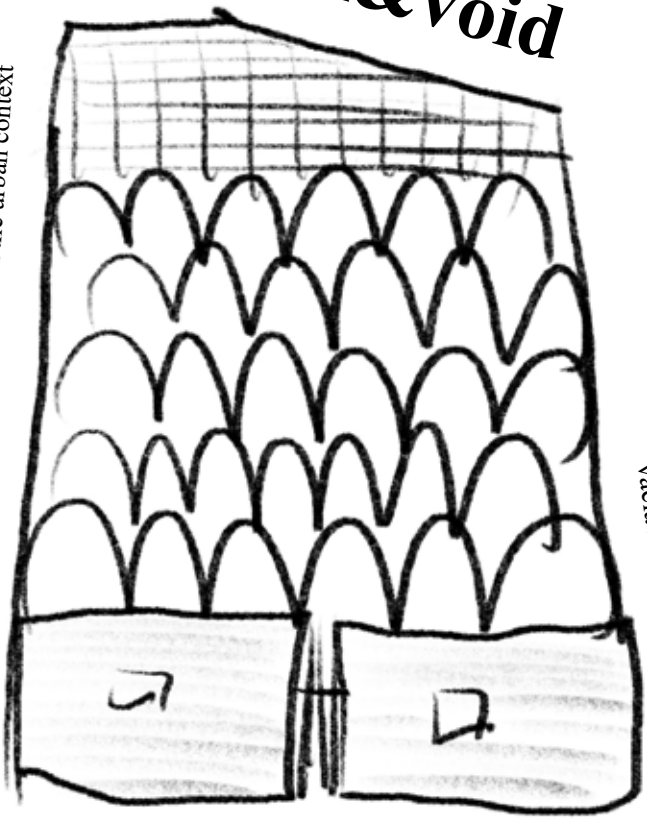
soil&void

rethinking the value and purpose of soil in the urban context



václav heginger

Master Dissertation project
Johan Nielsen, Johannes Berry
2022/2023, Faculty of Architecture, KU Leuven

Master Dissertation project
Roadside picnic

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Havířov, Orlová, Brno, Olomouc a Kebab, taky tam všude posílám díky za to, že jste mi drželi palce!

table of content [x]

x _ this booklet is divided into three parts to fully explain the main scope of the thesis _ *city, infrastructure and the soil*, context _ *void and the neighbourhood* and the project itself _ *soil and the void*

roadside picnic [x]

This project follows the path proposed with the initial explanatory text by tutors. There they position the methodology of the whole master studio. Inspired by this narrative, we positioned ourselves into the role of a stranger. Looking around ourselves with fresh eyes. Striped by the bias. We strangers are coming into the communities with one simple task. Propose something. Anything. Perhaps unconventional. Reacting on local conditions, working with local materials.

... In finding new potential in things, the stranger develops the capacity to design institutions of scarcity of resources, restricted means and careful consideration of what is existing ...

Let‘s be a bit more like Andy, main character from the Shawshank redemption.[xx] As described by Morgen Freeman in the movie, he came to the prison as a total outsider, yet with his ability to learn he soon realised the strength of being a stranger, being outside the community. Let‘s rethink the way we see the world around us.

x _ name of the studio is a reference to a novel Roadside picnic by the Strugatsky brothers, here they talk about the picnic place that might be seen as a visit of extraterrestrial specie from an insect perspective
xx _ APA. Darabont, F. (1994). The Shawshank Redemption. Columbia Pictures.

digging tunnel to a freedom means a lot of waste material →

1

City is in a constant flux. It is never finished, developed and re-developed continuously throughout its existence. The construction in the urban context generates a huge amount of residual soil. It is a concern that could be applied especially on big infrastructure projects. This part rethinks the value and use of such soil in the urban context. Thus the city of Brussels can be then seen as an urban mine.

expanding

The demand for public transport in the Brussels city centre is increasing following the expansion of the pedestrian zone in recent years.[x] The axis between the stations Gare du Nord and Albert is reaching saturation point, a significant increase in capacity is no longer possible. Thus the municipality decided to take action. Two decades ago the politicians in Brussels proposed the idea of expanding the metro system in the capital. After many years of negotiating between stakeholders, municipalities, local initiatives and inhabitants the best route was chosen. A small portion of the new railroad was designed on the south of the city, from the Albert station to Gare du Midi. A tunnel inside the pentagon will be converted to a fully metro line infrastructure. Several kilometres later it reaches the Noord station. There the route is taking a slight turn separating itself into a new tunnel. This part is what this thesis is mainly interested in.

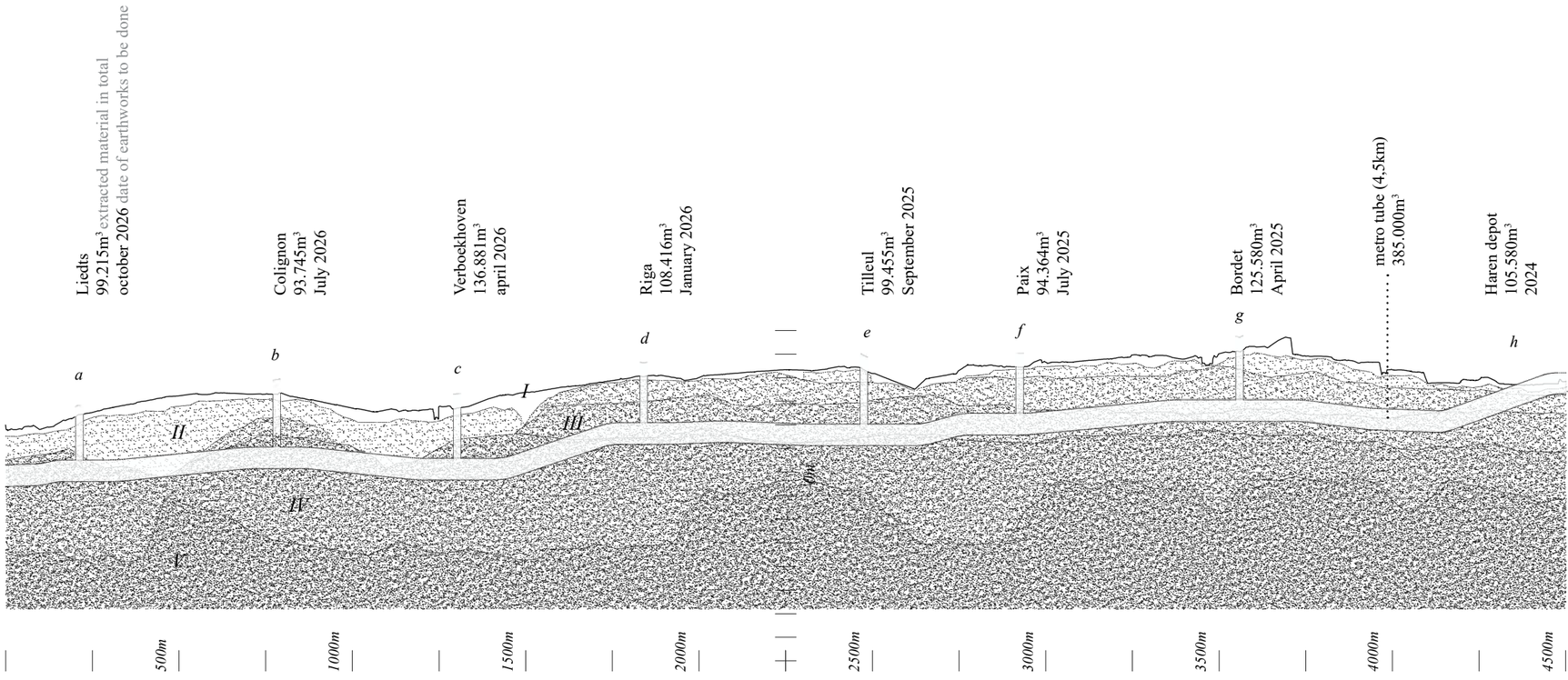
x _ Cauter, L.D. (2021) "Blogs on Urban Activism in Brussels," in Ending the anthropocene Essays on activism in the age of collapse. Rotterdam: nai010, pp. 140–151.

route of new metro line on the north of Brussels →

the north

The project of Metro3 will provide the north of Brussels with 7 new stations, extending the public transport system all the way to the Haren district. It includes the construction of a 170 m structure under the railroad grill at the station Noord, and excavation of a 4.5 km tunnel dug with a tunnel boring machine. This mechanism will cross the Brussels underground at an average depth of 23m below the level of the natural terrain. The extraction phase will be done 24 hours a day, 7 days a week, with a speed average progress of 10 metres each day.[x] The construction of new stations (Liedts, Colignon, Verboeckhoven, Riga, Tilleul, Paix and Bordet) and a new metro depot (Haren) will be carried out in open excavation rom the surface.

x _ BMN, 2022, Stedenbouwkundige Vergunningsaanvraag Tunnel - Stations - Depot, 28/01/2022, Index E 2. BASISNOTA, Available at: https://metro3.be/sites/default/files/2022-03/15PFD1696165_Note_explicative_0.pdf



section through the geological layers depicting tunnel and metro stations →

I

sands of Lede layer
Grey, fine, carbonated and slightly glauconious sand. The sand is characterised by a few benches of sandy limestone. Towards the base, presence of coarser levels and at the very base, a well marked gravel with elements revamped. The maximum thickness reaches 12 m.

II

sands of Bruxelles layer
Quartz sands, fine to coarse, heterogeneous and very slightly glauconious, characterised by the presence of hard beds and/or by sandstone nodules of very capricious shapes. The presence of Nummulites laevigatus fossils is typical. The thickness is 70m.

III

clays of Kortrijk layer
(part of d'Aalbeke)
Gray to grey-brown clay, very finely silty. The average thickness is 4 m.

IV

sands/clays of Kortrijk layer
(part of Moen)
Heterogeneous deposit of silty to clayey sand, weakly glauconious, with some layers of clay. Presence of nummulites. The average thickness is 35 m.

V

clays of Kortrijk layer
(member of Saint Maur)
Very finely silty clay with some thin intercalations of coarsely silty clay or very fine clayey silt. The average thickness is 30 m.

extracting

The civil engineering works for the construction of the tunnel under the train tracks started in the last quarter of 2020.[x] The process of extraction and construction at the Noord train station site began in 2021 and finished in the first months of 2023. A boring machine was used to cut a 10 metres wide tunnel that was later filled with concrete cylindrical slabs. The construction documents mainly recommend working with the material locally, preferably in the city of Brussels, in one particular case the soil extracted here was transported to Temse.[xx] A company C-energy specialised in construction of hills with basins to store the energy reused approximately 1050m^3 of earth. From the perspective of it is a highly controversial step though that should not be followed. Thanks to a close proximity of the harbour with many concrete factories it is also planned to use the cut material (gravel, rocks, sand) as an aggregate in a concrete.

x _ Permis d'urbanisme octroyé pour l'ouvrage à la gare du nord (2020) Metro 3. Available at: https://metro3.be/fr/article/25-05-2020/permis-durbanisme-octroye-pour-louvrage-la-gare-du-nord (Accessed: April 16, 2023).
xx _ Des Terres du Chantier de la Gare du Nord évacuées par le canal (2022) Metro3. Available at: https://metro3.be/fr/article/14-10-2022/des-terres-du-chantier-de-la-gare-du-nord-evacuees-par-le-canal?fbclid=IwAR16oKGj86RPkF5-wWOQQbTJ3sg2LS44UCSgPdeOF7JDKdBpcBjHnH0cPPw (Accessed: March 14, 2023).

