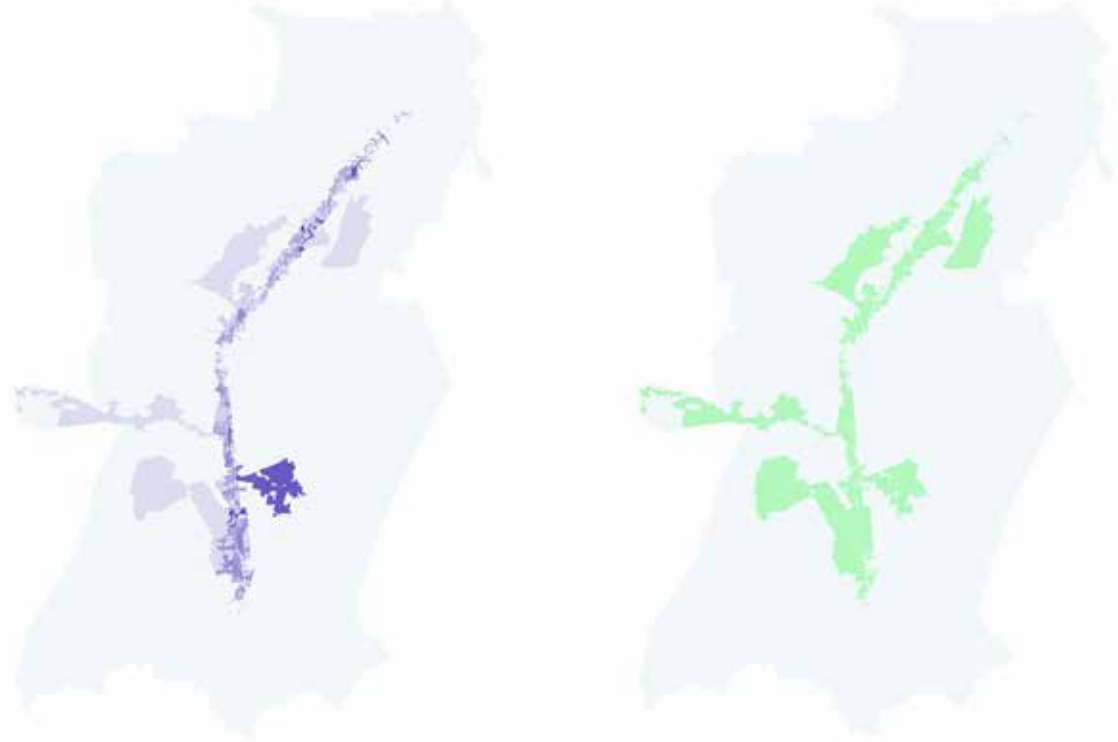
The proposed scenario involves *converting the agricultural land* along the bike path back to nature. Through this transformation, the area is reimagined as green spaces with water bodies and new forestation, untaming the ecological succession. As a result, the region is soon transformed into a network of interconnected green spaces, akin to a landscape-scale enfilade, series of inviting rooms along the path.

To bring life back to these newly emerged green spaces, a diverse range of *interventions* is employed. These interventions are listed in *catalogues* and differ in size, placement, and intended users. Some are designed for animals, others for people. Soon the area thrives with renewed vitality and biodiversity. By embracing these innovative strategies, the project aims to create a harmonious balance between the urban landscape and nature, making the environment more resilient to extreme weather conditions

