



**Mental Well-being** // Healing Architecture

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Graduation project  
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# HIDE AWAY

## COMMUNITY ROOM

Here you can drink, talk and read

### **Opening hours:**

Monday to Friday: 12.30 pm to 9 pm

Saturday and Sunday: 3 pm to 8 pm

### **You can sign in for:**

- a reading
- a workshop: dancing, clays, mandala drawing, painting etc.
- yoga/meditation lessons

### **Without signing in you can:**

- do yoga/meditation on your own
- follow yoga/meditation classes with the help of a screen
- boxing



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es weint  
Nach Paul Klee

## **TARGET GROUP**

Young adults and adults with mental problems/mental disorders as:

- \* Burn out, divorce issues and other life crises



# **THESIS**

Architecture can be supportive in the treatment of mental difficulties by evoking thoughts and emotions.



# RESEARCH

## **Literature:**

Emotions  
Yoga  
Meditation  
Mindfulness  
Architecture  
Sensory architecture

## **Questionnaire:**

Mental landscape

## **Design:**

Scale models  
- express emotions by  
spatial arrangement  
- express feelings by  
ordering blocks

## **Interviews:**

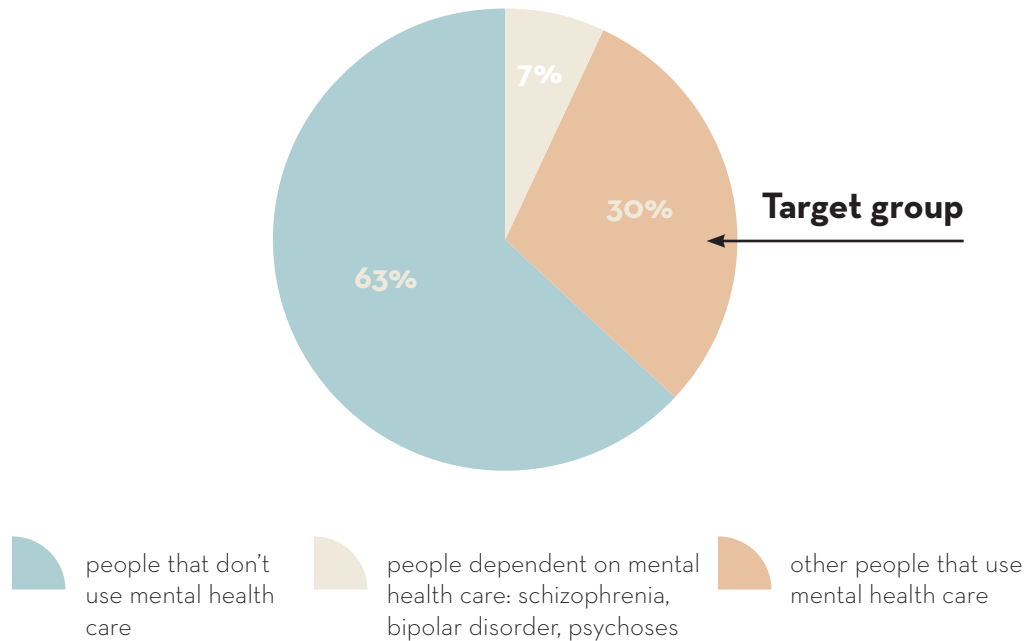
Client mental health care  
Psychologist;  
(Psychotherapist and  
mental health care  
manager)

## **Experts:**

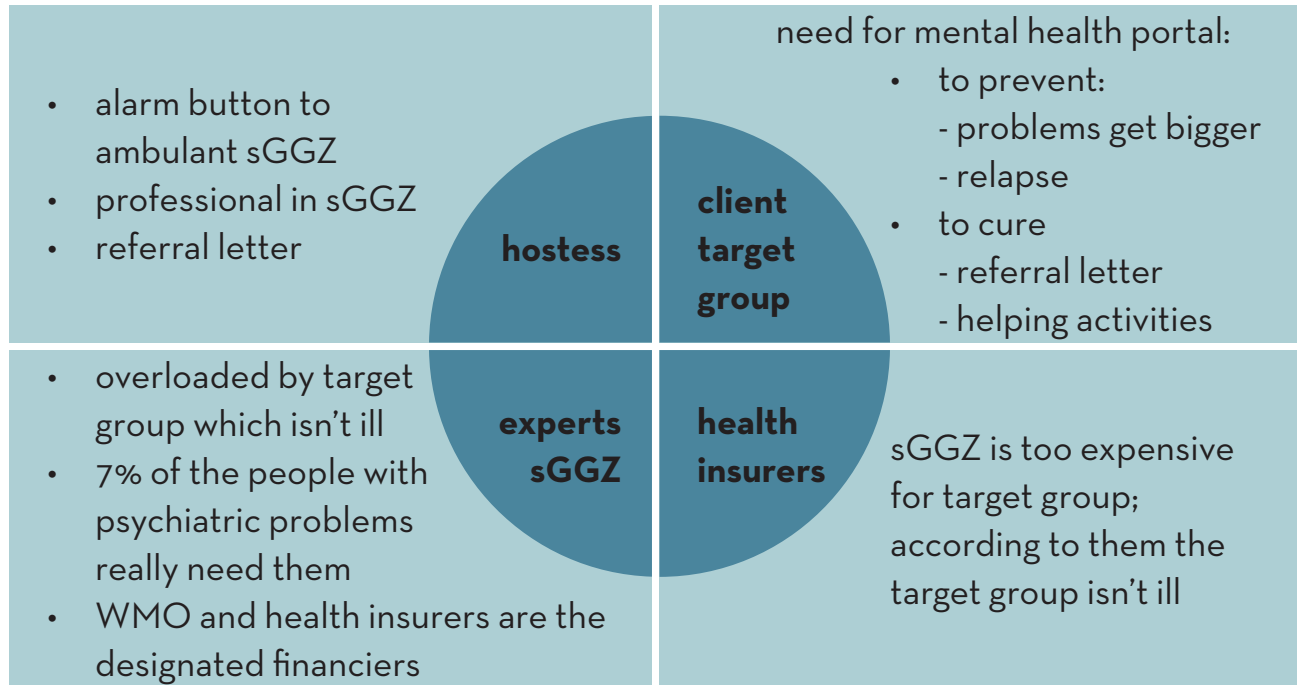
- water expert  
- technical engineer  
- plants expert

# RESEARCH - LITERATURE

*the number of Dutch people that use mental healthcare*



# CONCLUSIONS INTERVIEWS



# TARGET GROUP HAS AN OVERSTIMULATED NERVOUS SYSTEM

## Helping activities:

<b>Yoga*</b>	asanas (postures) and breathing
<b>Meditation*</b>	visualizations, relaxation exercises and breathing; focus on body
<b>Mindfulness*</b>	learn to keep more distance from feelings through self observations; from thinking: 'I'm scared' to thinking: 'I have an anxious feeling'
<b>Reading</b>	increases insight into one's own situation
<b>Talking</b>	to recognise, connect and identify
<b>Boxing</b>	to get rid of energy

**Walking** increases physical and mental well-being

**Writing\*** has an enlightening effect

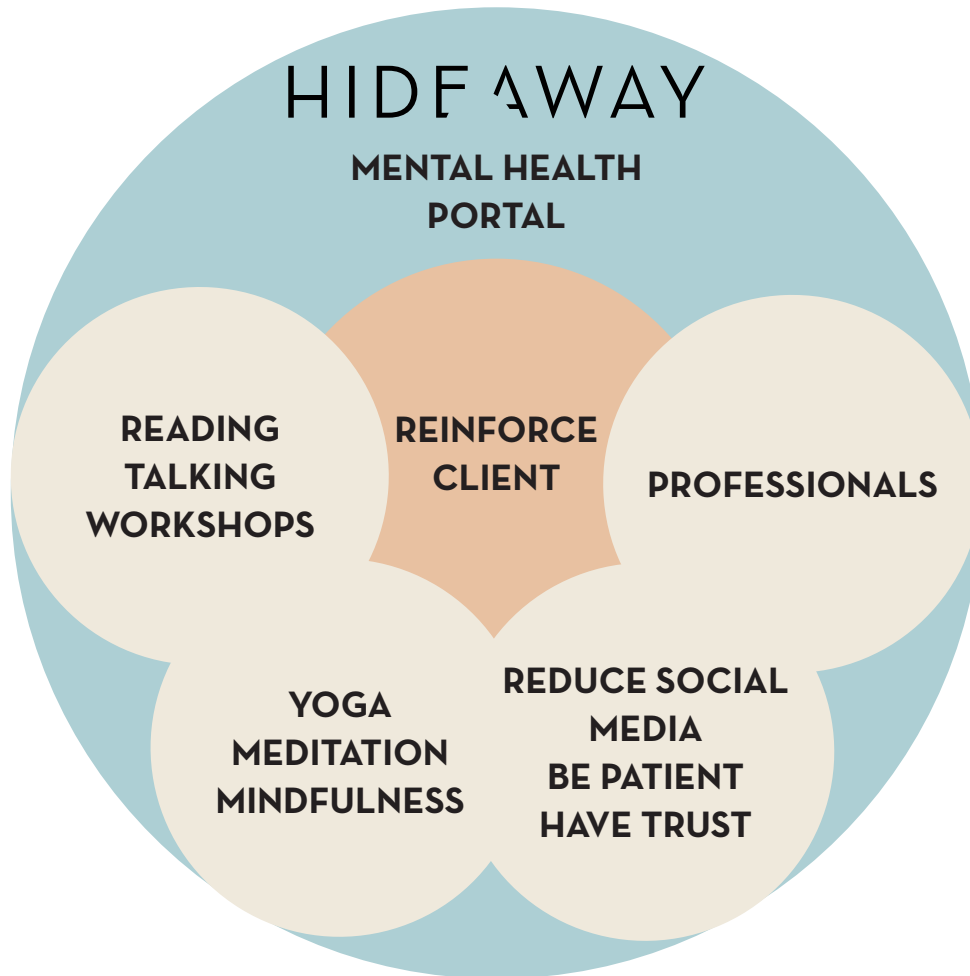
**Drawing\*** express feelings by visualisation

**Clay modeling\*** express feelings by visualisation

**Music\*** express feelings by hearing

**Dancing\*** express feelings by moving

\* optional as a workshop



**We know the target group**

**We know how to reinforce the target group**

**But what will be:**

- the location?**
- the architecture?**

# QUESTIONNAIRE > MENTAL LANDSCAPE

**nature 57,5%**

walking through the forest



silence & sounds of nature



being in the  
mountains  
or hills

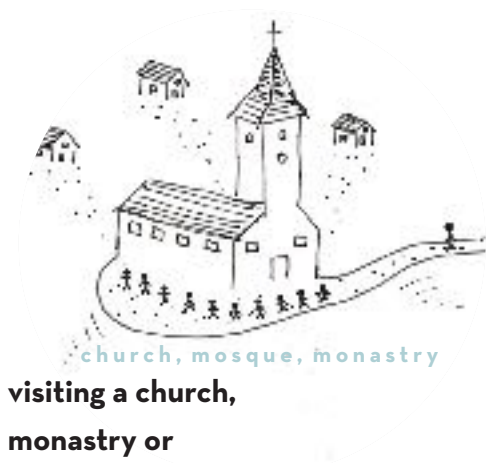


sitting and watch the sea or lake

where do people go if they feel tense?