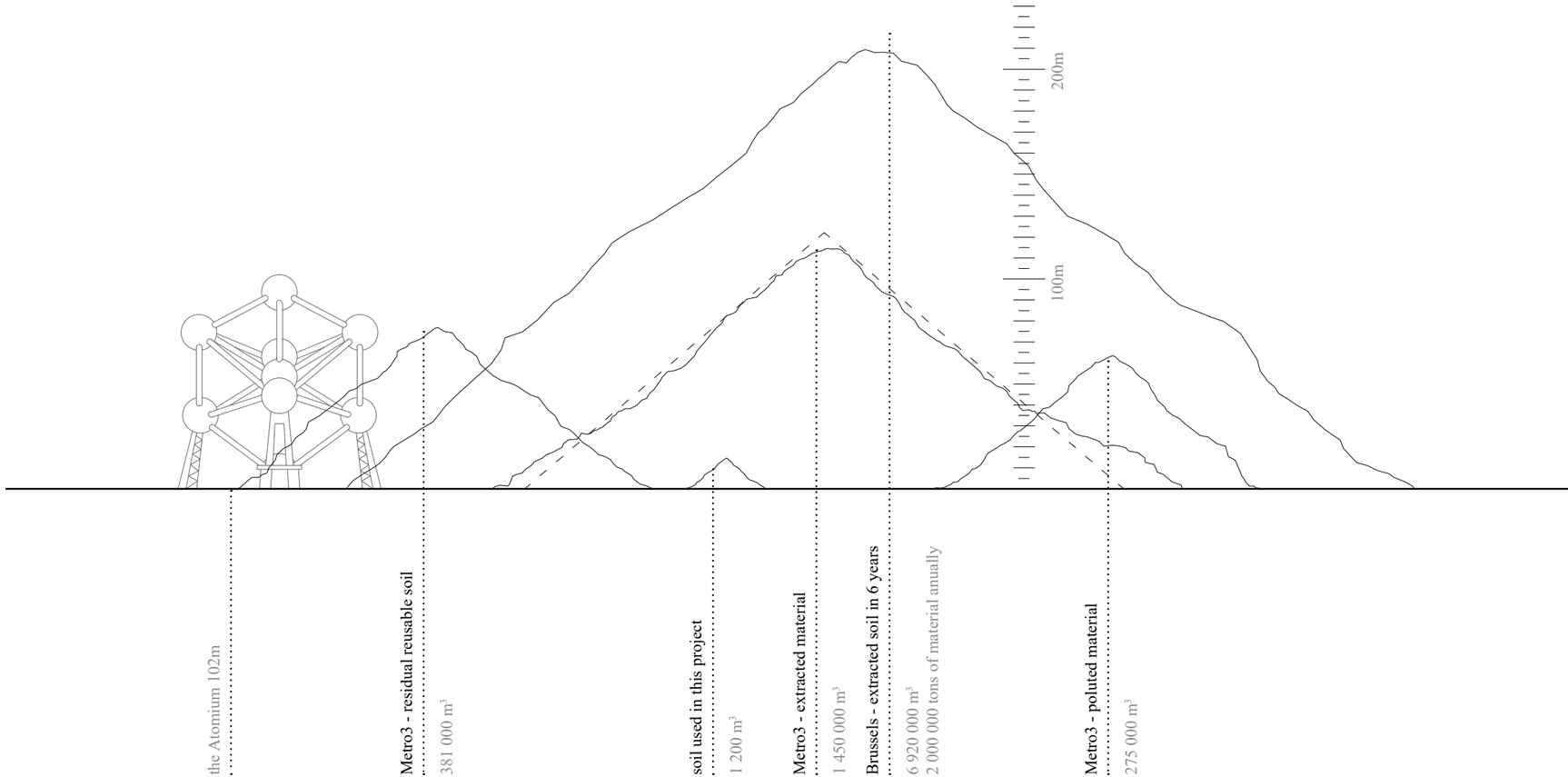
process of extracting material in the rue d'Aerschot shaft →

urban mine

Humans ability to modify the landscape by moving earth and mining activities have increased dramatically. As a consequence, we have now become the main geomorphologic element sculpting the landscape. Needless to say that the rate we are moving and extracting the earth is increasing exponentially. In an article Land as a Project, Topolovic states that the speed with which these transformations are enacted is dramatically exceeded by the efforts that would be necessary to undo them.[x] To put this in the perspective of an urban area, the amount of earthworks linked with all major infrastructure projects are becoming more present. Infrastructure is commonly thought of as the most permanent and enduring of our civic investment.[xx] Thus it is an opportunity to use this unique period in the life of the building, a construction period where material is being moved to new locations. Dug from underneath soil becomes an active object of the construction.

x _ Topolović, M. (2017) "Land as a Project: On Territorial Construction," in Forum 2016 - Infrastructure Space. Detroit: Ruby Press, pp. 132–159. Available at: https://doi.org/10.3929/ethz-b-000127045.
xx _ LeCavalier, J. and Young, J. (2017) "The Metropolitan Relational Matrix," in Forum 2016 - Infrastructure Space. Detroit: Ruby Press, pp. 30–33.