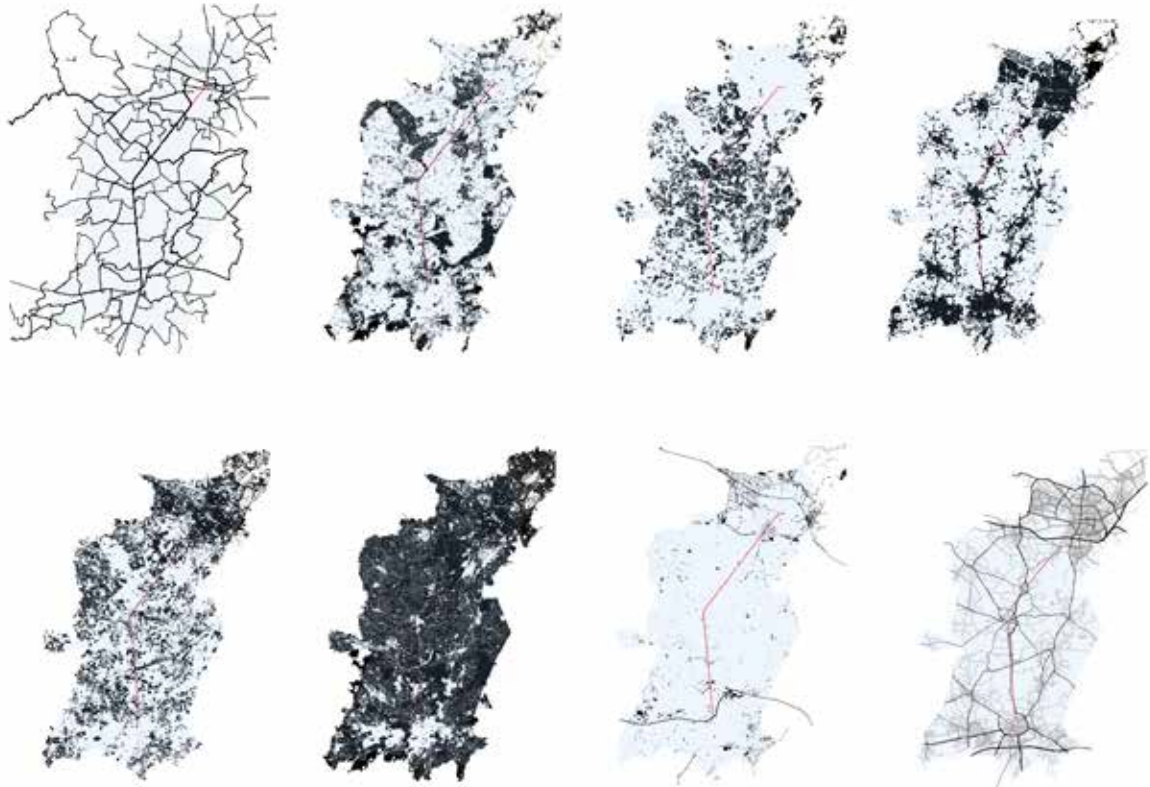
what was once an agricultural land
 is now a new restored landscape_1
 restored natural spaces are centered
 along the bike bath, together it
 creates a system of green rooms_2
 analysis of the area and bike line
 connecting Tilburg and Turnhout_3
 current layout of the city and land_4
 agricultural spaces in touch with
 the bike corridor are transformed
 into green thriving reservoirs_5
 ecological succession in a process_6
 interventions will bring new quality
 to users. both animals and people_7