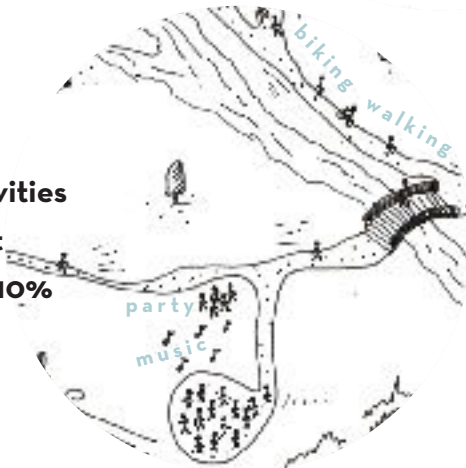


**social (6,5%) or  
individualistic (18%) activity // 24,5%**



**visiting a church,  
monastery or  
mosque // 8%**

**specific activities  
in sports, art  
or music // 10%**

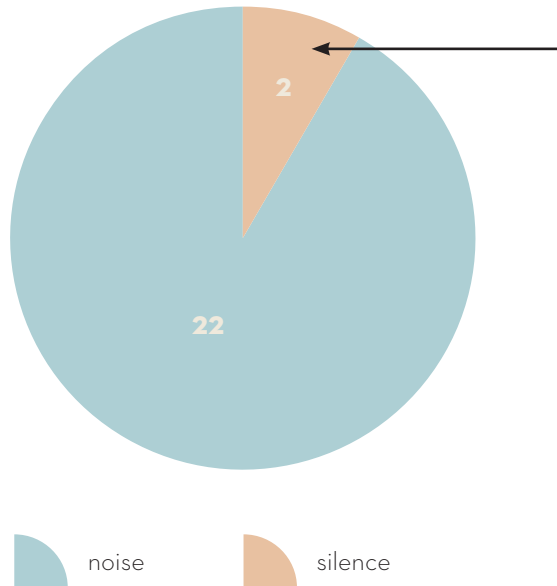


## WHAT HAVE I LEARNED FROM THE MENTAL LANDSCAPE?

### **People are recovering from:**

- visit to church / monastery or mosque
- alone at home / in bed / under shower
- 57,5% looks for nature! A walk in nature, natural sounds, mountains, sitting on the beach or other water, silence

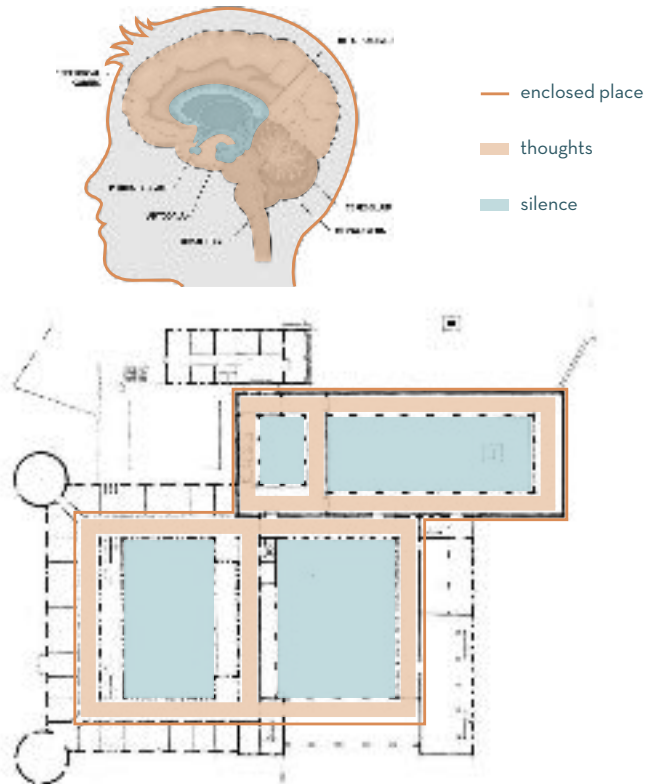
*the number of hours of silence we need in one day to develop new cells in the hippocampus (part of the brain associated with memory, emotion and learning)*



source numbers: A 2013 study on mice published in the journal Brain, Structure and Function  
source article: 'Science Says Silence Is Much More Important To Our Brains Than We Think' Lifehack **Rebecca Beris**

## Architecture analyse of a church and monastery:

- Introvert building
- High building; raises up to the sky (God)
- A little light comes from above (the dark symbolizes acknowledge/ and light the knowledge: God)
- Location: in the centre of the town/city district
- Corridors with arcades, walking space, water and open space
- Stained glass windows and sculpture tell stories (people used to be illiterate)



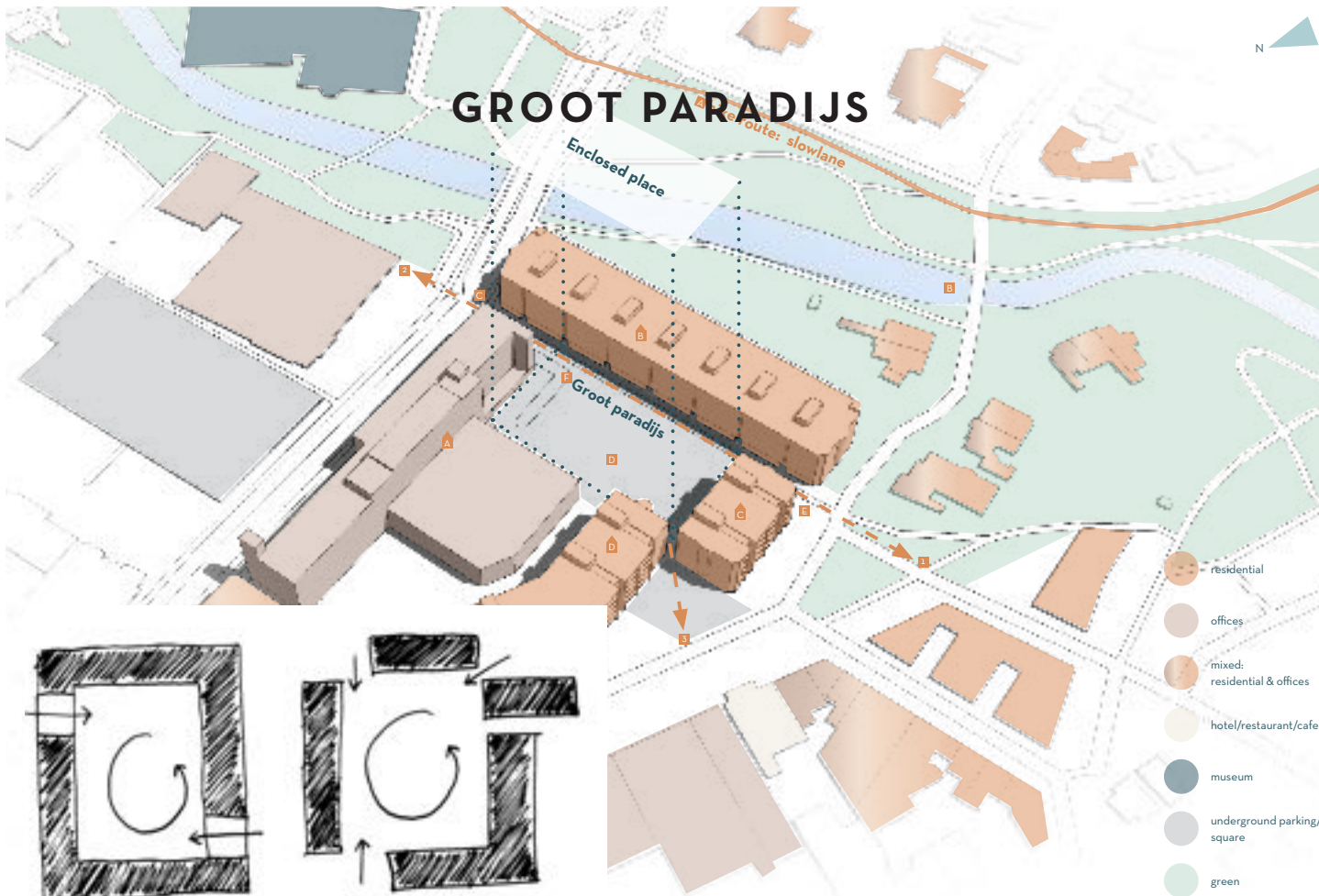
## TRANSLATED TO MY PROJECT PEOPLE NEED:

### **People need:**

- silence
- privacy (claustrium)
- walking space
- central location
- sensuality
- green
- water
- nature

### **My vision:**

Eventually you must find peace within yourself, you must learn this, it's part of the healing process. This process starts in a densely built environment.



# HISTORY, CULTURAL HISTORY AND ADDED VALUE

Groot paradijs was a rural area in the 16th century, from 1786 till 1965 an industrial area. Until 1990 it's wasteland, then it became part of the urban tissue with residential and office buildings

**Hideaway would be an oasis (with a smile to the 16th century) in the busy center of Eindhoven**

# THE ADVANTAGES AND DISADVANTAGES OF GROOT PARADIJS



- In the center of Eindhoven.
- Close to a busy cycle route along the Dommel river, which flows through a natural environment.
- Quiet environment.
- Surrounded by buildings.
- Claustrum.
- Hidden square.
- The construction site belongs to the municipality.



- Windows of the surrounding buildings face the square.
- The architectural quality of the surrounding buildings isn't attractive.
- The square is the roof of a parking garage. The technical engineer must approve it.

**We know the target group**

**We know how to reinforce the target group**

**We know the location**

**But what will be:**

**- the architecture?**

# RESEARCH - LITERATURE - EMOTIONS

We can influence emotions.

The house for all senses gives a layout for the interior; by this the architect influences emotions. I've translated this to HideAway (p27).

The experts teach the client to consciously deal differently with emotions and feelings by the helping activities.

We have primary and secondary emotions:

Primary (automatic and unconsciously) - hypothalamus is involved

Secondary (influenced by environment and culture) - the orbitofrontal cortex is involved

Secondary emotions can influence primary emotions and vice-versa.

## house for all senses

psychiatric environment

translated:

## HIDEAWAY

mental health portal

Emotions

Room

Hyper

Corridor

Agressive

Soundchamber

Delusions

Bathhouse

Loneliness

Reading

Depressed

Garden

Fear

Reflectionroom

Emotions

Room

Overstimulated

Boxing/Shower/Yoga

Agressive

Boxing

Chaotic

Shower

Loneliness

Loge/Community

Depressed

Corridor

Fear

Yoga/Loge/Meditation/  
Mindfulness

# THE TOOLS OF AN ARCHITECT TO EXPRESS HIS VISION ARE:

FORM ORDER MEASURE COLOUR INTENSITY MATERIAL



## SENSES

EYE EAR NOSE SKIN MUSCLE TONGUE SKELETON



## EMOTIONS

FEAR JOY SADNESS ANGER DISGUST SURPRISE



PHYSICAL CHANGE

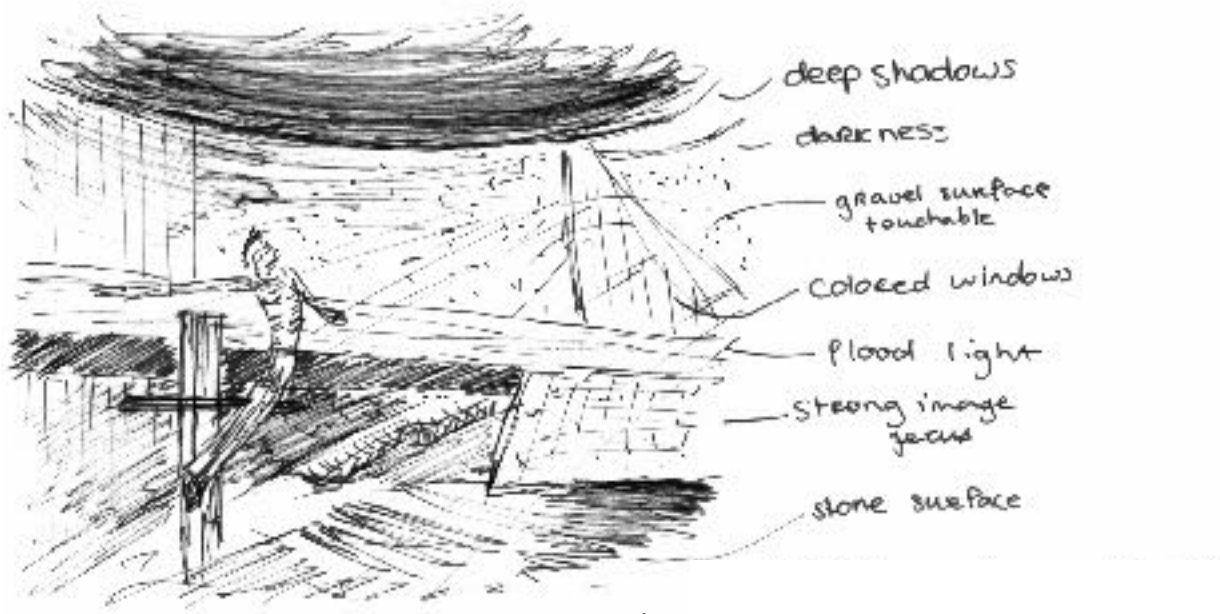
THOUGHTS

REACTION

**Personal experience**

**Lord's Ark Church**

Architect: Wojciech Pietrzyk



**FROSE**

**POLYPHONY OF THE SENSES**

**SURPRISE**

# THE HEALING EFFECT OF ARCHITECTURE

The healing effect of HideAway can be provoked by creating an environment that  
A) feels natural B) responds to the needs C) touches the senses.