the amount of soil visualized through heaps
(angle of repose is 40°)
→

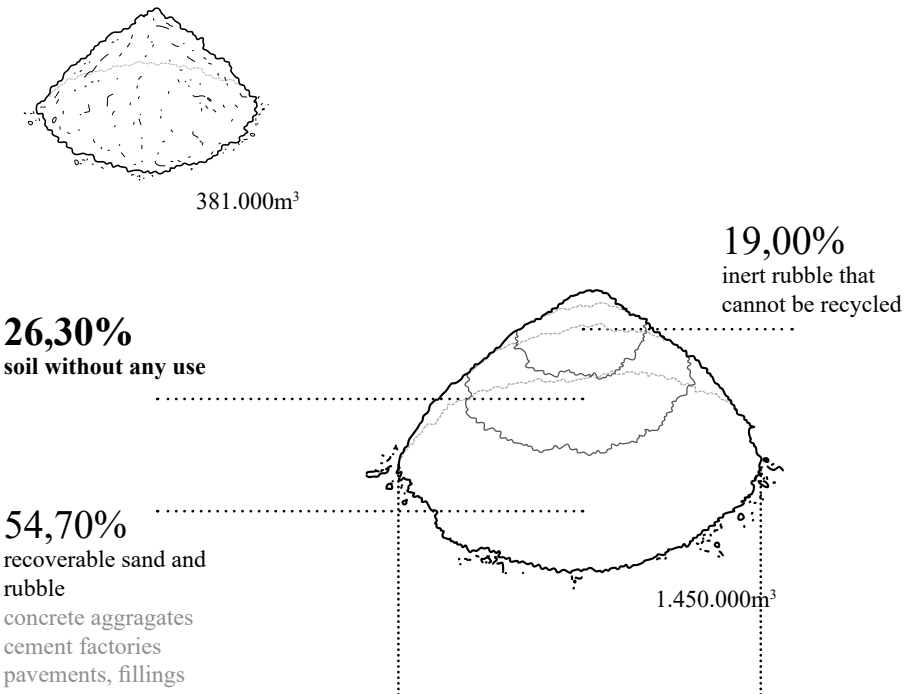


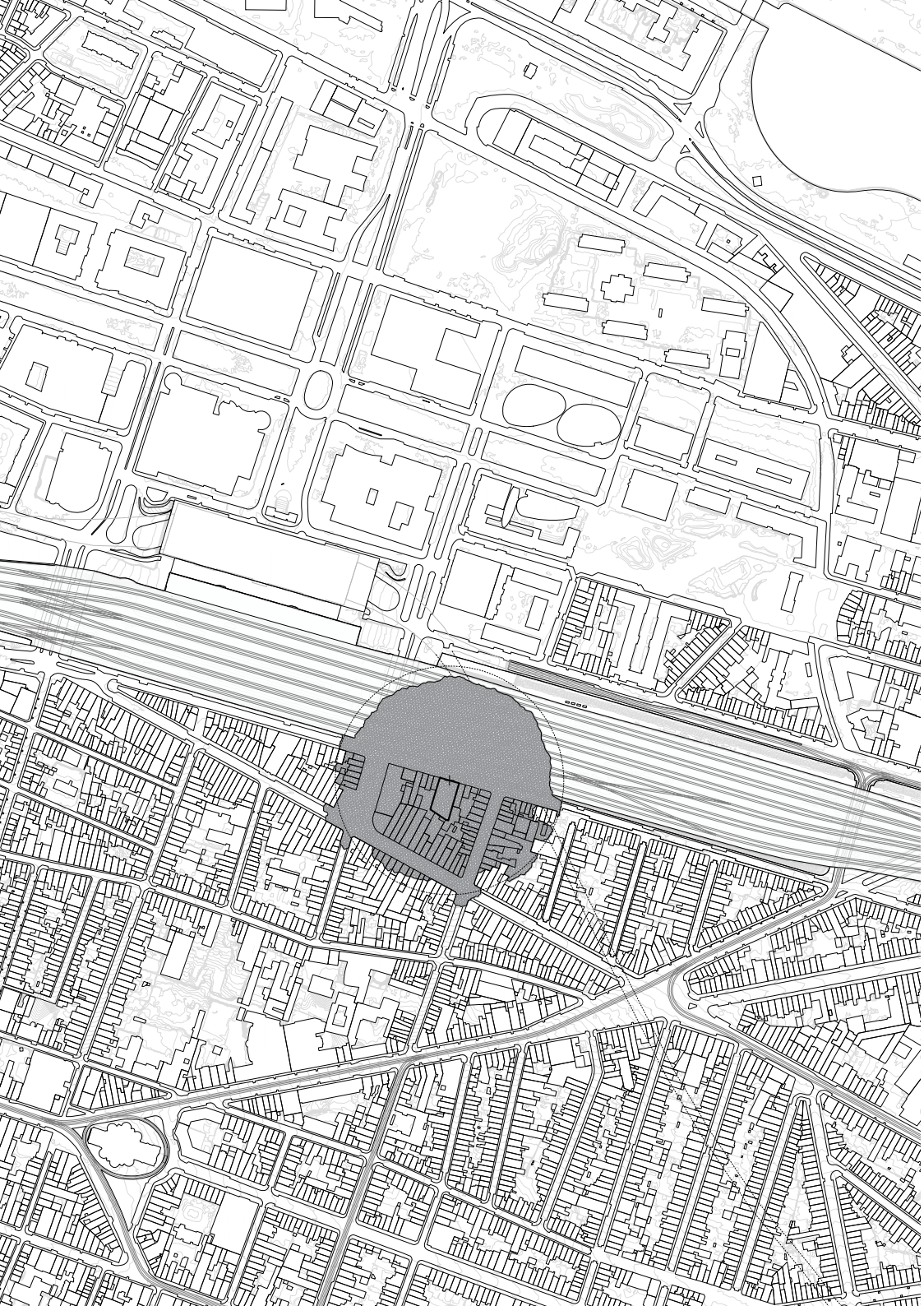
piling up

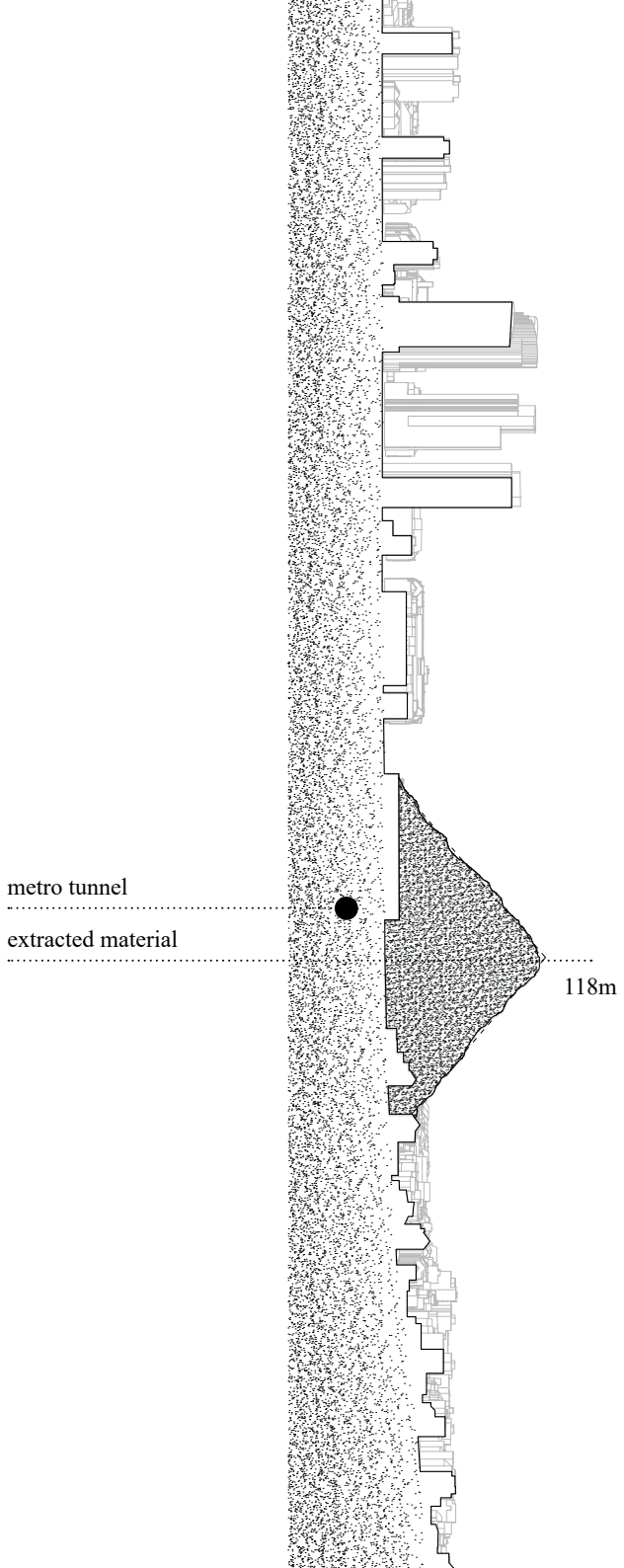
Cuttings extracted by the tunnel boring machine are evacuated to the planned temporary storage site at the Haren site on a treadmill. Later in the proces material is recycled based on the chemical and mechanical atributes. In the documents provided by the company, the extracted soil will be devided into three different parts. As seen on the diagram, the recovareable material repersent more then 50% of the soil from tunnel. This will be transported to cement factories along the channel in Brussels. Other 19% of the material can‘t be used in any way due to its polution. That leaves us with more then 381.000m^3 of soil that can be re-used yet no other use has been found for this amount. The excavation site is just a few hundred metres from many possible construction sites, allowing the transport of any material to be done in an easy and fast way. In other words a secondary product of the construction - soil - should be rethought as a project and opportunity at the same time. Motivation to use the material pragmatically, locally, effortlessly.

speculative scenario in which all the material from the metro (tunnel+stations) is piled up on one place, visualisation of the material to be extracted during the Metro3 construction
→

next page
site plan of the heap intervention
←
relationship of metro tunnel, site and the material depicted in a section
→






metro tunnel
extracted material
118m

2

The best way to learn about a city is to walk through its streets. The bodily movement initiates interaction with all human senses, resulting in a more intimate and intense experience. The city slowly reveals itself. While exploring you may come across many intriguing and moving non-architectural designs, concepts and places. It is an unlimited source of inspiration and references. And sometimes the best lies just behind the corner. This is the story of the void.

rue d'Aerschot

Formerly known as rue de la Liberté then rue de Cologne as reference to the Brussels-Cologne railway line. After First World War it was renamed rue d'Aerschot in homage to the city which suffered so much under the German occupation. The character of this street is very tangible. Walking down this street you can feel the immersive presence of it. It makes commuters really conscious about the environment around. Without any doubts this street catches your attention. That perticular feeling in your mind when crossing it is immersive, there is no escape. All senses are set on the highest alert. A regular street is more likely to be ignored by people when walking through it, here on the contrary you force yourself to ignore it as much as possible. What makes it also really specific is the diversity of people commuting through. People with criminal records, drug dealers, pickpockets etc, which over time became in cynical ways almost the standard equipment of this street. Other groups use it too, students, refugees, tourists, people rushing to work. This mix is what makes the place so special, dynamic and unforgettable.

a day in a life of a rue d'Aerschot
february 2023
→

red light

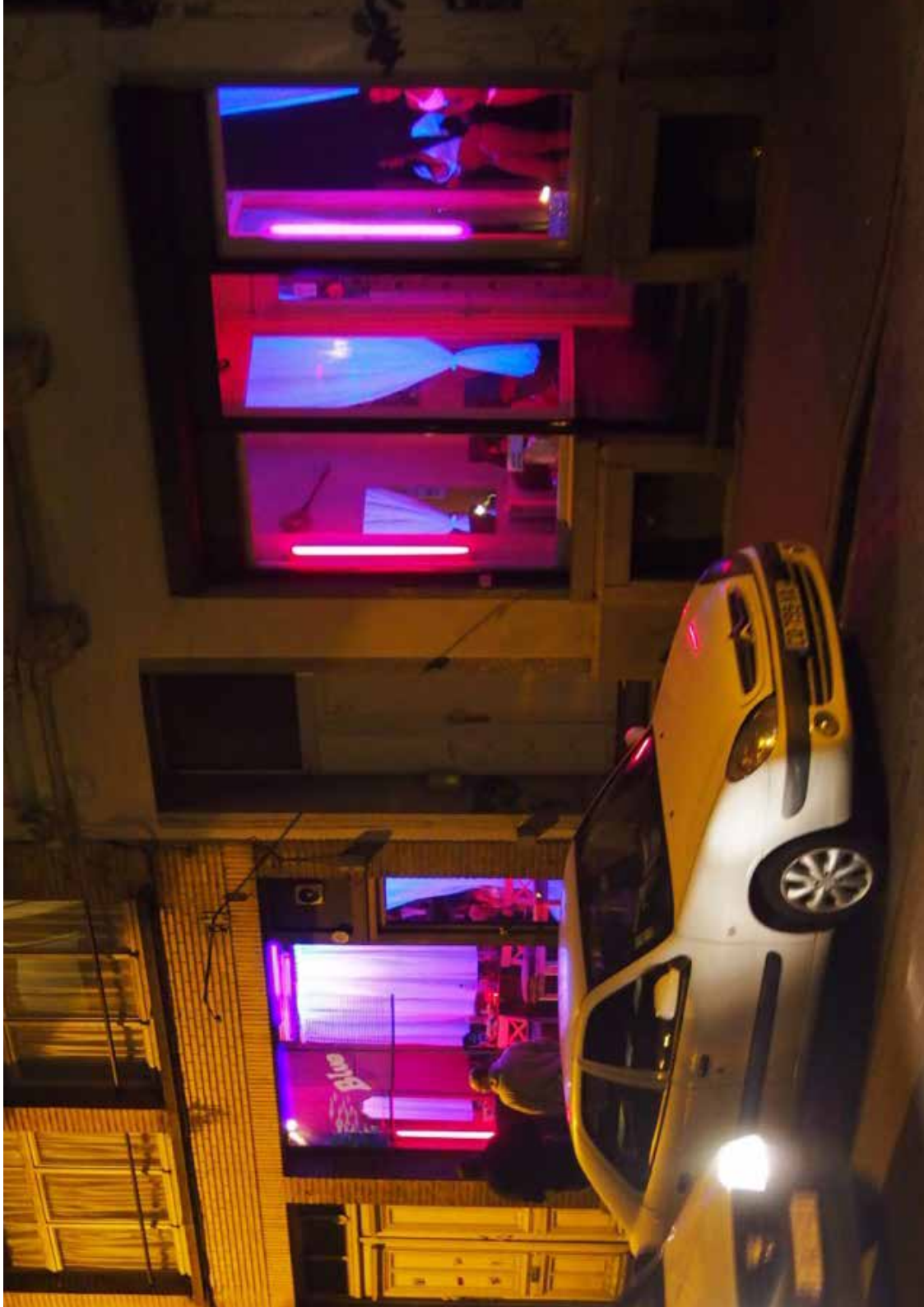
The red light district at Rue d'Aerschot is a part of the city without any boundaries, without secluding itself from the city. From the typology point of view the street unfolds between two totally different worlds, an orthogonal residential block layout with a row of houses on one side, the other occupied with a large international infrastructure node. The 1,5km long street neighbours the north railway station, thus the whole half of the street is one big wall with only three openings - entries to the station.