2



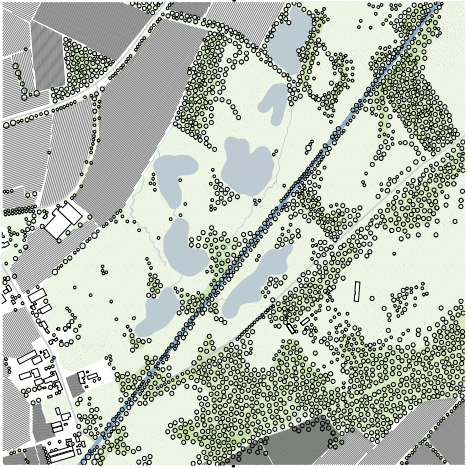
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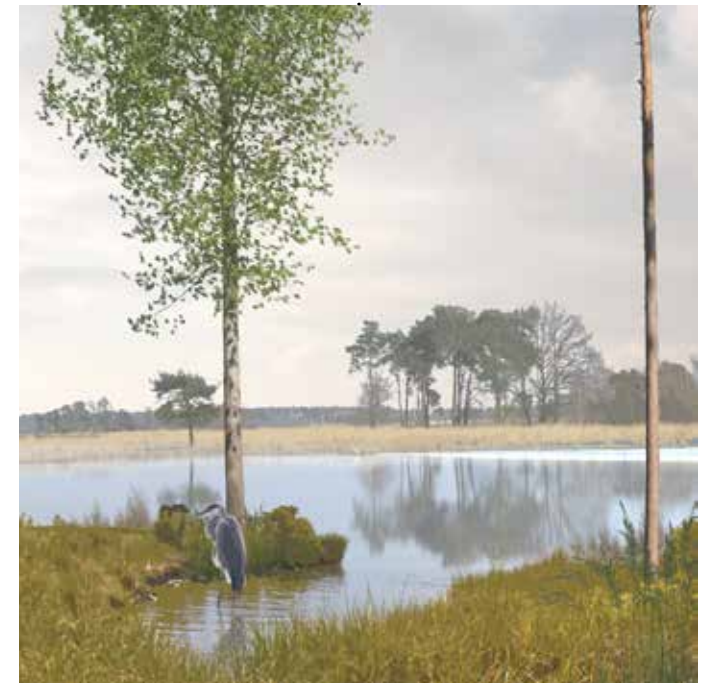
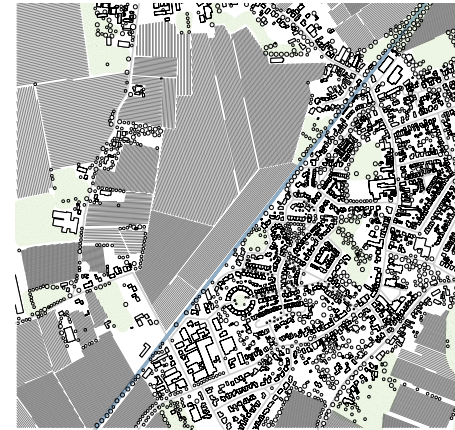
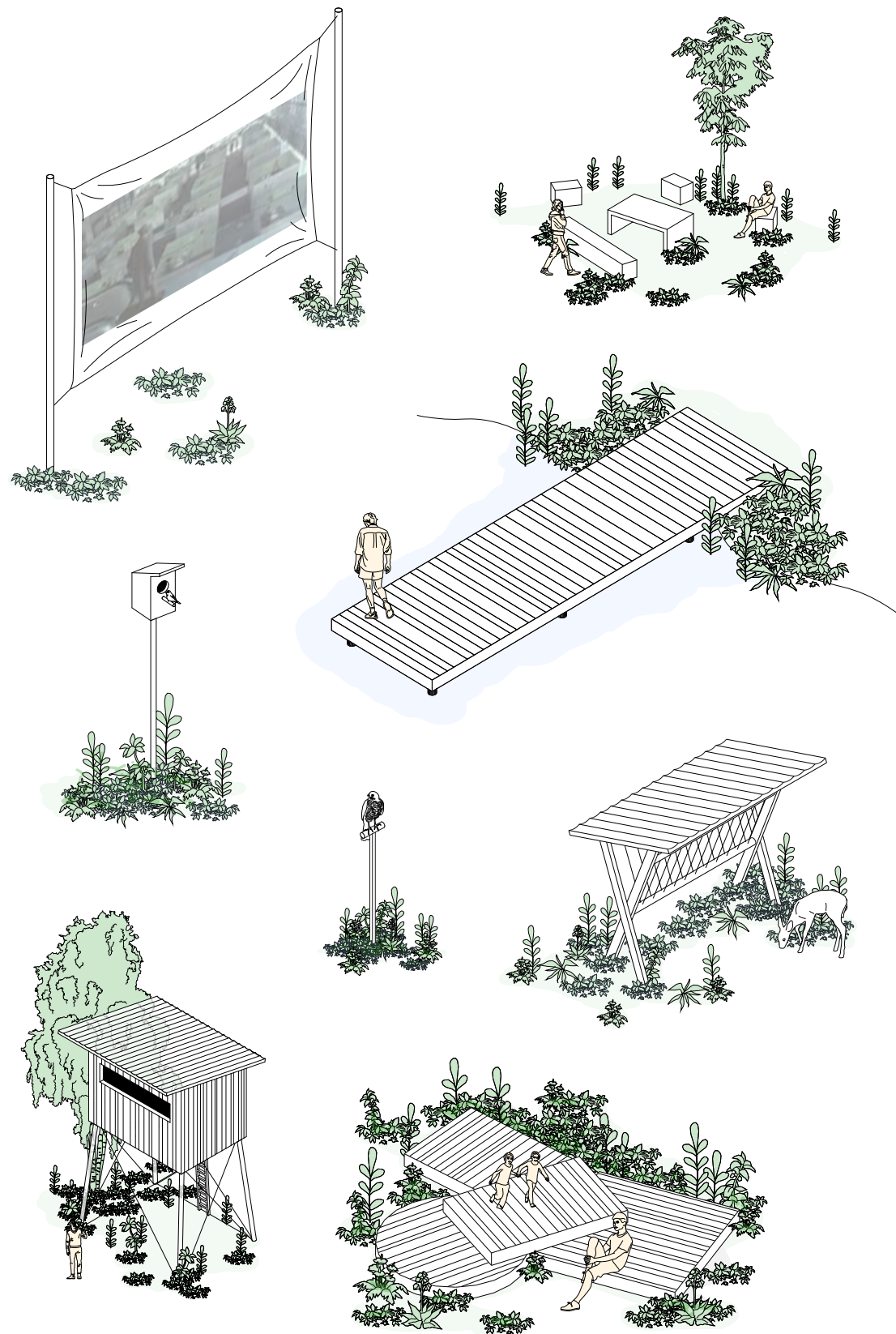