## THE TOOLS

### **Material:**

- brick as a recognisable material, painted with 'kalei', for a minimalistic and harmonious effect
- concrete for a trustful base
- wood for a warm feeling and tactility
- corten steel for strength
- water for a surprising and calming effect, touchable, to withdraw negative energy
- plants for connection
- artificial light for dramatising and influencing

### **Form:**

- round shapes of the arches stands for safety and embrace
- the building is contrary; it's both open and closed; extravert (downstairs) is inviting and introvert (upstairs) gives privacy

**Colour:** colors will be earthly

**Order:**

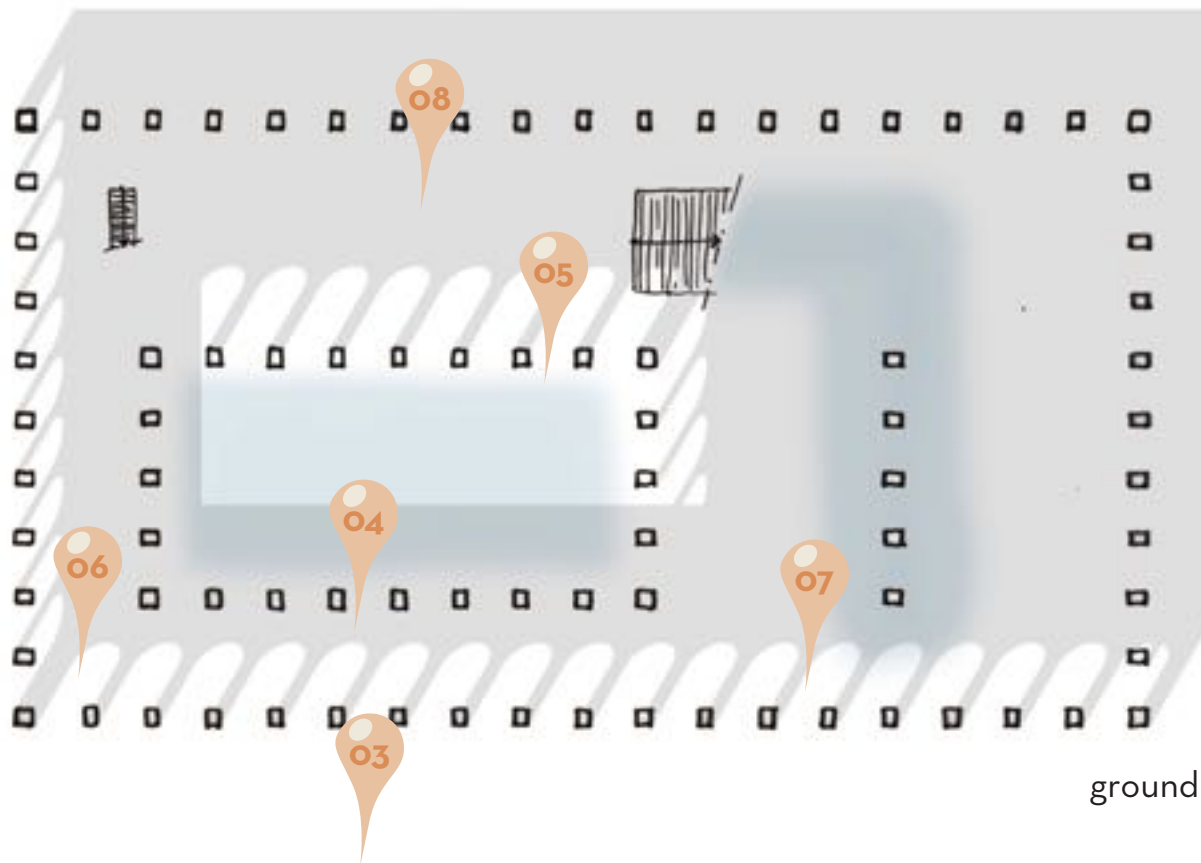
- arcades symbolises the forest and increases resilience
- the design focuses on 1) feelings 2) the functions of the different spaces

**Measure:**

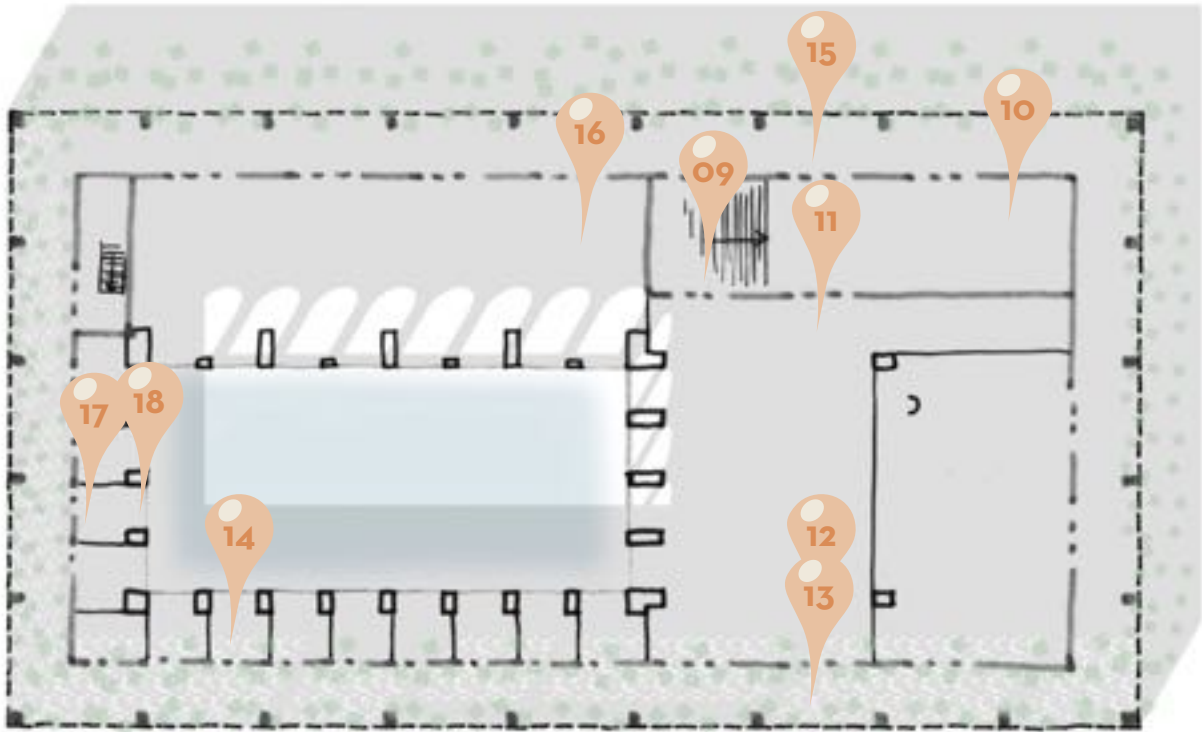
- arches are human sized; 1) to sit; 2) to walk through
- columns are human sized to hide behind; one or two shoulder widths
- scale of the building is spacious (ceilings and doors are higher then the norms) 'gives space to emotions and thoughts'
- the building is out of scale on the square; it's not a pavilion; it's present and confident

**Intensity:**

- intensity of elements to provoke emotions like the water curtain
- monolithic because it isn't distracting but effective
- the sounds of water from a distance makes people curious



ground floor



first floor

## EPILOGUE

No, this building isn't energy efficient; sustainable, but responds well to the needs of people. I've consciously opted for all functionalities that can contribute to the well-being of people in our society. In the first instance it costs a lot of money but in the longer term it saves many costs in the mental health care. That's also a form of sustainability.

# ACKNOWLEDGEMENTS

Hereby I want to thank Jan Willem van Kuilenburg, Pieter Feenstra and Teo Bähler a lot for their knowledge, patience and wisdom during the supervision of my project HideAway.

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# HIDEAWAY

“a claustrum for the mind”

The pressure on mental healthcare is growing every day. Waiting in line doesn't help people, and continuing their journey keeps the flame alive. In the rush, where everyone runs from early in the morning until late in the evening, a place to dwell upon feelings is needed. A place to hideaway and to connect to the self and like-minded people. A place to find support, consolation or simply silence. Hideaway is a place for introspection in the middle of the dense city of Eindhoven. It is a journey that takes people to experience the self and the contemplative characters of nature. It is like a walk in the forest and a walk along the water. Hideaway is a proposal to bring people to their inner world by architecture. It is a claustrum, latin for an enclosed place, that embraces time for healing.

graduation project by Manja Adriaens

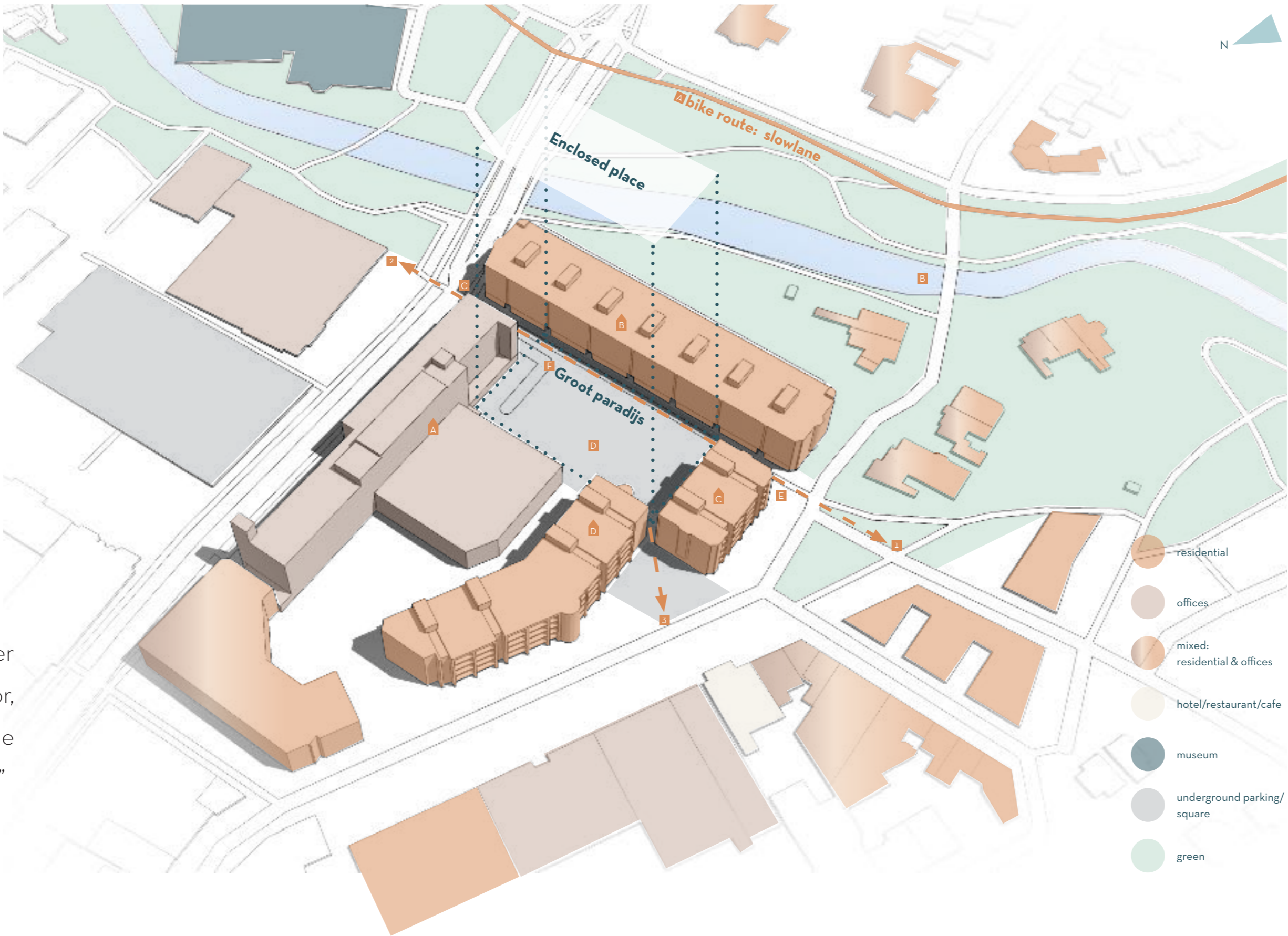
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## landscape of contemplation



Location Position

Groot Paradijs is a square on top of an underground parking in Eindhoven near to the slow lane, a bicycle path that moves along the Dommel river. It connects the Technical University with the High Tech Campus and the Brainport. A logical location to reach the large target group. At the same time, a central position in the city promotes intensive use, since it is next to the City hall in a mixed development.



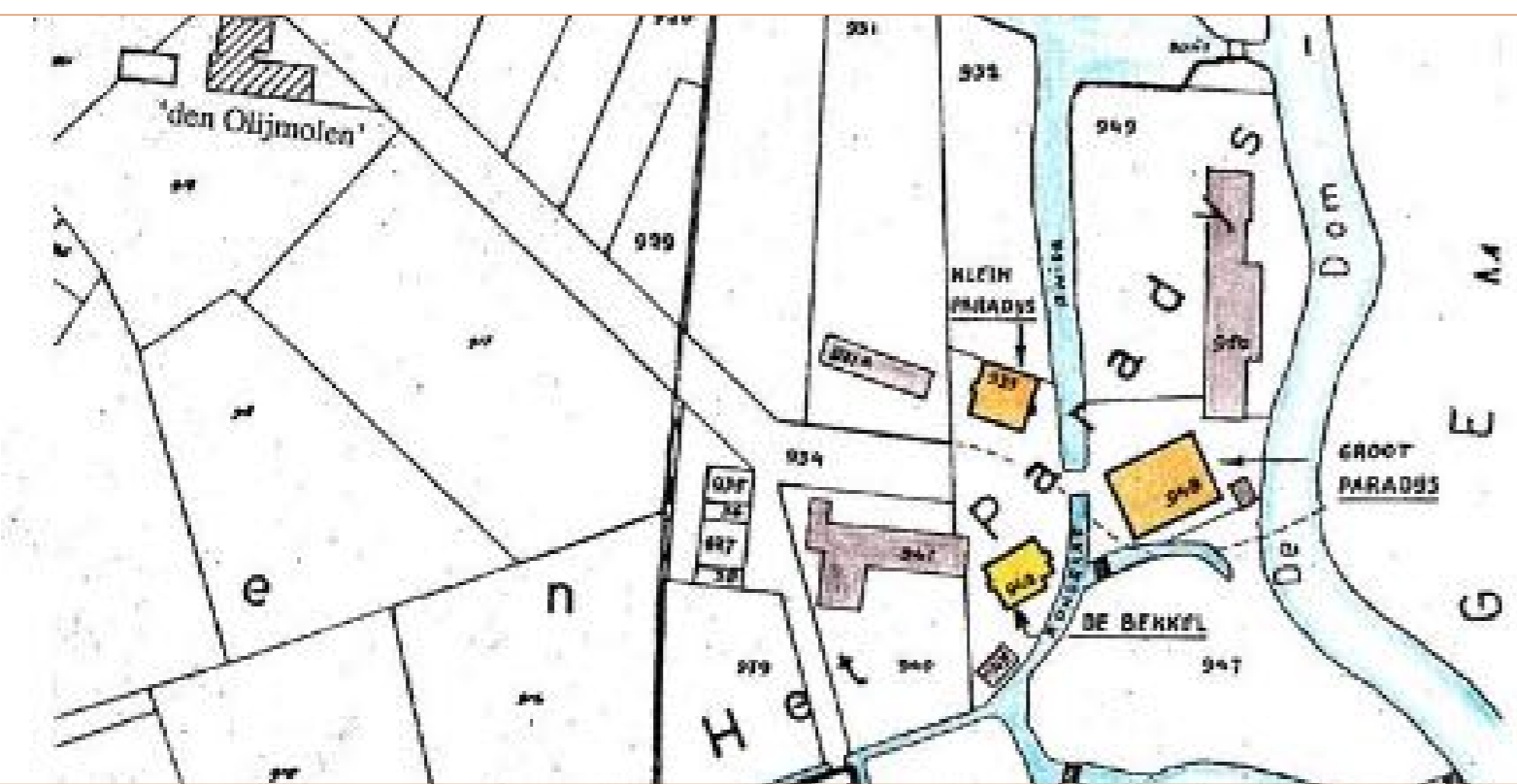
“Junkspace is what remains after modernization has run its course, or, more precisely, what coagulates while modernization is in progress, its fallout.”