…my square is like an office. Once I'm done for the day, I'm just like every other woman…

says Doris, 59 years old sex worker from the Brussels famous red light district.[x] Reading this interview helps with rethinking the stereotypical view on prostitution. In short, it's a job like any other.

x _ Oszczak, F. (2019) Une ex-prostituée de la rue d'Aerschot parle de son business, Une ex-prostituée de la rue d'Aerschot parle de son business. VICE MEDIA GROUP. Available at: https://www.vice.com/fr/article/gy4pz7/une-ancienne-tds-de-la-rue-daerschot-nous-a-parle-de-son-business (Accessed: April 17, 2023).

a night in a life of a rue d‘Aerschot
→



backstory

This quarter of Brussels was not always perceived in such a deceptive and dishonest way. Whole neighbourhood was established and built in the early 19th century. At first it was just an outskirt of Brussels, which later developed into a proper functioning municipality. Given its name by the original settlement - Schaerbeek - it became one of the richest and most prominent parts of the city.[x] The rue d'Aerschot was initially planned as a street with three story buildings on both sides. As the Noord train station grew in size and importance half of the surrounding street needed to give way to this infrastructure. One full side of vibrating street disapeared and was replaced by a regular and dull wall.

x _ Heilige Familie Schaerbeek. (n.d.). Geschiedenis van Schaarbeek. https://www.heiligefamilieschaarbeek.be:8443/phocadownload/userupload/kdhoe/Geschiedenis_van_schaarbeek.pdf. https://www.heiligefamilieschaarbeek.be:8443/phocadownload/userupload/kdhoe/Geschiedenis_van_schaarbeek.pdf

historical development of the neighborhood
19th century
→

next page
an aerial view on the Nord train station
and part of the rue d'Aerschot, 1914-1918
white line represents the site
←
buildings documented at the end of millenium
→

N.108 1 - 2 N.106 - 104 ANNEXE 6

N 110 3 - 4 VUE D'ENSEMBLE.

RUE D'AERSCHOT - "L'ANXMER."

demolition

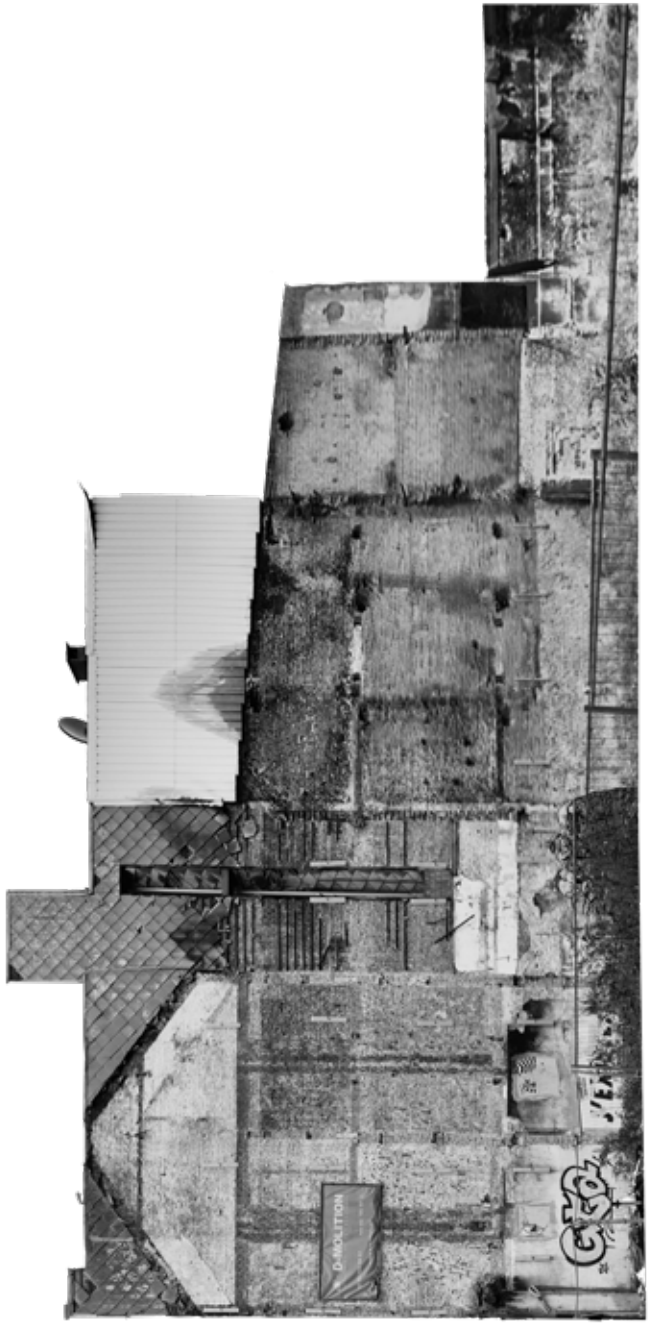
A century later another demolition took place in the area. In 2019 two houses were torn down in order to give space to a proposed project of mix-use building (offices and apartments). During the demolition a part of the third building caught fire.[x] The neighborhood was instantly coverd with a thick grey smoke, later to be recognized as hazardous due to azbestost particels. The building was heavily affected by the unfortunate accident and needed to be destroyed too. Three historical houses disappeared without any substitute. The void in the structure was born. An alteration in a system that gives the place whole new potential.

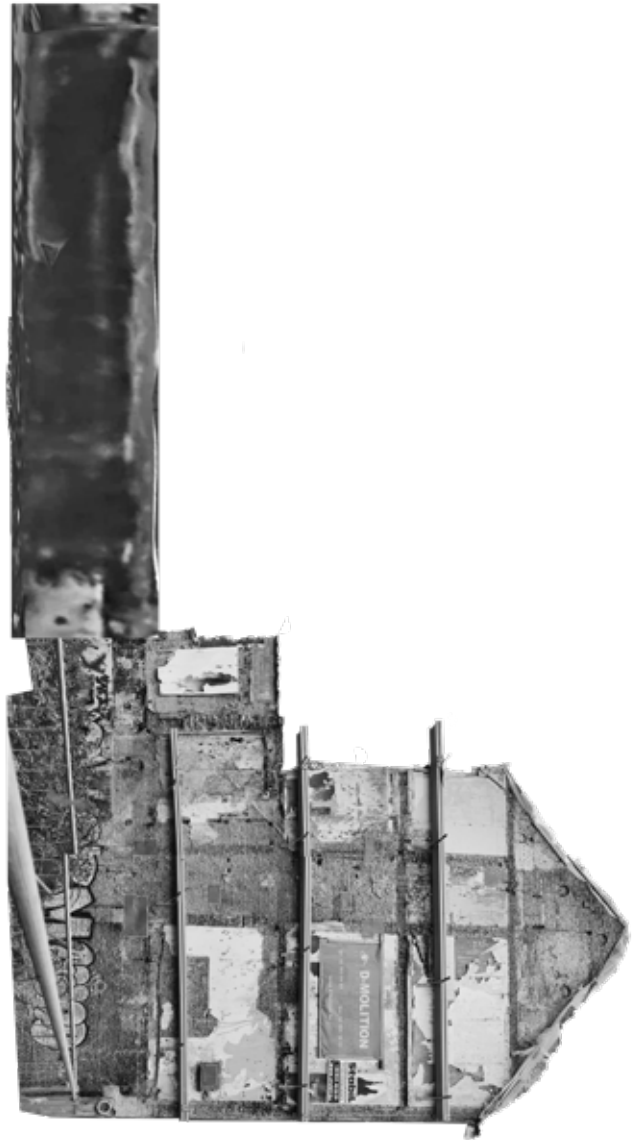
x _ Galindo, G. (2019) Brussels building to be demolished after being ravaged by fire, The Brussels Times. Available at: https://www.brusselstimes.com/84225/brussels-building-to-be-demolished-after-being-ravaged-by-fire-schaerbeek-asbestos (Accessed: February 2, 2023).

aftermath of the fire
↑
an aerial view of the neighbourhood and the smoke coming from the third building
↓

next page
sides of the neighbouring building after the demolition in 2019
←→

next next page
panoramatic view of the void
←→


D-MOLITION

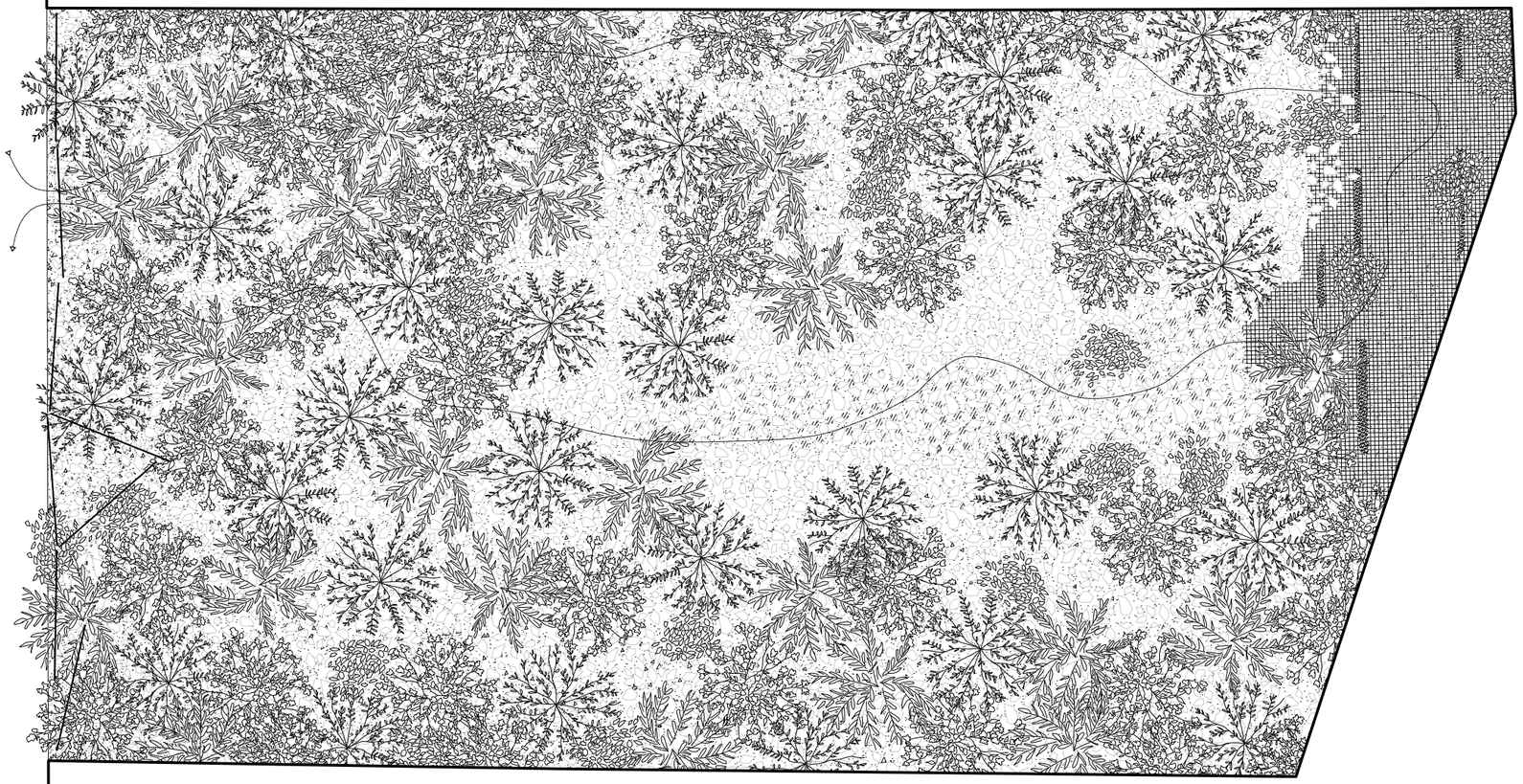

D-MOLITION


CAFE CLUB
ACTIV'TAXI

site visit

sunday, february 19th

8:15
leaving the dormitory
8:21
coming to the spot, waiting for people to go away, I feel more comfortable to enter the site when no one is around
8:34
too many people walking along the void, I‘m surprised, I chose this time frame between the sunrise and the time people wake up
8:36
coming through the hole in a fence
8:37
finally I‘m inside! on the other side!
8:40
I managed to get over the hills of garbage, I‘m moving through the forest of shrub
8:41
I reached the back of the void, the corner, there are still original floor tiles from the demolished building
8:43
I‘m taking pictures of everything,
8:50
leaving the site, people were crossing the street, no one noticed me though, short but really intense experience



site plan of the current conditions,
line represents the path during the first visit
february 2023
→
next page
images taken on the site
← →

welcome to the jungle

The void was slowly taken over and filled in with greenery. The main contributor in this case is a buddleja davidii, perceived by many as an invasive species.[x] In the context of the void it represents a plant that was able to bring life once again to the harsh environment.