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ATAMA

presentation of projects I contributed to during my stay in the office

I was primarily involved in competition projects, actively participating as a team member throughout all phases of the design process

for more clarity, there is a list of all my contributions within each project

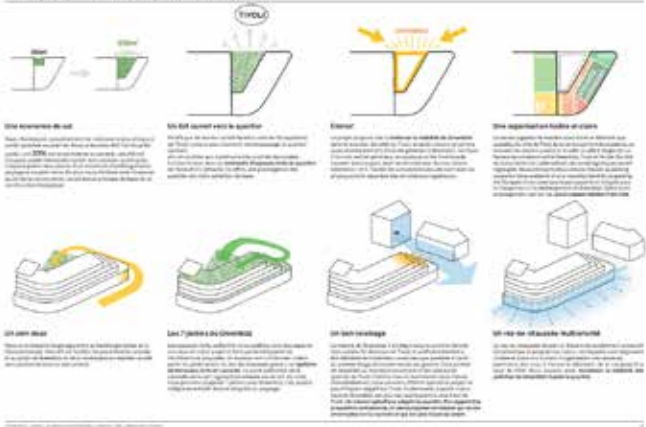


architecture comptition Greenbizz in Brussels
workshop and atelier units transformabel into housing

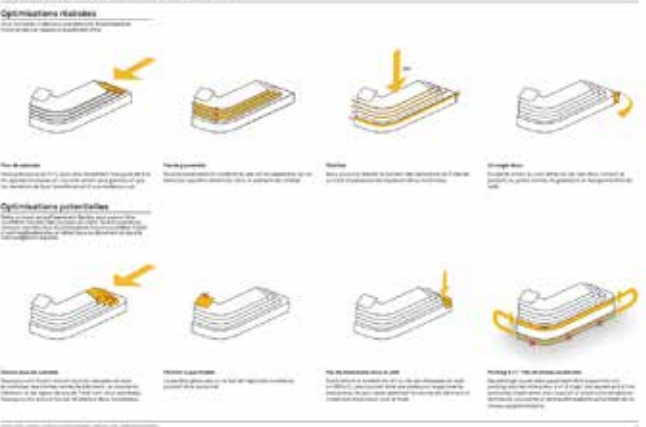
my contribution

- preparing architectural drawings, focusing on façade and detailed floor plans for apartments
- developing the initial volumetric model to explore massing and spatial relationships
- constructing a physical model for the final presentation, use of CNC
- modeling the project in Rhino to support visualization production
- assisting in the preparation of the final project booklet, creating conceptual diagrams and producing cut-through axonometric drawings

8 AMBITIONS URBAINES



UN CONCEPT FLEXIBLE



LE PAYSAGE COMME MOTEUR



TRANSFORMER & HABITER



GREENBIZZ DANS LE QUARTIER



Habiter & travailler dans un quartier naturel!