architect Rem Koolhaas



Location History and culture history

The estate Het Paradijs covered the area between the Dommel, the Paradijslaan and the Wal. On the estate, which probably dates from the 16th century, there was a country house, a coach house and stables, surrounded by gardens and grassland. The Run(d)tgraaf river that nowadays ends in Veldhoven, coming from Eersel and Bergeijk is a fishing stream that was part of the Paradijs landscape, next to the dommel river. From 1786 till 1965 a textile factory stood here and from 1928 till 1961 a milking factory. Both buildings have been demolished. The area remains undeveloped for a long time and is used as an event site until the apartment complex ‘Groot Paradijs’ on the Paradijslaan rises in the 1990s on this spot. Now the street is called Groot Paradijs. Also a number of houses have been demolished for the apartment complex.



1832

LANDGOED ‘HET PARADIJS’ EINDHOVEN  
ESTATE ‘THE PARADISE’ EINDHOVEN

1546 Een schepenregister uit 1546 vermeld toen reeds de verkoop van ‘een erffpant binnen der parochien van Eyndhoven gheheyten dat Parady’s’

Het wordt gevormd door:  
**Huis ‘het GROOT PARADIJS’** eenen modern en welgetimmerde Heere Huysinge en erve binnen de prochyen van Eyndhoven, staende en gelegen van voren aen den stroom de Rundtgraeff en van agteren aen de rivier de Dommel, gesloopt in 1930

**Huis ‘het KLEIN PARADIJS’** eenen Huysinge naest het Groot Paradijs, aen de westzijde van het Groot Paradijs en aen de overkant van de gracht onder Gestel tussen de Dommel en de Rundtgraeff, gesloopt in ?

en **‘de BEKKEL’** eenen ruym koetshuys, gesloopt in 1967

Een van de oude panden, die Eindhoven ooit hebben gesierd, is Het Paradijs. De eerste vermelding stamt uit 1546 “een erffpant binnen der parochien van Eyndhoven gheheyten dat Parady’s”.

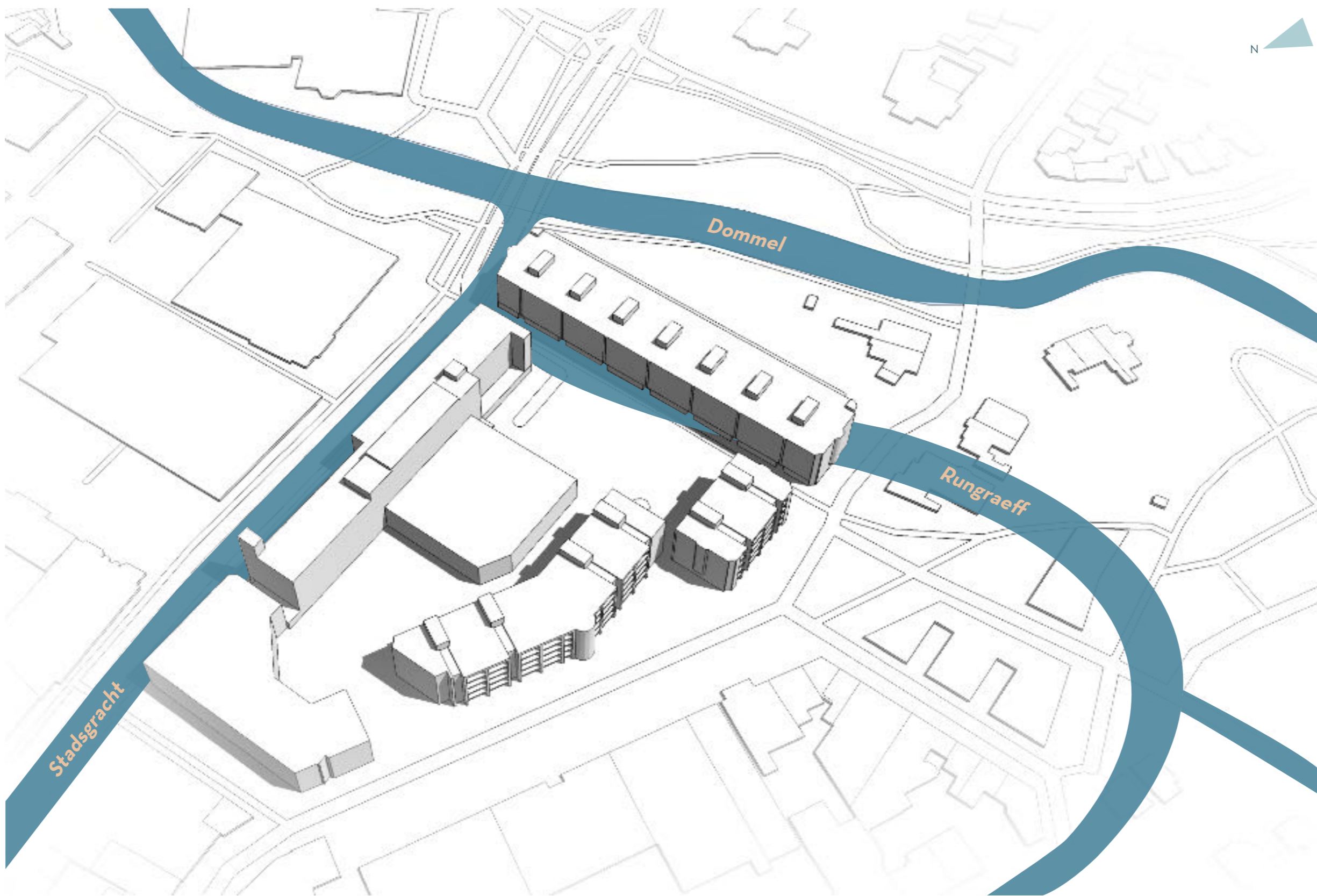
Omgeven door de Rundgraaf en de Dommel, lag deze lusthof in het gebied dat nu wordt omgrend door Dommel, Wal, Waagstraat, Don Boscostraat en de oostzijde van het Frederik van Eedenplein.

Volgens beschrijvingen uit de 17e en 18e eeuw bestond het hele complex uit het hoofdgebouw met daar omheen een aantal bijgebouwen, als koetshuis, stallen, huize “Clein Paradijs” en de “Olijmolen”. Het hoofdgebouw bevatte rijk geornamenteerde vertrekken, die naar de kleuren van hun stoffering, de “Rode” en de “Groene” kamer genoemd werden. Aan dit pand was ook vanouds het visrecht op Dommel tussen de Gennep en Stratumse watermolen (aan het Molenwater) verbonden. Heel wat adellijke families en hooggeplaatste militairen hebben er

gewoond. Rond 1800 werd het eigendom van J.T. Smits, eigenaar van textielfabriek “De Bouw”. Na zijn dood ging het over naar Jozef Smits, die later heer van Oyen werd. Jac. Marto, de textielfabrikant, was de laatste eigenlijke bewoner.

Na de eerste wereldoorlog kwam het pand echter in gebruik als een soort huurkazerne, waarna het door nalatig onderhoud steeds meer in verval raakte.

Rond 1930 is het hoofdgebouw, het Groot Paradijs, gesloopt en werd er de huizen neergezet. Ook werd hier toen de Coöperatieve Melkinrichting en Zuivelfabriek St. Joseph geopend, die daar tot 1961 in gebruik bleef. Het laatste gebouw, het Koetshuis genaamd “de Bekkel” werd in 1967 gesloopt.



“Someday and probably soon, there will be a need for what is missing in our big cities: silent and spacious outstretched places to think, places with tall, long colonnades for bad weather or sunny weather, where no noise penetrates [...]; new buildings and public gardens, which as a whole express the eminence of contemplation and embody [being aside]. [...] We want to see ourselves in stone and plant, we want to walk in ourselves, when we walk in these gardens and halls.”