... life finds a way...

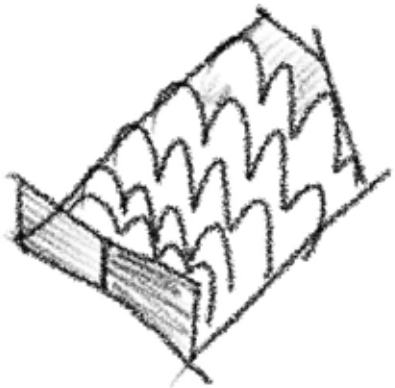
is a quote by Jeff Golblum in the movie Jurassic park.[xx] He refers to nature as something that can‘t be tamed. Same as here in the void the plants grow as it wants, with little or no human interaction. The wasteland that is eaten by an ecological succession has a great capacity to develop itself into a fully sustainable and resilient piece of landscape. The emptiness and the jungle both hides great potential. The strength also lies in the non-specificity of such space. Searching for a proper function might lead to overlooking the actual quality. Doing nothing, building nothing might be the correct answer then.

x _ Branquart , E. et al. (2007) Invasive alien species in Belgium: Buddleja davidii, The Belgian Forum on Invasive Species. Available at: https://ias.biodiversity.be/species/show/44 (Accessed: February 25, 2023).
xx _ Spielberg, Steven. (1993) Jurassic Park. Universal Pictures

life found a way
→

3

Earth in the city is usually hidden from our sight. It lays under the man-made concrete and asphalt layers, under the infrastructure and buildings, deep down. The more exciting it gets to find a pile of soil just standing there in the streets. Heap of soil as a symbol of a demanding construction/extraction process. The earth was liberated after millions of years, now it waits for another purpose. A unique frame in the life of a soil to fully discover its potential in the urban structure.



void again

This particular site is one of many possibilities where the intervention could be. There are many other wastelands along the perimeter of the tunnel. Site at rue d'Aerschot combines perfect position in the urban structure with the uniqueness of the local circumstances. It is in a perfect close relation towards the new metro line. In the editorial of the OASE 110 (Exploring the soil)[x] is said:

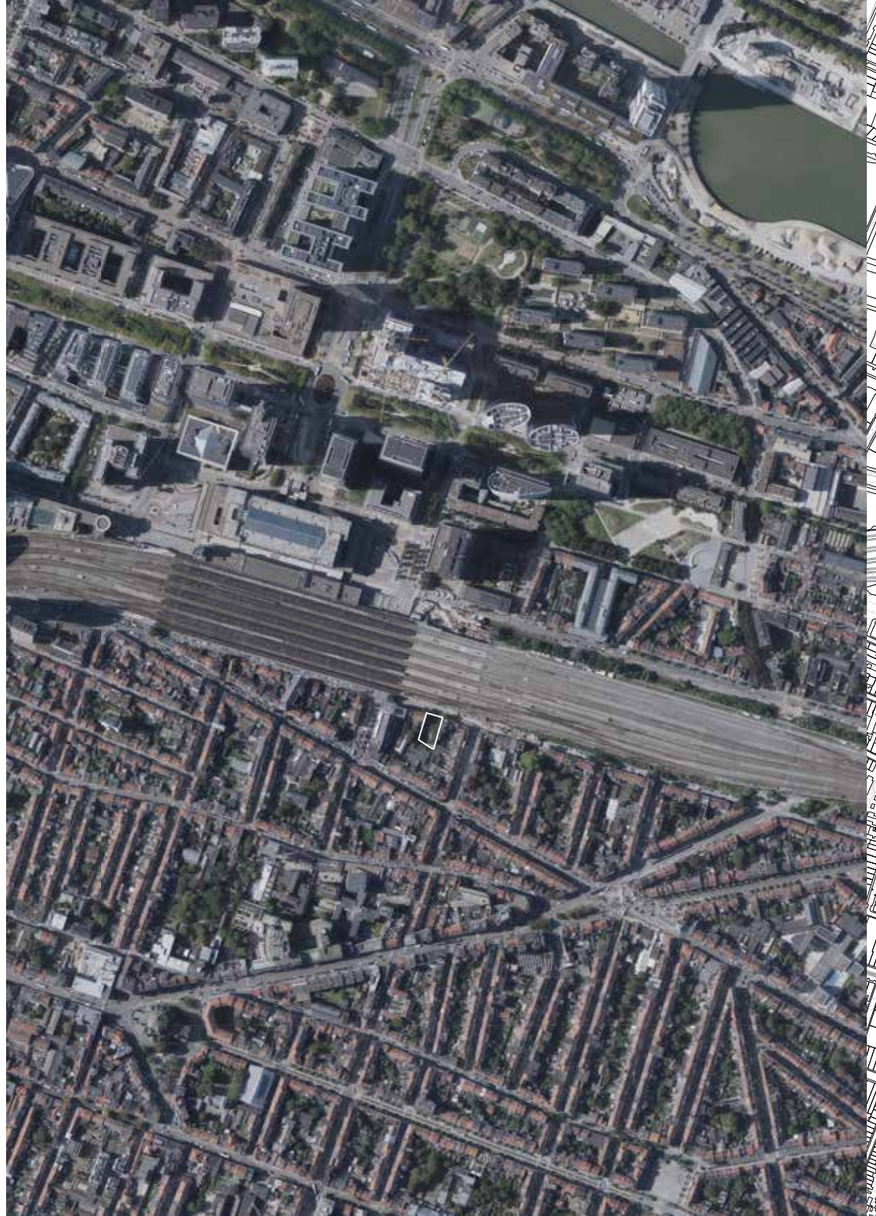
...A significant part of the challenge is to change our perception of these spaces (wastelands, same typology as the void) and give them meaning in/for the urban territory of the future...

With this act a possible awareness is brought to the process of material extraction in the city. The void gives a space to an intervention that visualises the enormous quantity of soil extracted within a one infrastructural project. However this principle can be repeated to entirely use the potential of the city's voids.

x _ Peleman, D., Corte, M. B., & Ronner, E. (2021). OASE 110: The project of the soil (D. Peleman, M. B. Corte, & E. Ronner, Eds.). OASE Foundation.

orthophotomap of site and the context
←
outline of the site
and its relation to the metro line
→

next page
soil heap and the rammed earth wall,
main elements used in the project
←
layout of the soil heaps
→



3rd landscaping

The idea of this intervention is to make an intimate, enclosed yet accessible garden. Rejecting the renaissance picturesque garden. The intention here is not to produce a beautiful landscape, rather to make a piece of nature that is sustainable, resilient, that can live long without any help from humans, with no maintenance at all. That is where the inspiration comes from french architect Gilles Clement and his manifesto called Third landscape.[x] The third landscape is the space unattended by man and ruled over by natural evolution. Vacant space just like the void at rue d'Aerschot. By using the natural forces and processes of ecological succession the project aims for the resilient piece of greenery in the urban space. What grows there, grows there. This approach does not prefer any flowers nor trees. There is no hierarchy. Let the space decide what it wants.

x _ LILA Jury statements (2022) Gilles Clément , Landezine International Landscape Award LILA RSS. Available at: https://landezine–award.com/gilles-clement/ (Accessed: April 15, 2023).
xx _ Clergeau, P., & Roux, R. (2019). Accueillir le vivant: l'architecture comme écosystème. Park Books

list of plant species traditionaly found on the places of third landscape[xx]
budleja davidii: seeds, blossom and leafs
→