Les habitants et le paysage forment un tout indissociable. Les programmes se sont dirigés vers un paysage durable, avec "une masse verte" suffisante pour valider, et devenir un écosystème durable. La densité habitable se tourne vers la densité paysagère et s'intègre dans le quartier pour une complémentarité de l'air et du climat.

Selon nous, et conforté par les ambitions du maître d'ouvrage, le programme est un élément secondaire. Notre projet se veut avant tout un facilitateur pour les différents programmes présents et pour l'avenir. Des choses sont changeantes. Ce qui est fait dès le départ, c'est la relation du volume construit avec le quartier. Celle-ci a été conçue avec le plus grand soin. Greenbizz pour le quartier, pour les gens qui travaillent et y vivent, la forme et la forme.

Greenbizz s'ouvre au quartier

Le projet se présente comme un équilibre parfait entre la vie urbaine et la nature urbaine, où la fonctionnalité et l'esthétique convergent pour créer un environnement qui répond non seulement aux besoins urbains contemporains, mais célèbre également la richesse naturelle du cadre.

C'est pour cette raison que nous avons tout d'abord envisagé un grand jardin public (900m²), face à Tivoli. Ce jardin sera conçu en grande partie par le biais d'un processus participatif, afin de répondre également à différents souhaits des différentes parties prenantes. Le jardin sera un espace vert et ouvert, partagé avec les différents fonctions de Greenbizz seront visitées et accessibles. Ce jardin deviendra le visage de Greenbizz.



• Un profil approprié, qui recule à des endroits précis, s'intègre dans le quartier.
• Le bâtiment se situe au milieu entre l'industriel et le domestique et peut faciliter les deux programmes.
• Le bâtiment et le paysage constituent une boucle de liaison dans le quartier.

LOGISTIQUE INTÉGRÉE



Un fonctionnement logistique simple par la rue.

Tous les accès logistiques seront concentrés au niveau de la rue Dieudonné Lefèvre et de l'entrée déjà existante du parking souterrain. La zone de chargement et de déchargement sera intégrée à l'intérieur du bâtiment afin d'éviter les décongestionnements sur la voie publique ainsi que les problèmes acoustiques. La zone de chargement et de déchargement est en liaison directe avec les deux monte-charges.

Les vélos visibles!

Les vélos auront une place de premier plan dans Greenbizz II. Un espace dédié sera aménagé au niveau du sol sur l'angle arrondi visible. Cet espace constitue également une entrée secondaire du complexe pour les cyclistes et se connecte à la zone de circulation.



Parking -1:

Nous avons ajouté une rampe supplémentaire à l'étage souterrain. Les parkings de Greenbizz I et II fonctionnent actuellement séparément. Les rampes sont équipées de feux de signalisation. Il existe également des scénarios possibles où les deux sont reliés et où la rampe de Greenbizz II peut servir d'entrée et la rampe de Greenbizz I de sortie, créant ainsi une boucle. Ceci est expliqué plus en détail dans la note budgétaire.




architecture comptition Schaerbeek, Brussels
transformation of the tram depot into an educational centre


my contribution

- producing architectural drawings, concentrating on façades and sections
- preparing a detailed Rhino model for visualization purposes (rendering handled by an external firm)
- conducting post-processing of rendered images to enhance presentation quality
- leading the production of a 1:100 physical model, responsible for: preparing CNC files, managing material selection and operating the office CNC machine


DAGLICHT & INTERNE RELATIES: WELZIJN



Niveau +2 met zicht op de centrale vide, links en rechts de leslokalen en in het midden een doorzicht naar etage +1.

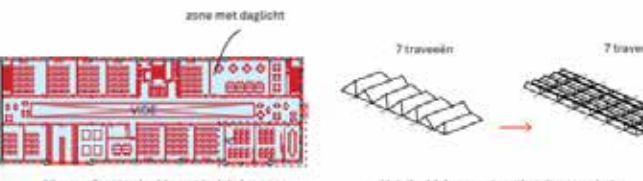


Interieurbeeld op +2 met het nieuwe industriële sheddak dat het auditorium aanlicht. Mobile wanden zijn geopend.