philosopher Friedrich Nietzsche 1882



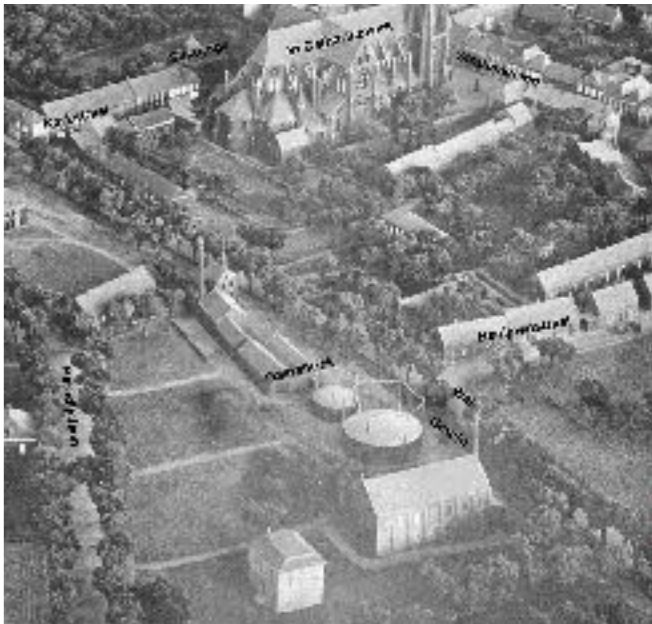
erffpant groot parady's



fishing in the dommel river



dommel river



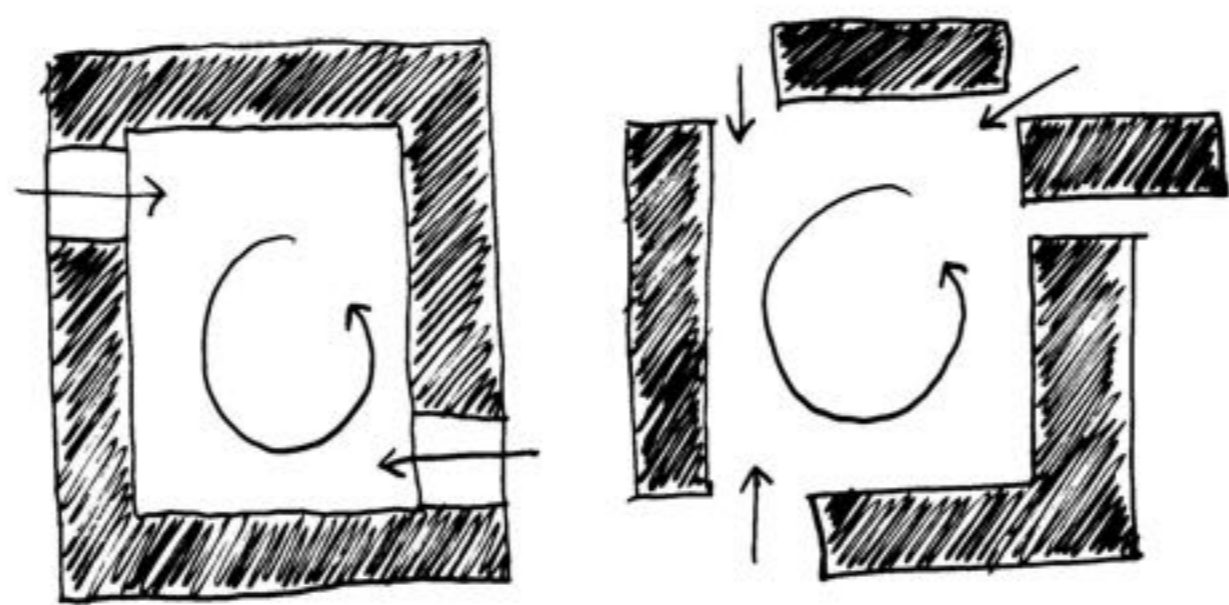
1891



along the rungraeff

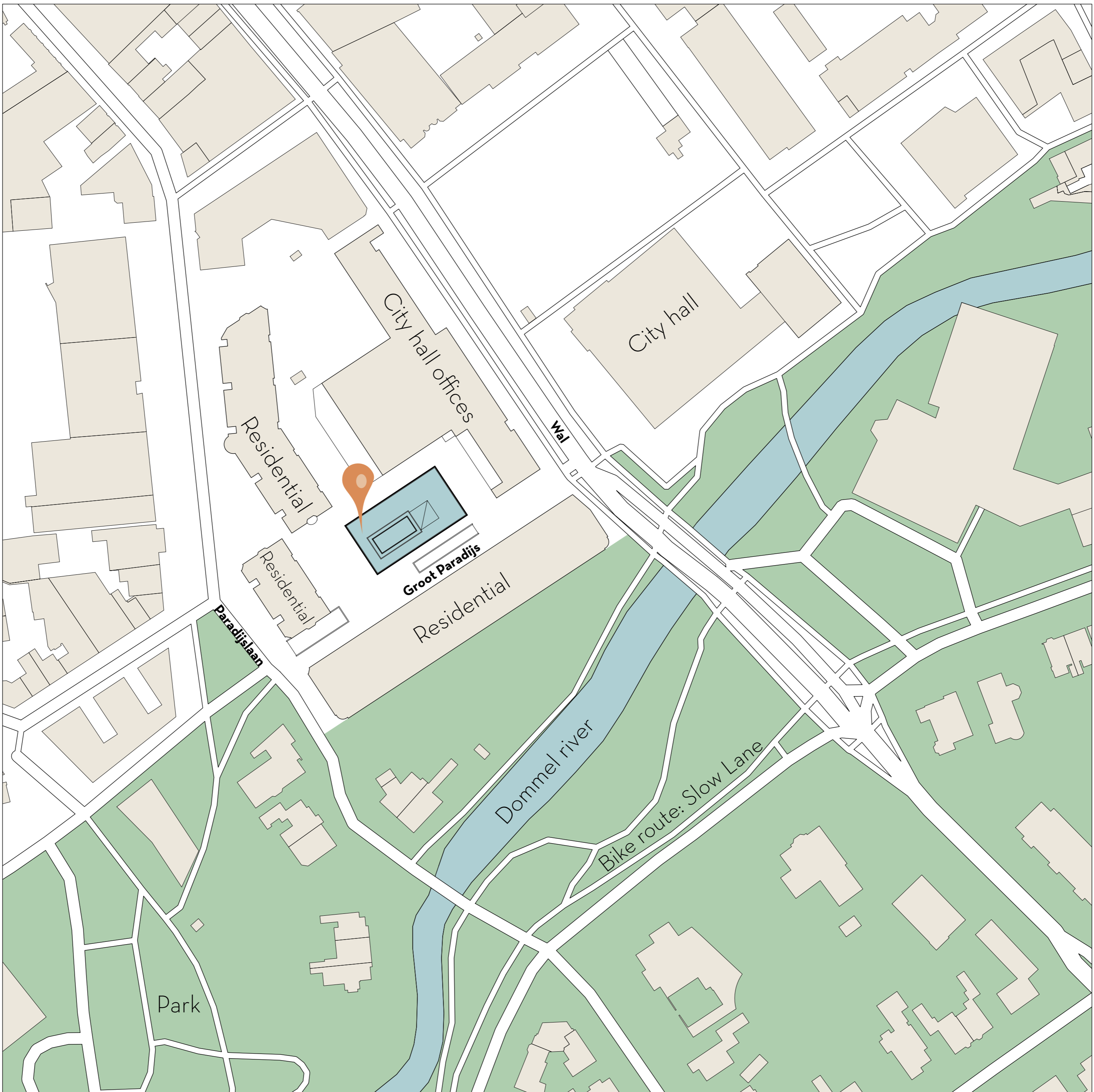
Location Analyse

Groot Paradijs is a square in the centre of Eindhoven, this is very positive to reach a lot of people. The beautiful Dommel river, park and slow lane are an attractive surrounding for the target group. The square is only reachable by foot, and therefore leaves a lot of noises outside. It is between buildings which makes it a silent place in the busy city. Being hidden from the busy city is an attractive state, it helps people to turn into their inner worlds. Walking around the place can be meditative. The square is surrounded by apartments and offices, which look down onto the square. This is the biggest issue to tackle, to create privacy for visitors of Groot Paradijs.



claustrum

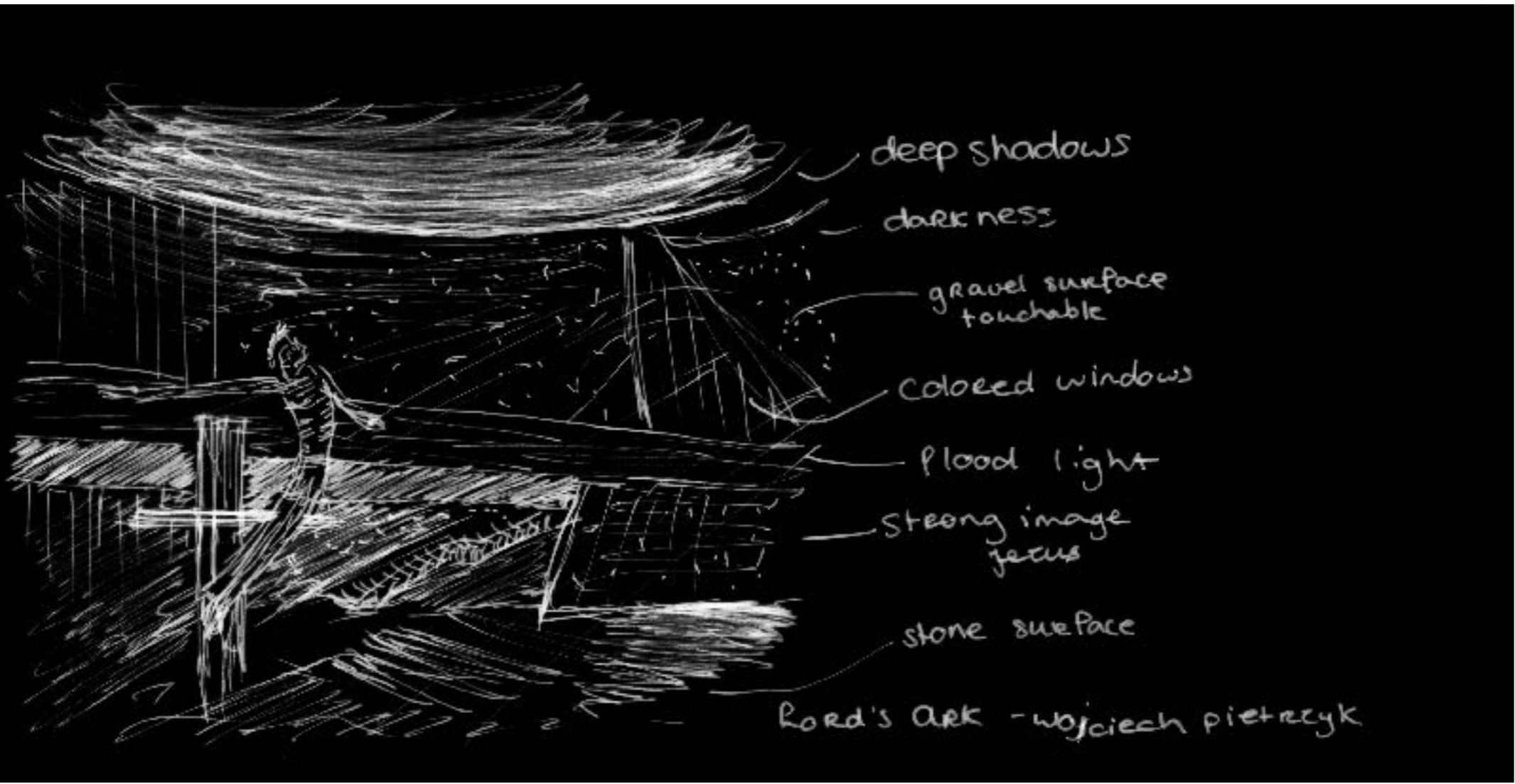
left: cloister; right: groot paradijs



situation 1:1000

Motivation Personal

During a burn out I visited a Nurse Practitioner Mental Healthcare (POH GGZ in Dutch) for therapy and I took yoga- and meditation lessons. But when I visited a church in Polen, during my study architecture, I had an overwhelmed feeling (light and dark on the stone surfaces), that calmed me and strengthened me during my study architecture. Now, I visit more often a Church (without believing in God) and I know that architecture has the ability to heal.



Wojciech Pietrzyk Lord’s Ark Church

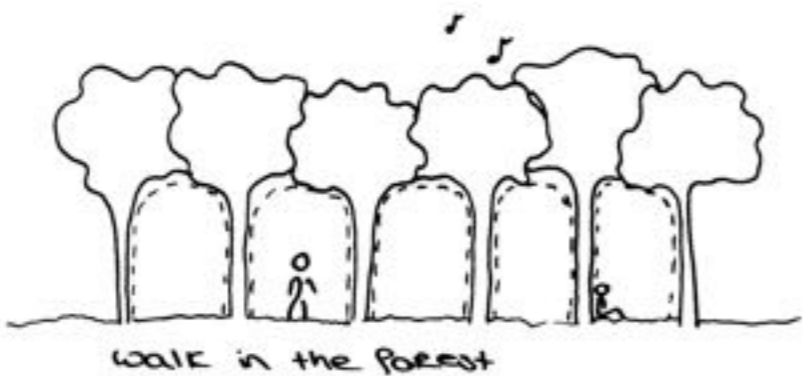
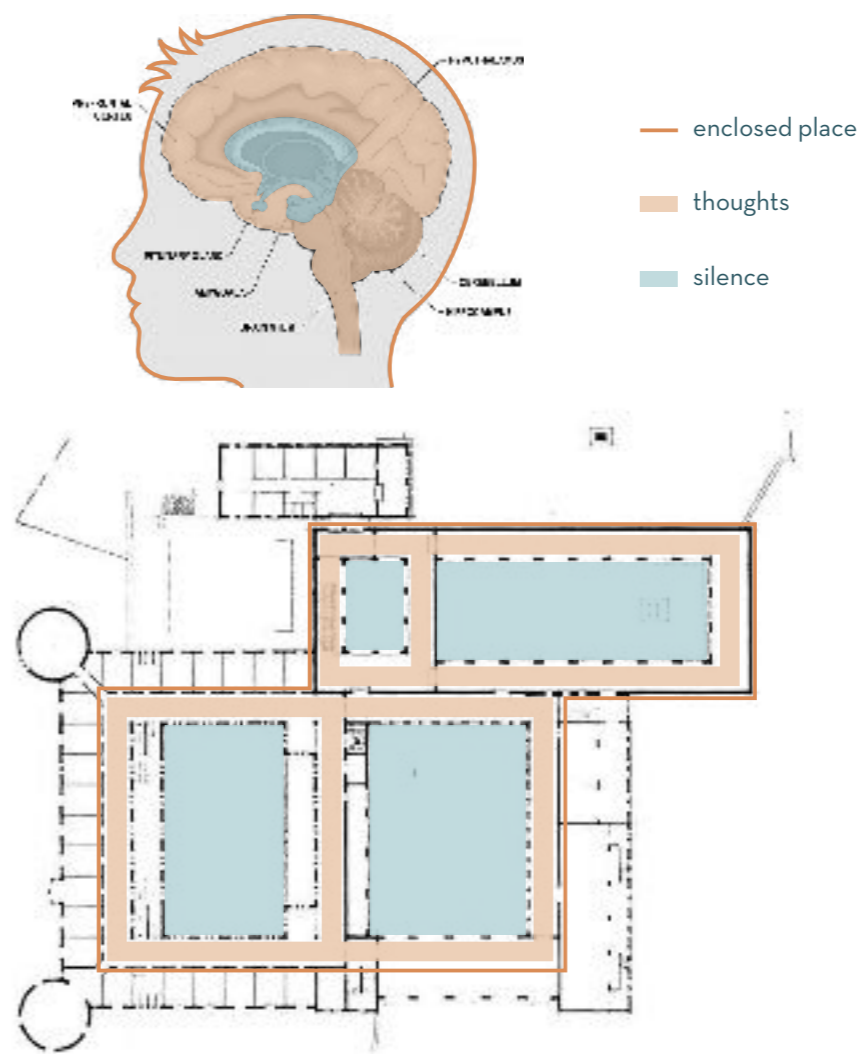
Architecture Analyse

“You enter: the architectural spectacle at once offers itself to the eye. You follow an itinerary and the perspectives develop with great variety, developing a play of light on the walls or making pools of shadow,” the purpose of all this being to help us “learn at the end of the day to appreciate what is available.”