ecological succession

I _ starting point, vacant space

II _ a residual material is brought to the site

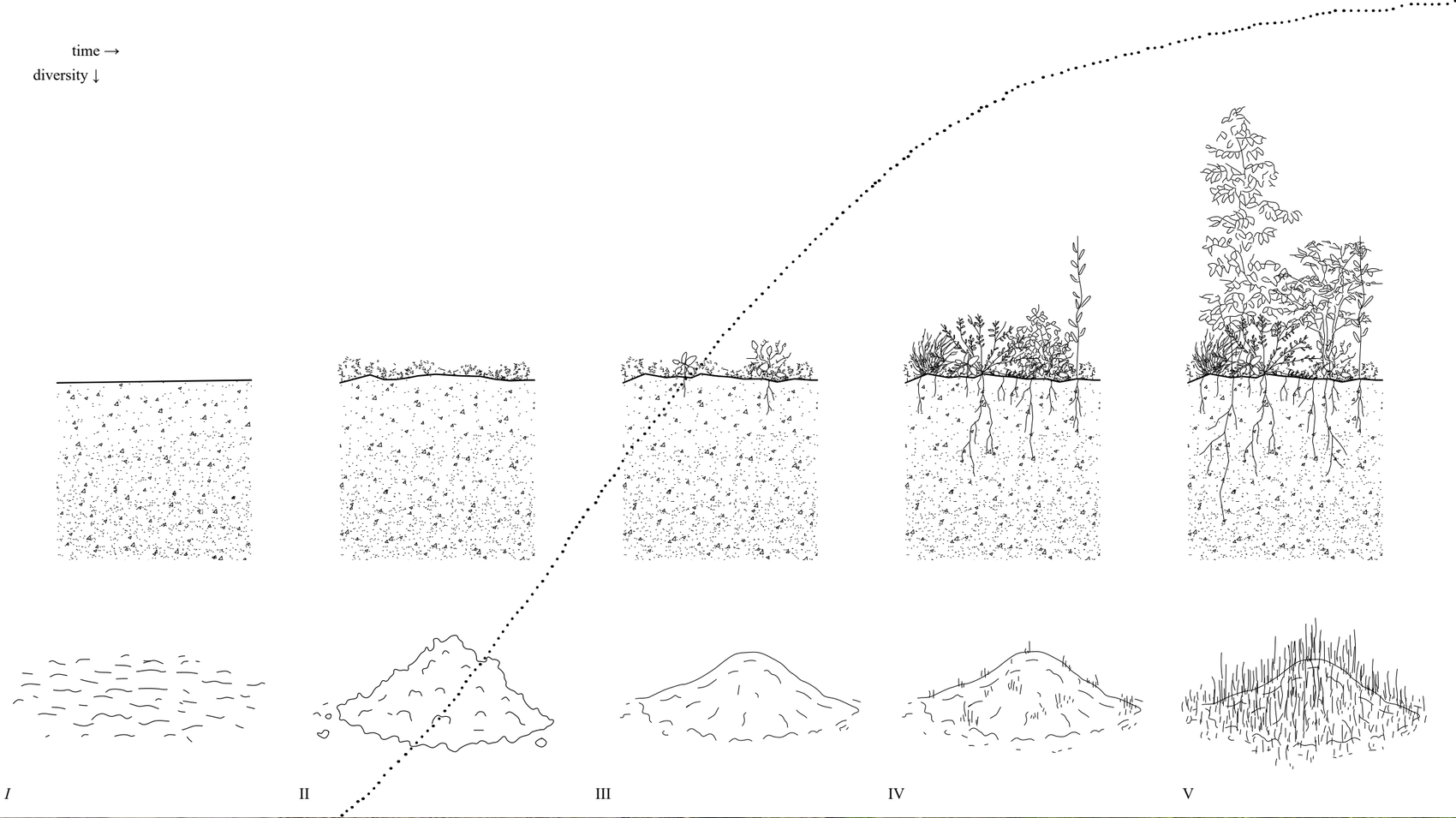
III _ due to the weathering processes (rain, wind, gravity) the pile changes its original form

IV _ plant seeds brought by external forces (wind, animals) start to grow

V _ after years of abundance the pile is transformed into a green resilient piece of landscape

The dotted line on the next page shows the relation between time and diversity. The process of ecological succession is slow at the beginning. It takes several years to achieve a rigid and sustainable green ecosystem. Green spaces with an open-ended design approach, taking in account the natural processes, might intervene in a spaces like the void without losing their essential quality of indeterminacy.[x] Design as little as possible.

x _ Luo, S., & Havik, K. M. (2020). Gardens of Interstitial Wildness: Cultivating Indeterminacy in the Metropolitan Landscape . Spool. Journal of Architecture and the Built Environment, 7(1 #6), 9-22. https://doi.org/10.7480/spool.2020.1.5478



various phases of ecological succession →

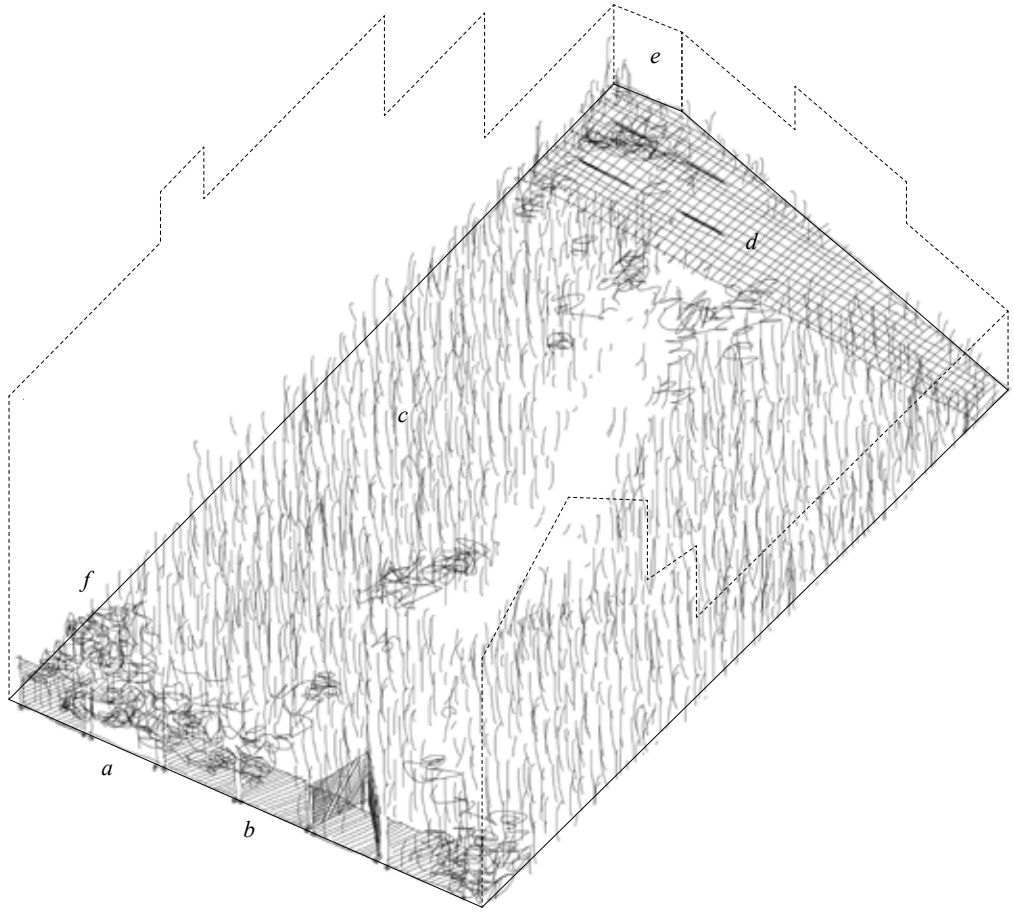
next page
example of the landcape along the channel on the south of Brussels, the heaps of waste material is overgrown with plants ←→

strategy

The whole project is devided into 4 separate phases. This allows the project to be executed properly.
First phase takes care of the vacant space. By removing the rubble site is going to be accesible again.
During the second phase the void is filled up with the soil. Up to 9 trucks per day comes to dump the material.
In the third stage a wall is erected. This phase might be more time consuming, it is necesary to take in account the period when the wall cures and gets solid.
At the very last phase the garden is opend to the public. This might be done right away, Another scenario is to open the space after the rigid and sustainable ecosystem of plants is established there.
The proces od building this intervention is heavily dependent on the project of new metro line.

a _ hole in a fence
b _ the fence assembled out of 8 pieces
c _ shrubs (budleja davidii mostly)
d _ floor tiles
e _ corner of the site
f _ rubbles from the demolition

void before the intervention
→



phase i

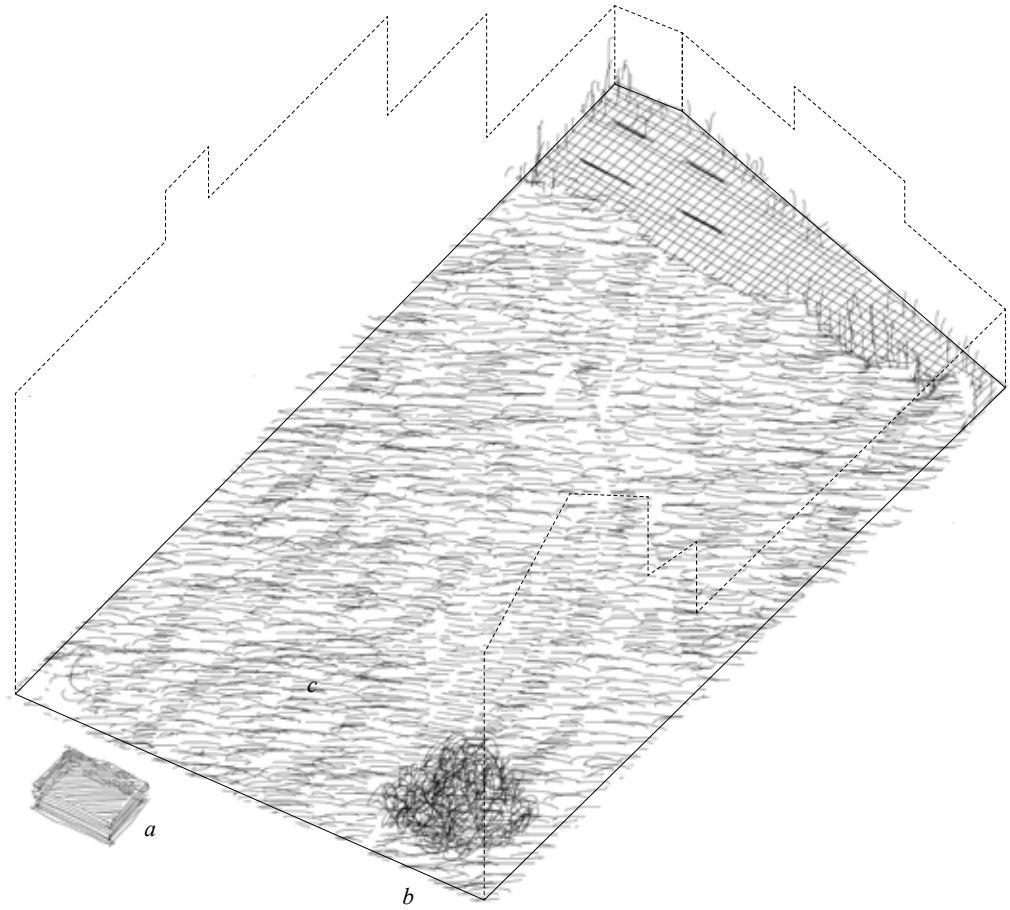
Dismantling the fence, keeping it aside for an entrance/door/gate in the final stage

Cleaning the place from all the excess rubble and rubbish

Recycling rubble/rubbish, usable pieces are put aside - non-toxic, non-polluted, safe and clean garbage + stones, rocks, pieces of bricks, concrete slabs, tiles will be used during the wall construction as a part of a formwork

Cutting the grass and bushes, leaving them on the site - it will be covered with layer of soil

Cleaning the corner with a tiles, only place without a layer of soil, only place where the plants are left just the way they are, this corner then works as spot from which a new greenery can emerge from, spread easily, not starting totally from a scratch



a _ dismantled fence
b _ rubbles and other waste material
c _ cut shrubs

phase ii

First trucks coming with the soil, maximum of 7-8 trucks per day

Size and shape of the heaps depend on the truck capacity/size, material mixture and grain size depends on the geological layers during extraction in the tunnel