Een centrale vide: interactie, overzicht en daglicht

Vandaag is het gebouw donker en laag per laag afgescheiden. Leeromgevingen mogen niet labirynthisch, donker en intern afgescheiden zijn. We openen de vloer tussen +1 en +2 door een beperkte zone af te breken. Hierdoor ontstaat een 'open opleidingscentrum'. De verdiepingen staan nu in contact met elkaar. Er ontstaat overzicht en contact tussen de verschillende opleidingen.



Een performant industrieel sheddak: daglicht en flexibiliteit

We verwijderen het oude, om talrijke redenen problematische dak en vervangen het door een nieuw industrieel, noordgericht sheddak. Wat zo ontstaat is een gebouw met optimale daglichtcondities. Neutraal daglicht zal alle leslokalen aanlichten, alsook de centrale vide. Bovendien is het dak zo bedacht dat er op talrijke plaatsen akoestische wanden kunnen worden opengeschoven en gedicht. Maximale flexibiliteit in gebruik!

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VERNIEUWD ERFGOED...vier respectvolle ingrepen die de uitstraling in de buurt versterken



1 Duidelijke adres

Het ontwerp stelt voor om de historische, prominente deuren te gebruiken als het adres voor de verschillende programma's. Centraal: EFP; links daarvan de mogelijkheid om een aparte toegang te maken voor avondactiviteiten; uiterst links het flatsatietje. Rechts de brouwerij en de tuin.



2 Gevel openen

Met respect voor het erfgoed openen we de ramen op +1 tot borstweringhoogte. De interactie met de straat wordt hierdoor sterk verbeterd en daglicht treedt binnen. Op +2 bewaren we de openingen. We hebben een andere oplossing voor het daglicht op deze verdieping (zie verder).

3 Een eigen terras

Mooi aansluitend op de horizontale lijn in de gevel brengen we een ruim terras aan op verdieping +1. Hier kunnen studenten even frisse lucht opsnuiven. De aanwezigheid van de gebruikers geeft betekenis aan het gebouw in de wijk. Een trapverbinding met de stadstuin kan worden overwogen.



4 Een industriële kroon

Het oude dak is nauwelijks zichtbaar en we vervangen het door een nieuw industrieel en uiterst performant dak. Deze respectvolle verbouwing is eigen aan industriële panden die doorheen de tijd aan een nieuwe functie worden aangepast. De bekroning versterkt de aanwezigheid van EFP in de wijk.

STUK Leuven © NRA

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WELKOM



Een dubbelhoge onthaalruimte wordt gecreëerd zodat contact tussen gelijkvloers en +1 ontstaat.



De onthaalbalie met doorzicht naar de liften en de dubbele trap naar de eerste verdieping. De balie kan met plooivanden worden afgesloten na de openinguren.



Maquettebeeld waarop goed te zien is hoe de centrale ruimte wordt aangelicht.



Visueel contact met +1

Volgens ons is het essentieel om contact te doen ontstaan tussen de verschillende verdiepingen. Zowel visueel als fysiek. De verticale circulatie is een cruciale succesfactor in het project.



Onthaal en verticale circulatie

Wanneer iemand het EFP gebouw binnenkomt willen we twee zaken meteen duidelijk maken: 1. je bent welkom; een medewerker achter de nieuwe balie staat je te woord 2. je krijgt meteen een zicht naar de natuurlijk verlichte, soevereinende verdiepingen. Dat is vandaag een groot probleem van het gebouw. Er is namelijk geen relatie tussen het gelijkvloers en de etages. Interne interactie tussen de verdiepingen wordt gecreëerd.



Daglicht tot op gelijkvloers

Een bijkomend voordeel van de dubbelhoge onthaalruimte is dat daglicht, komende van het nieuwe dak (zie verder) tot in het centrum van het gebouw valt. Het diepe, donkere gebouw wordt zo in het hart aangelicht.

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