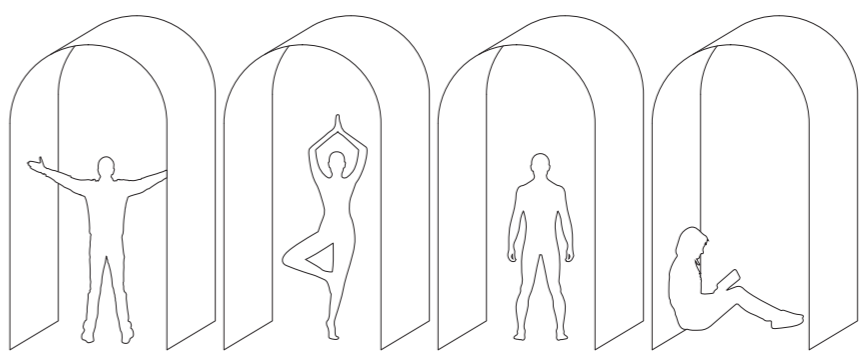
architect Le Corbusier

Architecture analyse of a church and monastery:

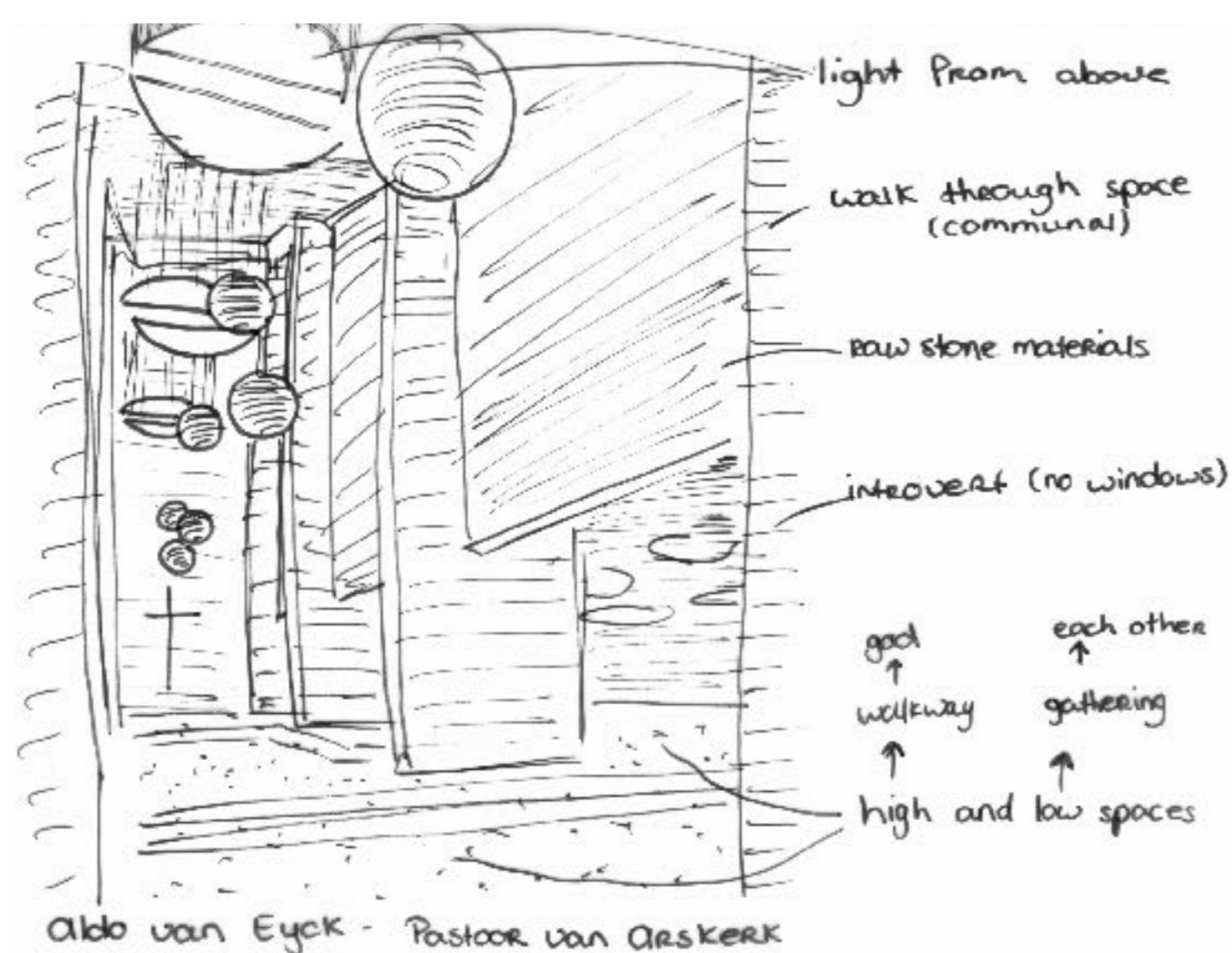
- Introvert building
- High building; raises up to the sky (God)
- A little light comes from above (the dark symbolizes acknowledge/ and light the knowledge: God)
- Location: in the centre of the town/city district
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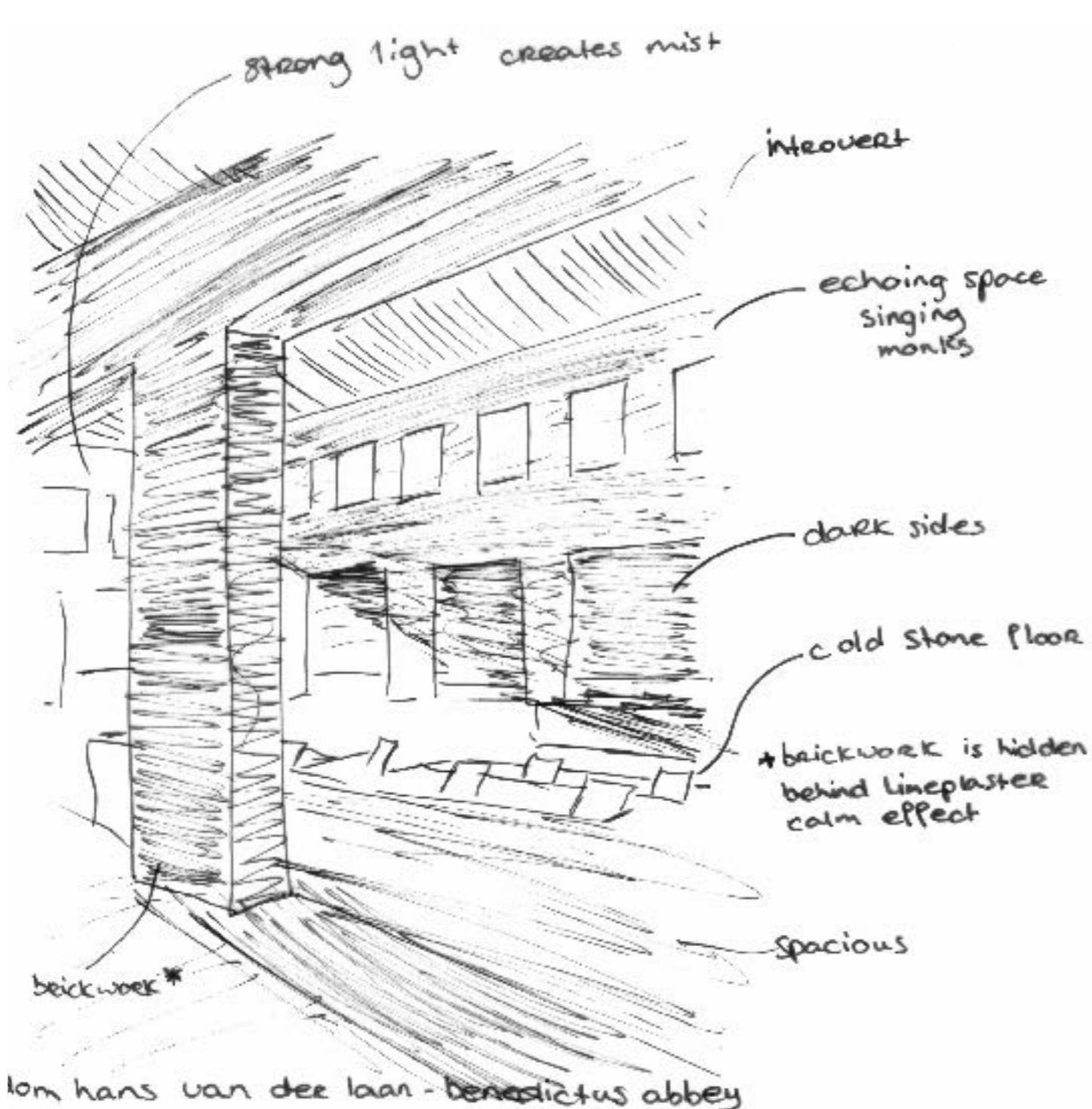
“A walk through a forest is invigorating and healing due to the constant interaction of all sense modalities; Bachelard speaks of ‘the polyphony of the senses’.”



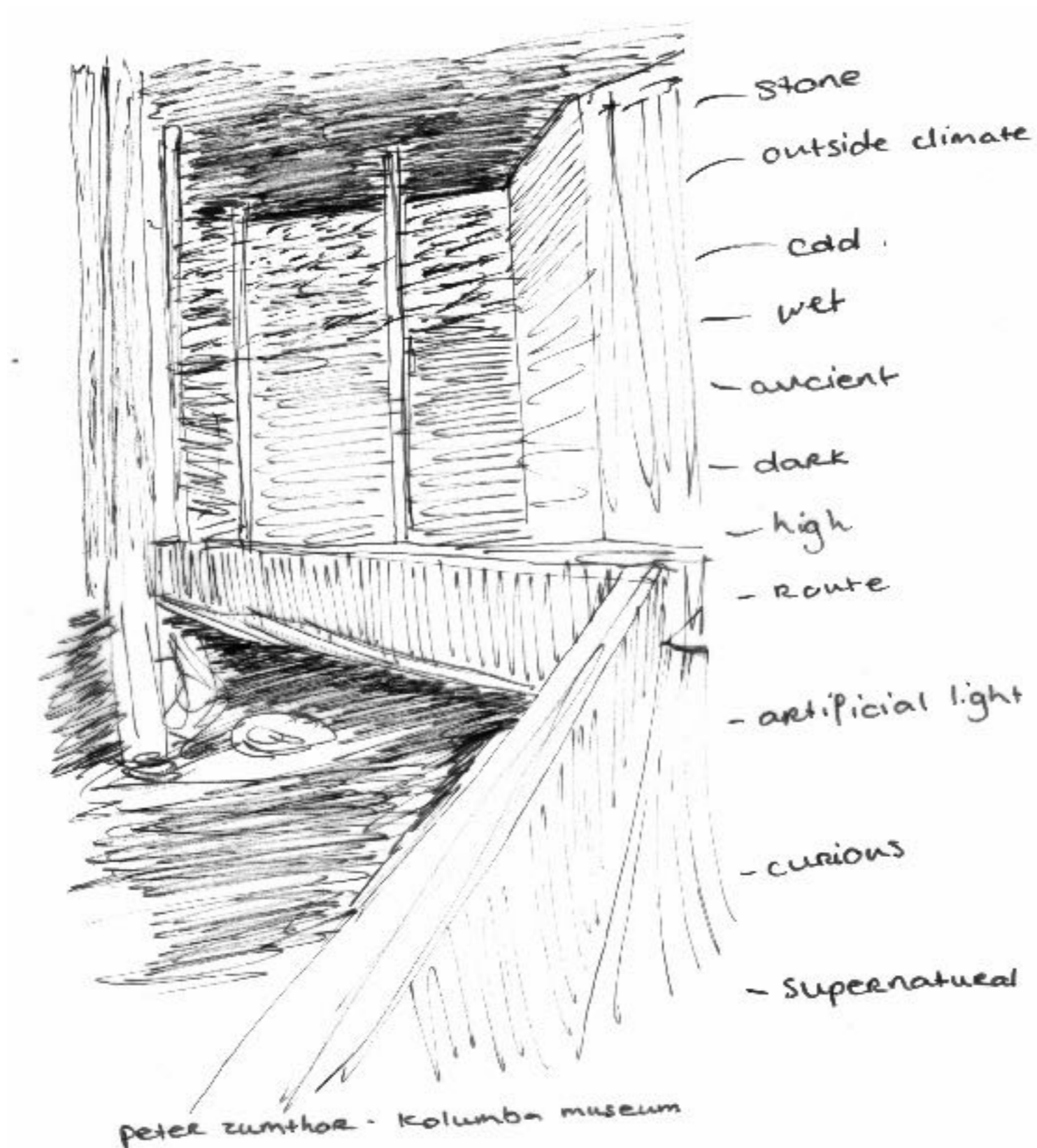
architect Juhani Pallasmaa in The eyes of the skin