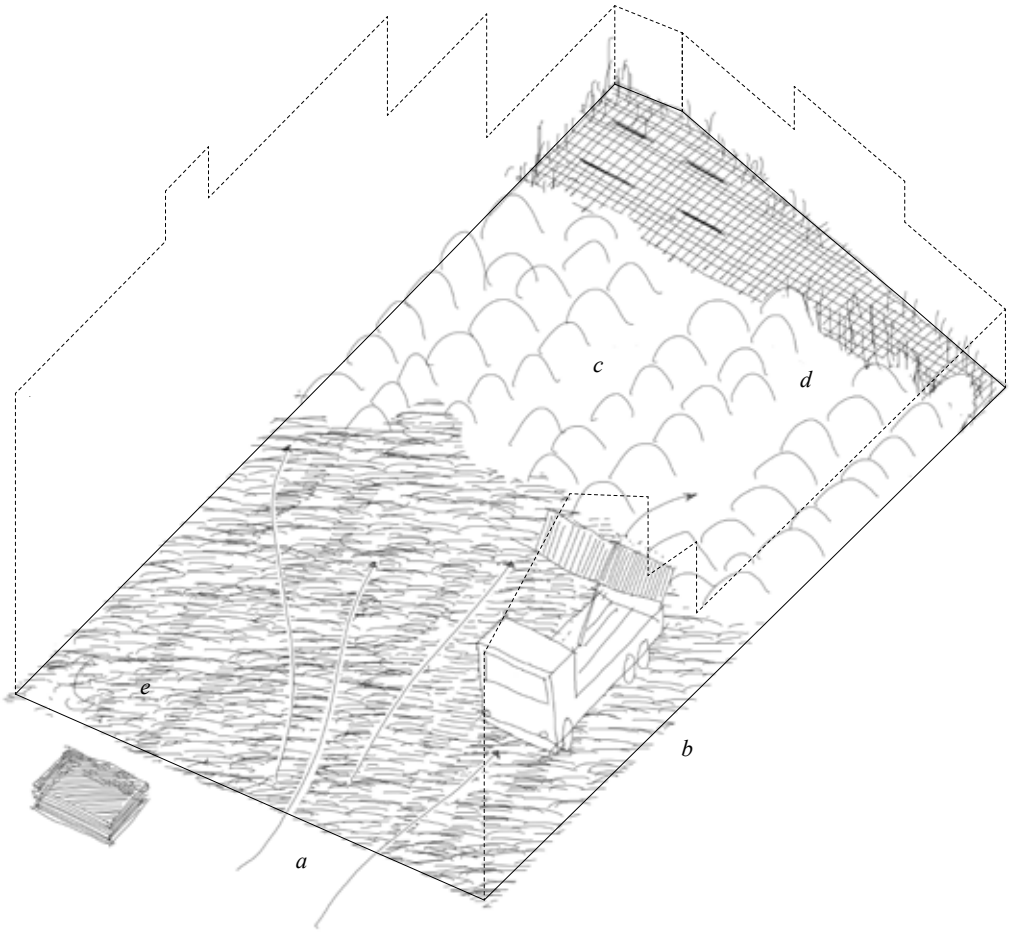
The process of filing the site with soil heaps starts in the back of the site

One worker (safety reasons) present on the site is directing the trucks to dump the soil in exact positions - approximately 5 rows of heaps, positioning might vary during the process

Creating a material reservoir in the front of the site with 200m3 of soil, preferably creating a bigger pile, providing close relation with the future wall

Estimated time to fill the site with approximately 1800m3 of soil is 15 days (8 trucks/day with the capacity of 15m3)

Creating water reservoir for the treated underground water pumped from the tunnel/stations, this will be used in the rammed earth mix - 10% water



a _ access point for the trucks
b _ tuck unloading the soil
c _ heaps of soil
d _ passage between heaps
e _ water reservoir

phase iii

Preparing the crawling wooden formwork, the wooden planks and boards are one of few elements brought to the project from the outside (not from the site itself nor from the metro construction), it is recommended to use recycled, already used wood (RotorDC)

Marking the position of the wall
Levelling up the surface underneath the wall (with a rammer)

Putting the formwork in position, it consists out of three 1 meter long removable segments, a wooden planks are pierced with a metal bars, that holds the the form together, the bars also help with the stabilising the form in vertical position

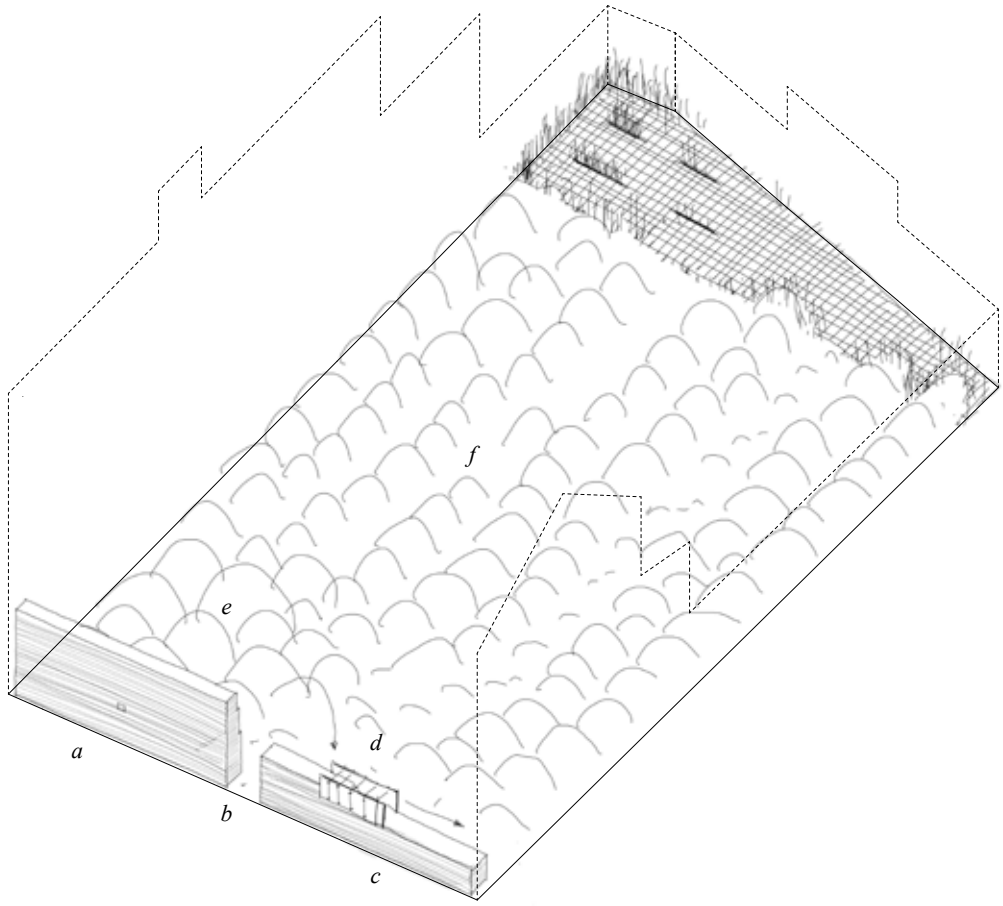
Ramming and compressing the soil up to the thickness of 0,15m (rule of thumb: 0,3m of regular soil equals to 0,15m of compressed soil)

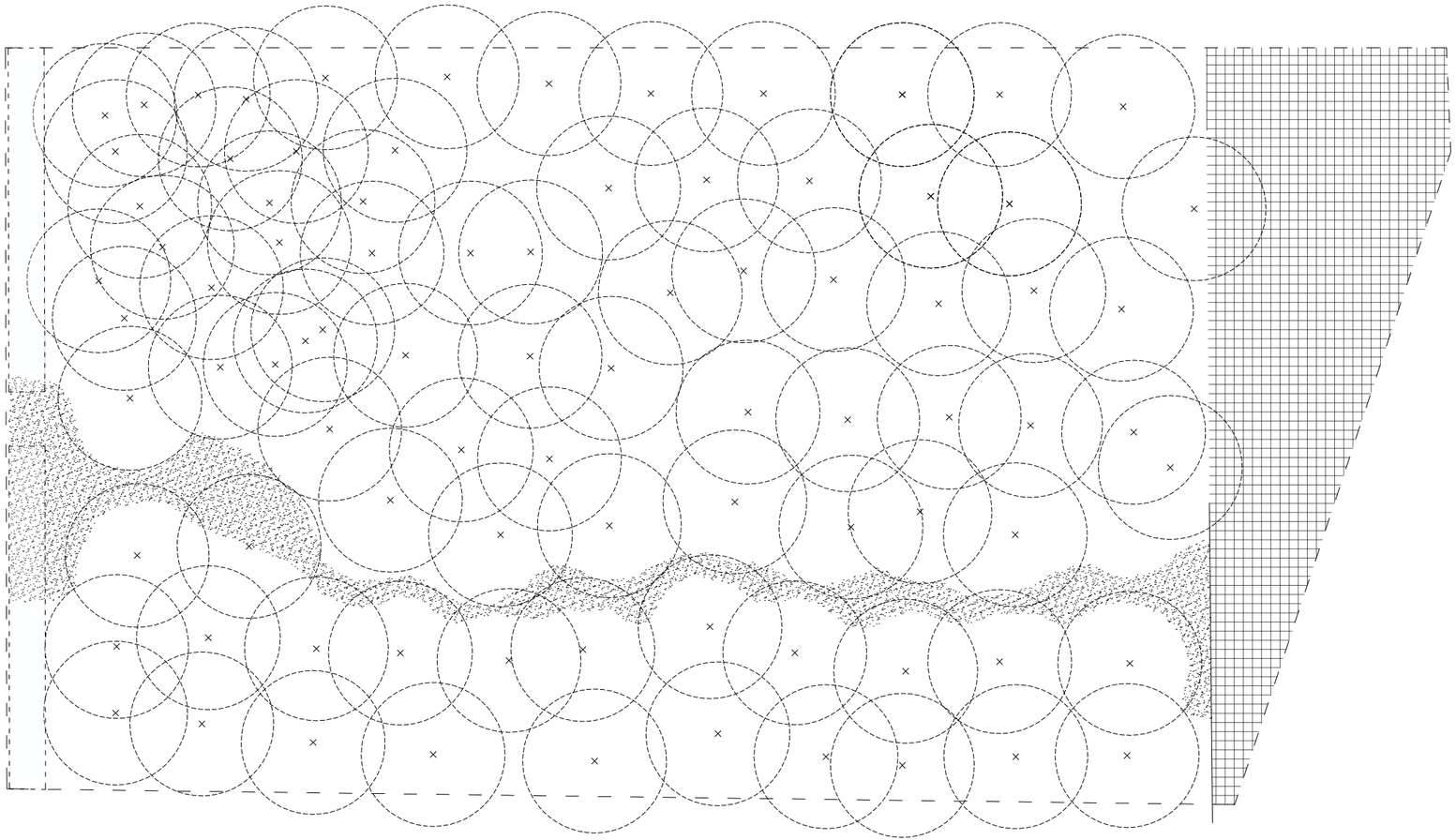
After the compressing is done, a part (one third) of a formwork is removed and slightly moved to the side, again attached to a already existing wall through the bars, ramming can start again