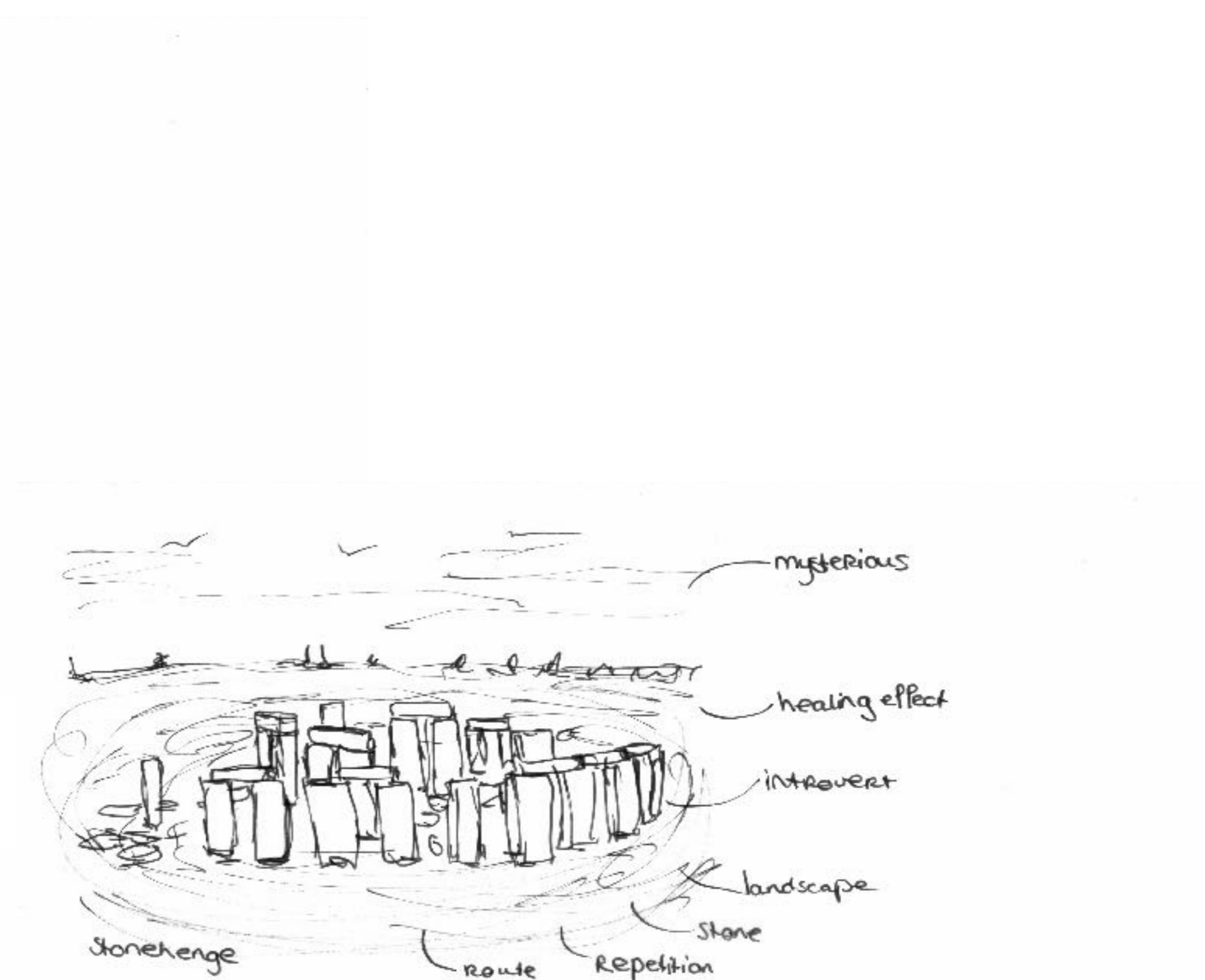
**Aldo van Eyck** Pastoor van Arskerk



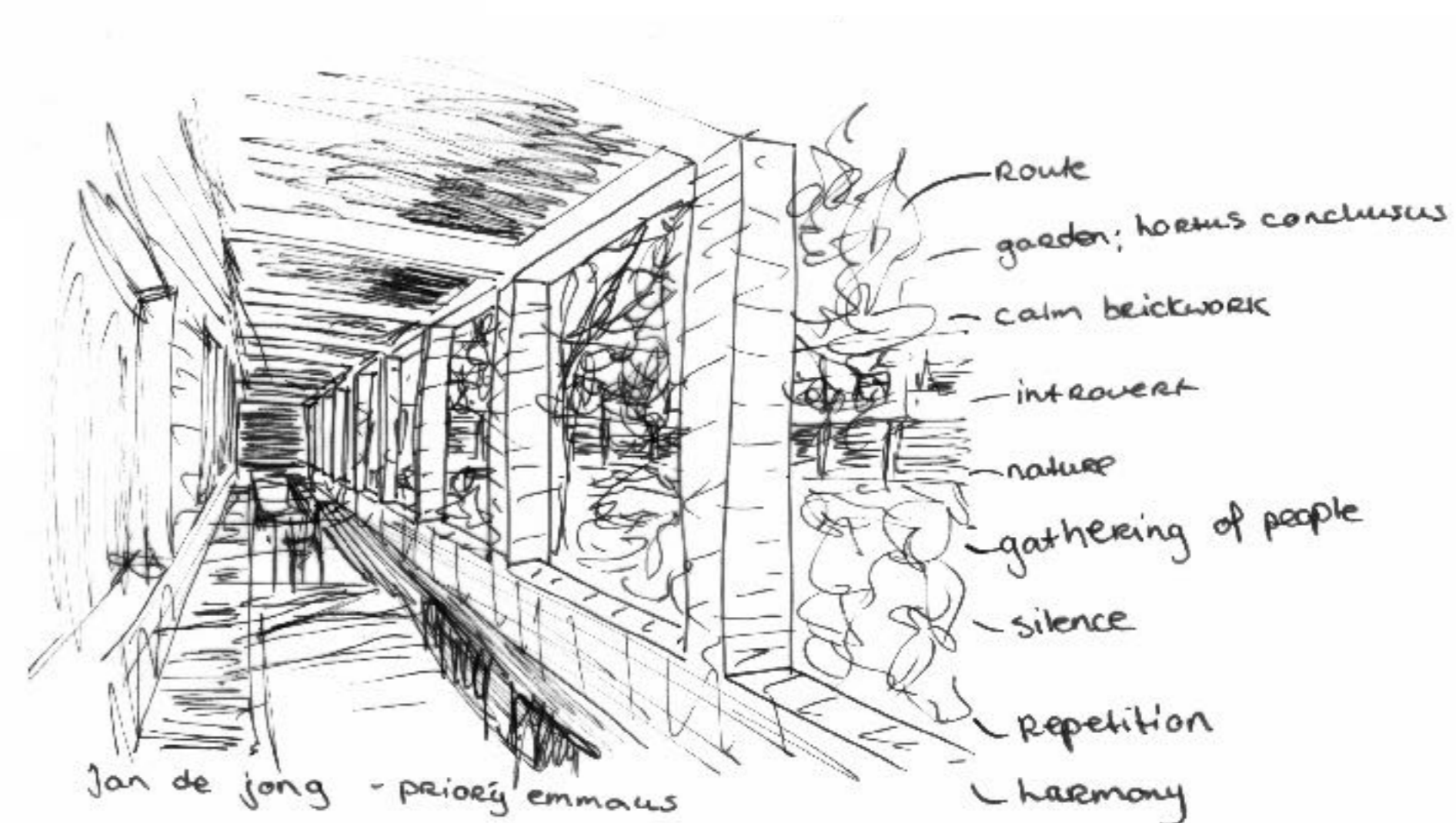
**Dom Hans van der Laan** Benedictus Abbey



**Peter Zumthor** Kolumba Museum



**Stonehenge**

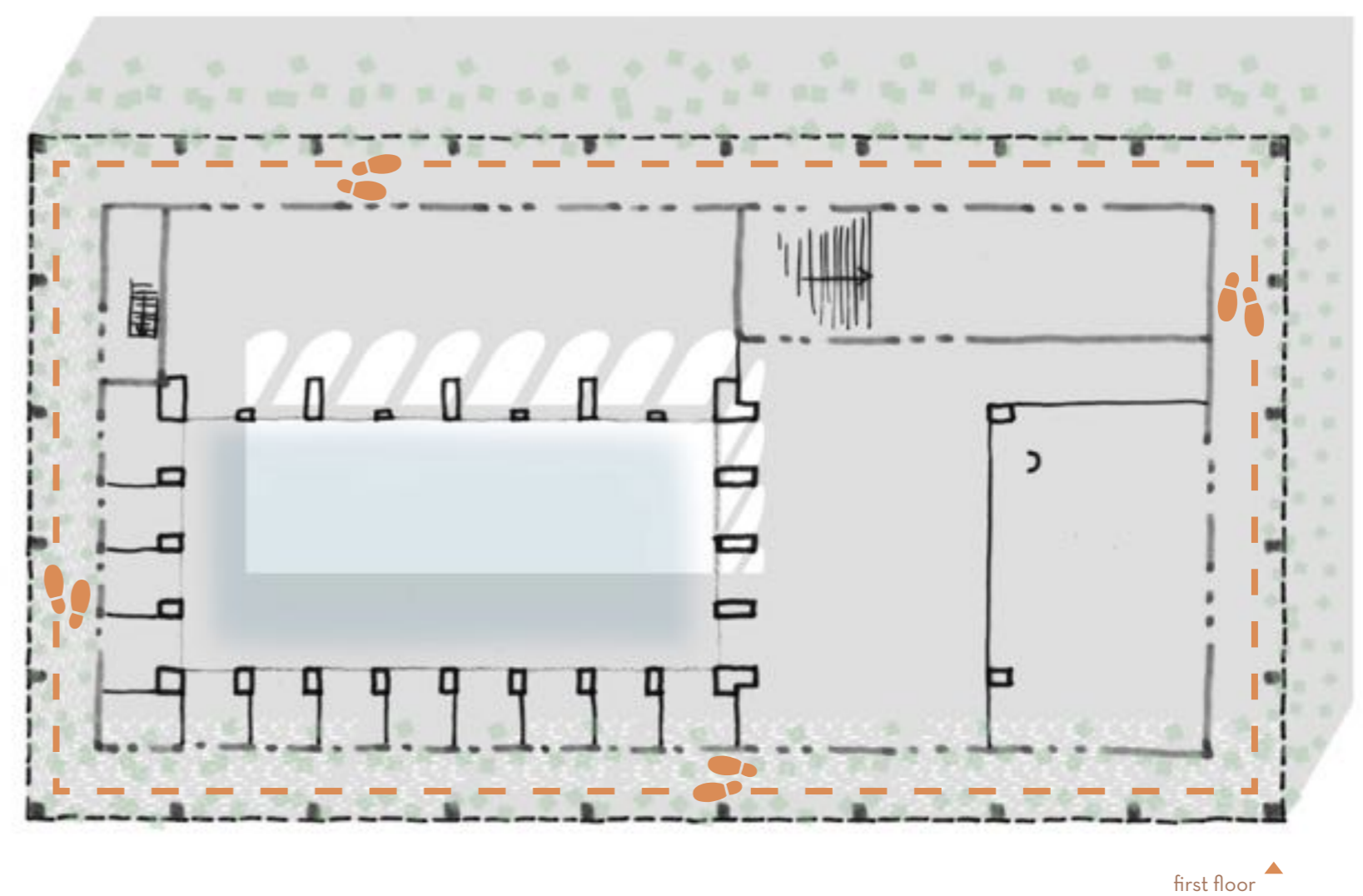
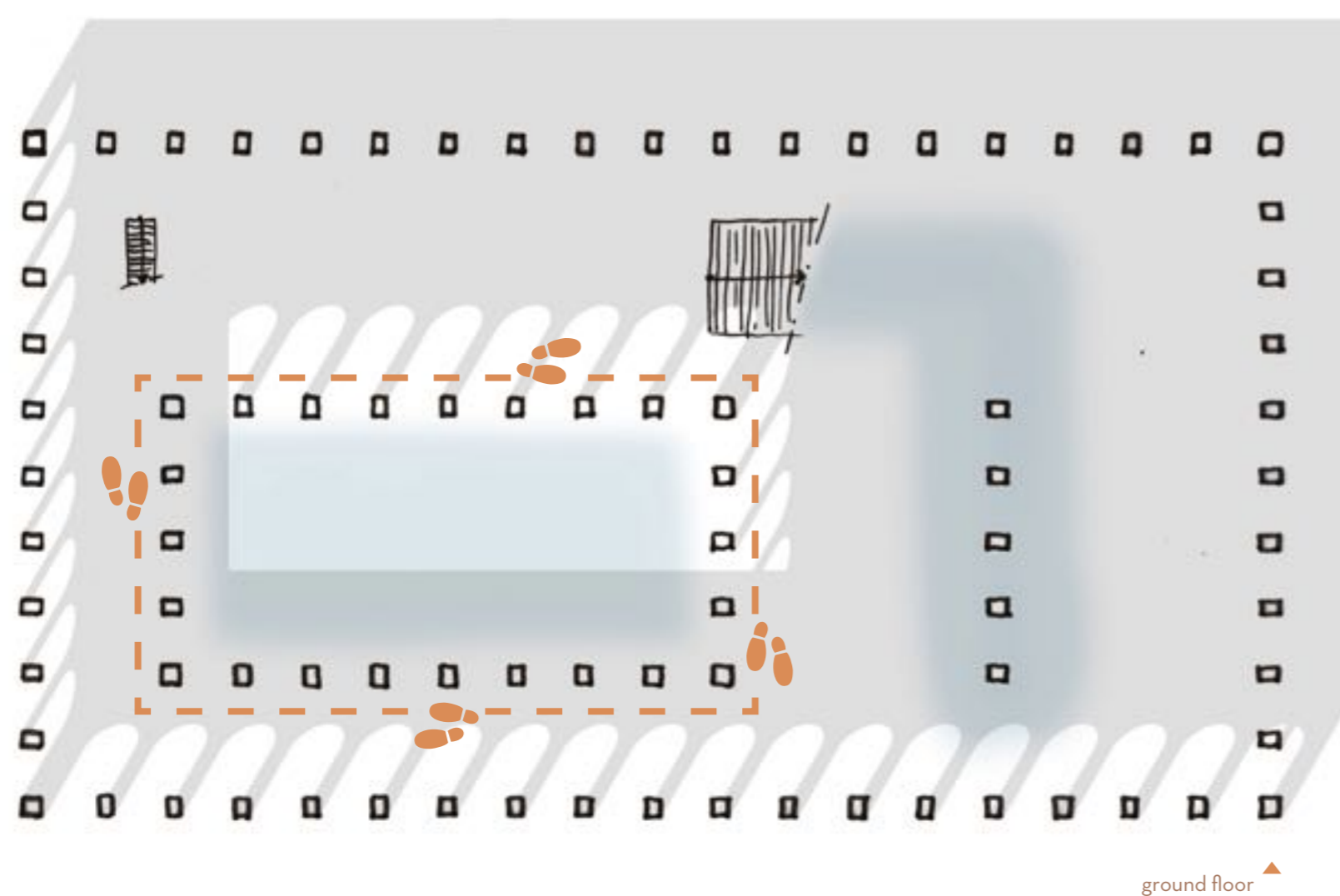
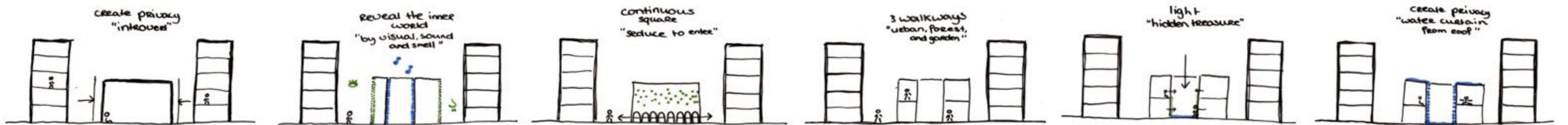
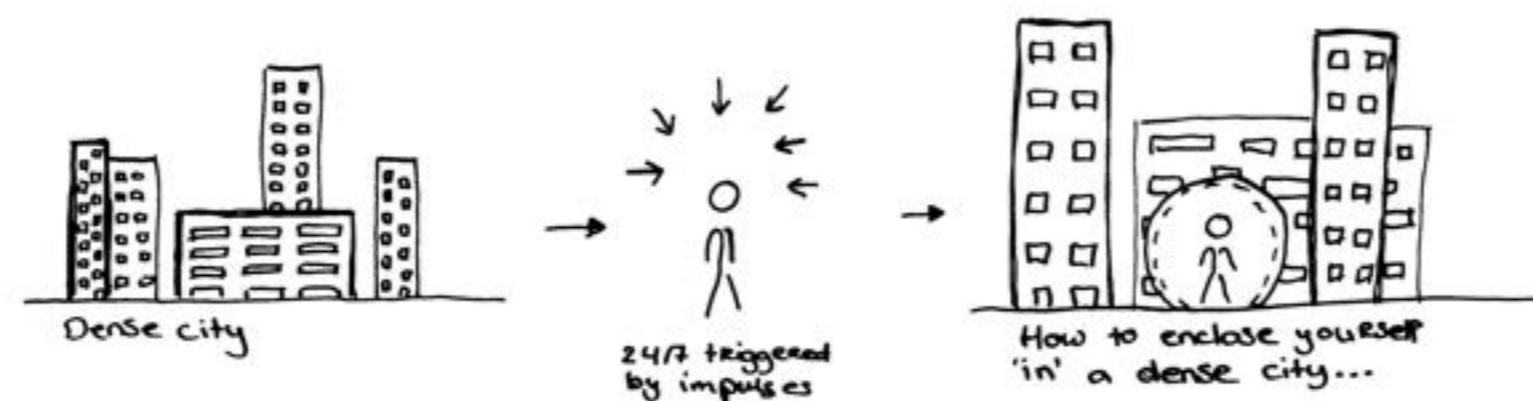