Crawling formwork allows to build a 3 layers (0,45m) of a wall continuously in one go, openings are made with a bags filled with a stones, no cement is added here and so the the bags full of gravel can be removed after

a _ rammed earth wall segment
b _ entrance
c _ second wall segment is being built
d _ crawling formwork
e _ soil reservoir
f _ field of heaps

next page
soil heap and the rammed earth wall, main elements used in the project
←
layout of the soil heaps
estimation counts with 90 heaps of soil
→





phase iv

Spraying the rammed earth wall with water for better curing

Waterproofing the segments by compressing the surface (metal scratchers), filling up the pores and holes marking a path through the garden, pathway depends on the position of each heap and on the space between them

levelling and compressing the soil with rammers/vibratory tampers

Recycling the metal bars from the fence, cutting it on 1,5 meter pieces welding them together creating a movable gate

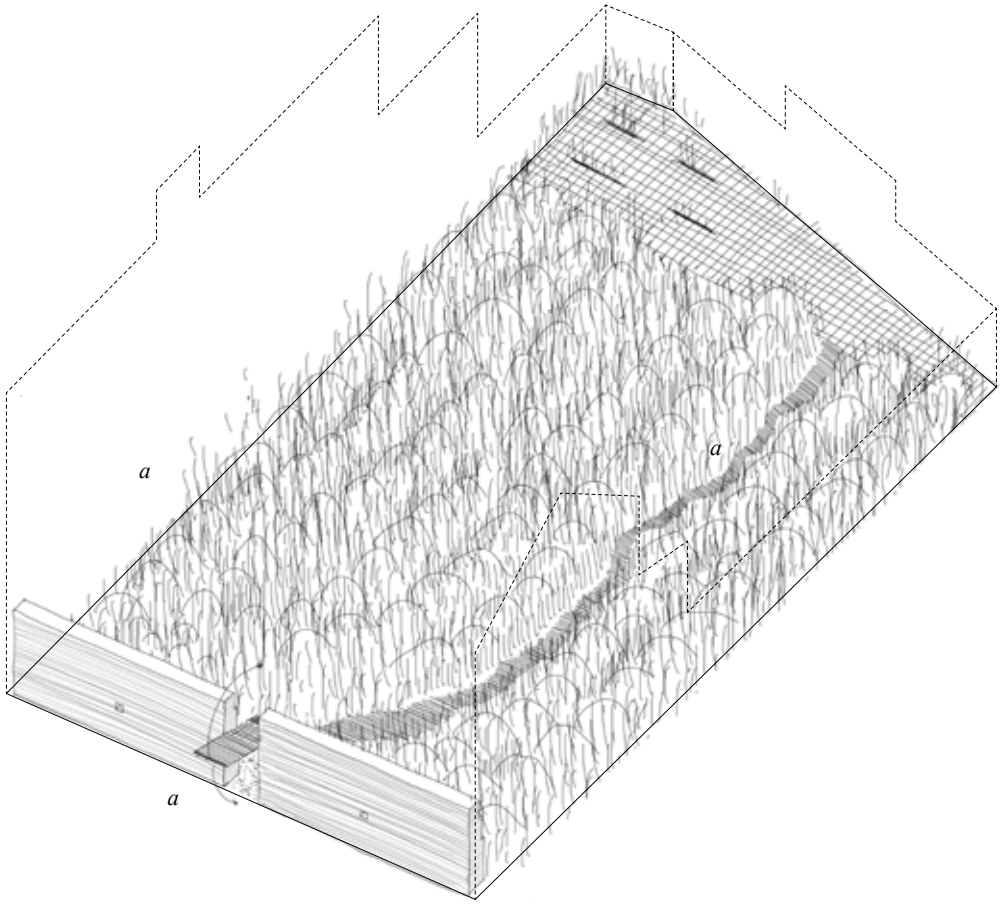
Attaching the gate to the garden

Marking the openings with a graffiti spray, reference to the demolished buildings

Closing the garden to give the plants, greenery time and space to grow

Creating jungle without any extra human intervention

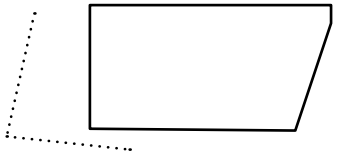
Garden opens to the public



a _ rotating gate
b _ path
c _ green layer

the wall

Soil heaps are separated from the rest of the neighbourhood by a rammed earth 4 metre tall structure. The wall positioned at the front of the site continues with the already established street line, reacting to the height of the adjacent ground floors too.
Two holes, one in each segment are small windows to look through when the garden is closed and see. You can spot the emerging urban jungle. Plants mixed in a manner to produce a resilient entity. Unlike in the context of near bars, you see nature, this is a vegan peep show.
As time passes by more and more gravity is sprayed on the wall. Claimed by locals. In this sense the intervention is becoming an integral part of the street.
A bit more time it takes for plants to overgrow the wall. A living wall.



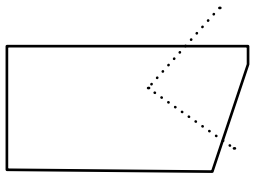
street view on the void,
now filled with a heaps and wall
→

next page
rammed earth wall elevation
←
site plan of the void
→

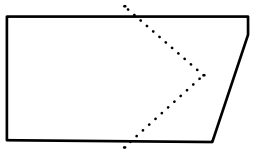
ГУЛИЦА 2

corner

This place in the very back of the site represents the tiny niche of the previous world. Memento. A piece of the the buildings that are no longer here that is worth to be preserved. The original floor tiles were discovered under the old rubble. The surrounding walls are covered with old and dark patches. Graffiti as an ornamental layer of the contemporary world. The corner plays a crucial role in the process of re-emerging of the plants here. As a place that was left alone without the urge to cut the greenery growing there it has the ability to work as a seed reservoir. This corner is the starting point for a new generation of plant species. New plants are going to spread from here. Hopefully covering most of the heaps in the end. However this green space also works as a meeting point. Hidden in the back, it provides intimate space later to be visited by people.



back corner of the garden, original tiles are kept as a memento to a previous structure
→



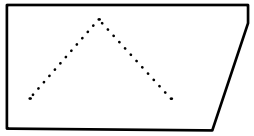
next page
view from the back of the garden, piles turned green due to the act of ecological succession
←
section and elevation of the garden
→


CAFE CLUB RIVE
SUNNY BEACH

the form

Heap landscape in the heart of the urban block relies mainly on the natural proceses. At the very beginig of this jurney the plot is covered fully with only soil piles, reaching up to 2 meters of height. The materiel takes a natural form of a pile. The gravity pulls each particle to the ground, depending on the inter partial forces and especial on the angle of repose the soil creates a typical pile.[x] Thus the form is a result of pure natural impulses. Later on the shape may vary, hovewer the influence of the typical belgian weather changes the form of heaps only slightly. Wind, rain and other elements play a role in the final stage of forming the place. Sharp edges of heaps are rub off, the soil particles on the surface move down to small valleys inbetween.

x _ Al-Hashemi, Hamzah & Al-Amoudi, Omar. (2018). A review on the angle of repose of granular materials. Powder Technology. 330. 397-417. 10.1016/j.powtec.2018.02.003



raw soil dumped on the site creating a landscape full of heaps →

coming to life

Physical model in scale 1:50. This is a collaboration of many different subjects that came together in order to visualise and materialise the project. As mentioned before the city is an unlimited source of soil, surely you can also find other things there. The HDF panel was caught in the container at the campus Luca School of Arts. The soil is borrowed from one of the construction heaps in Parc de Forest. Material for the rammed earth segments was dug from the metro tunnel. The dry out plants and shrubs were collected at Vilvoorde train station. After the final jury this model will be ritualy recycled.

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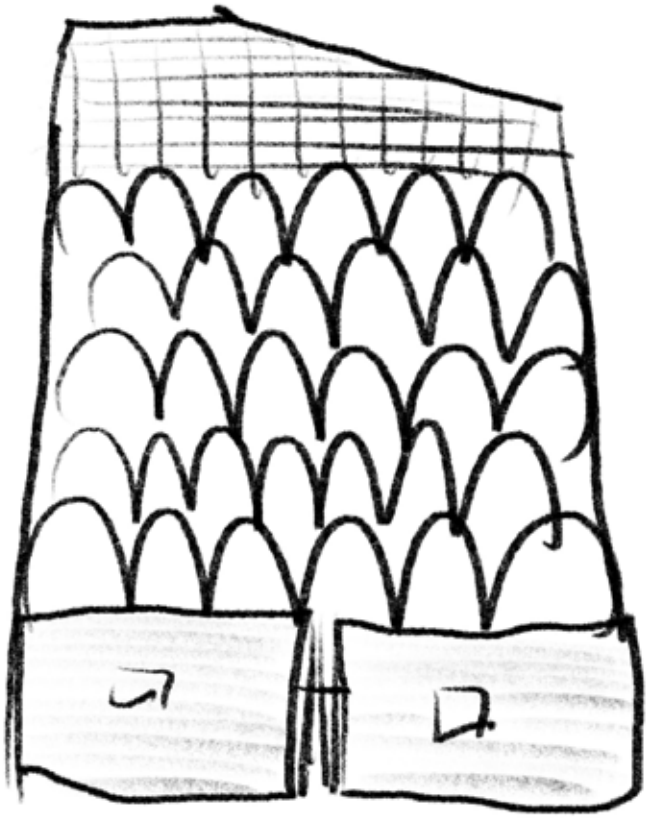

The city as a ***never finished*** entity is in constant flux. It is developed and re-developed continuously throughout its existence. ***Infrastructural earthworks*** have a huge impact on the urban structure and processes. Materials ***extracted*** from underneath come in huge quantities. Thus the city can be perceived as an ***urban mine***, an unlimited source of material. Digging up, storing it, transporting, reusing. This project explores the possible use and re-use of residual soil in the urban context. Extracting the soil from below, making it visible and thus ***raising the awareness about the consequences of our actions***. For this purpose I chose a project of a new ***metro line*** in Brussels. This infrastructure project generates huge quantities of soil. Using a bit of earth I propose to make an ***intervention at rue d'Aerschot***. Forgotten ***void in an urban block*** has the potential to bring a new quality to the local community. The close relation of the void and the metro construction site allows the transportation to be done in a fast and easy way. The intervention itself consists mainly of bringing the material on the site. ***Filling up the void***. One truck as a measuring unit, the void is slowly filled with ***piles of earth***. New ***third landscape*** type of space emerged in the city. ***Life finds a way***, so will the plants on the site.

Master Dissertation project
KU Leuven, Faculty of Architecture

Soil in the void
Václav Heginger

promotor
Johan Nielsen
(co)promotor
Johannes Berry

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