**Jan de Jong** Priorij Emmaus

# HIDEAWAY

## Concept

Hideaway is situated on an enclosed square called Groot Paradijs. The program is lifted so the square continues under the building. The architecture is introvert. The perforated brick facade, the patio and the arches reveal the inner world by visual, sound and smell of water and plants. The arches on ground floor invite people for a meditative walk in the shade along the water garden. The route continues upstairs in the raw concrete construction and along the perforated brick facade that allows light to enter for the plants to grow and to satisfy peoples curiosity. The garden walkway gives acces to the inside of the building. The wooden interiors embrace a patio of light with arch shaped windows to sit in. The water garden on the square is experienced on the first floor as well because of a water curtain coming from the roof. The water creates privacy inside, gives a touch of nature outside and makes the building disappear when looking on top of it because of the sky's reflection.



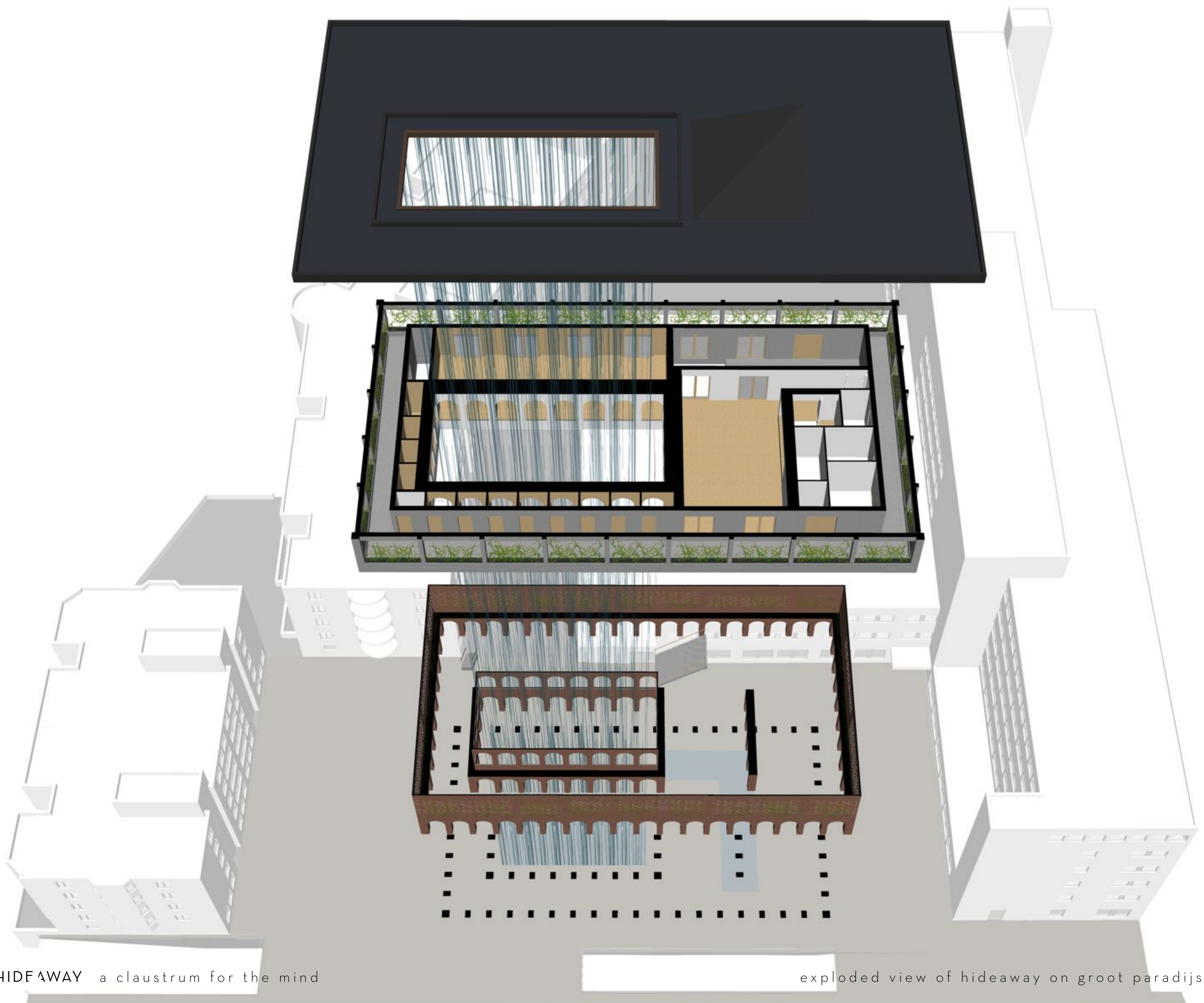
# HIDEAWAY

“a claustrum for the mind”

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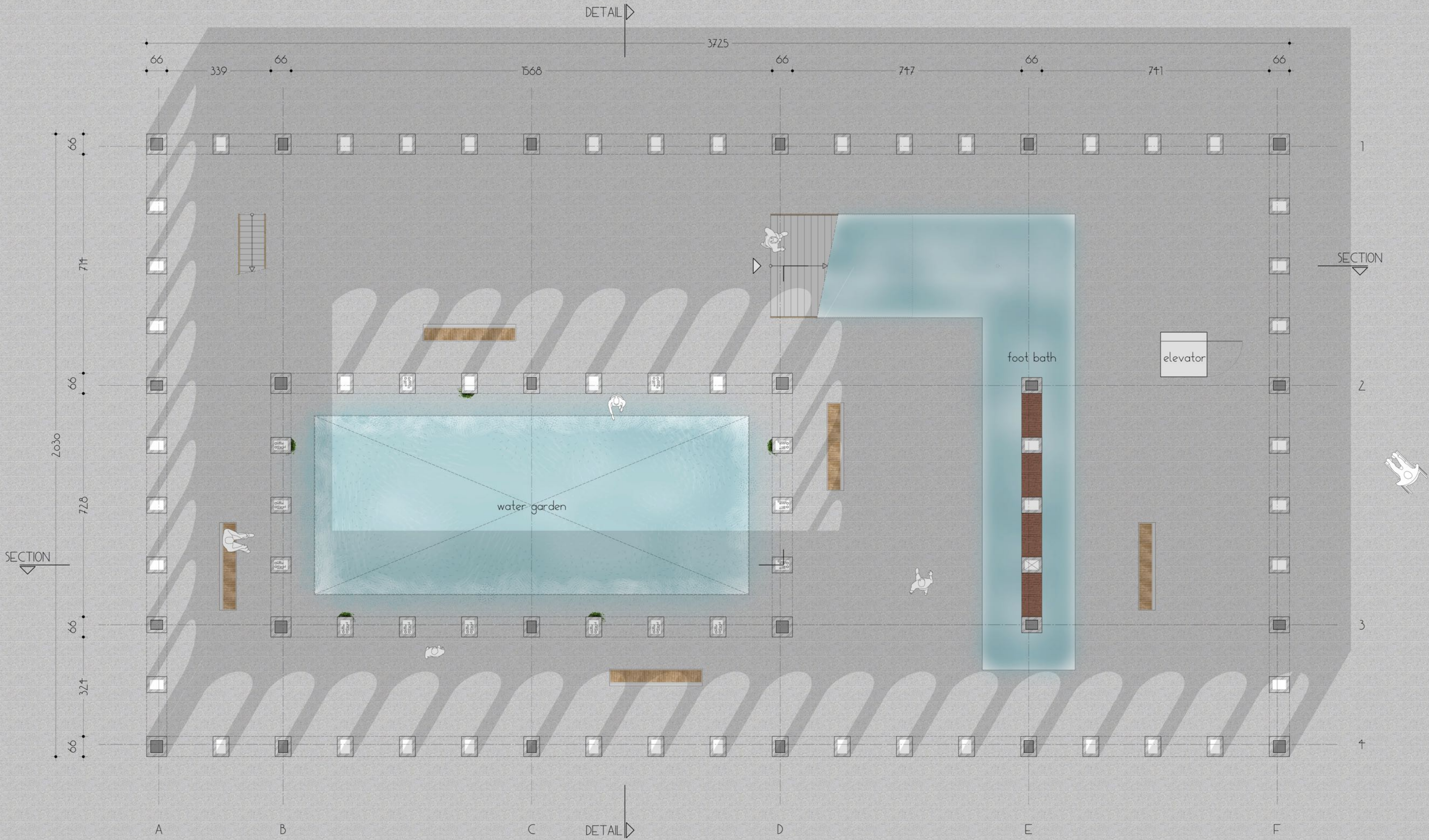
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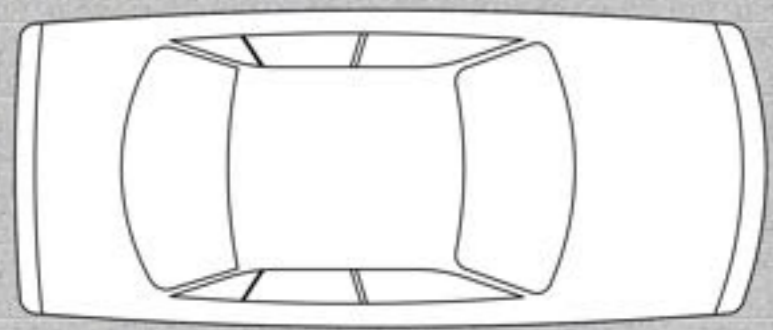
HIDEAWAY a claustrum for the mind

ground floor 1:50



entrance parking garage

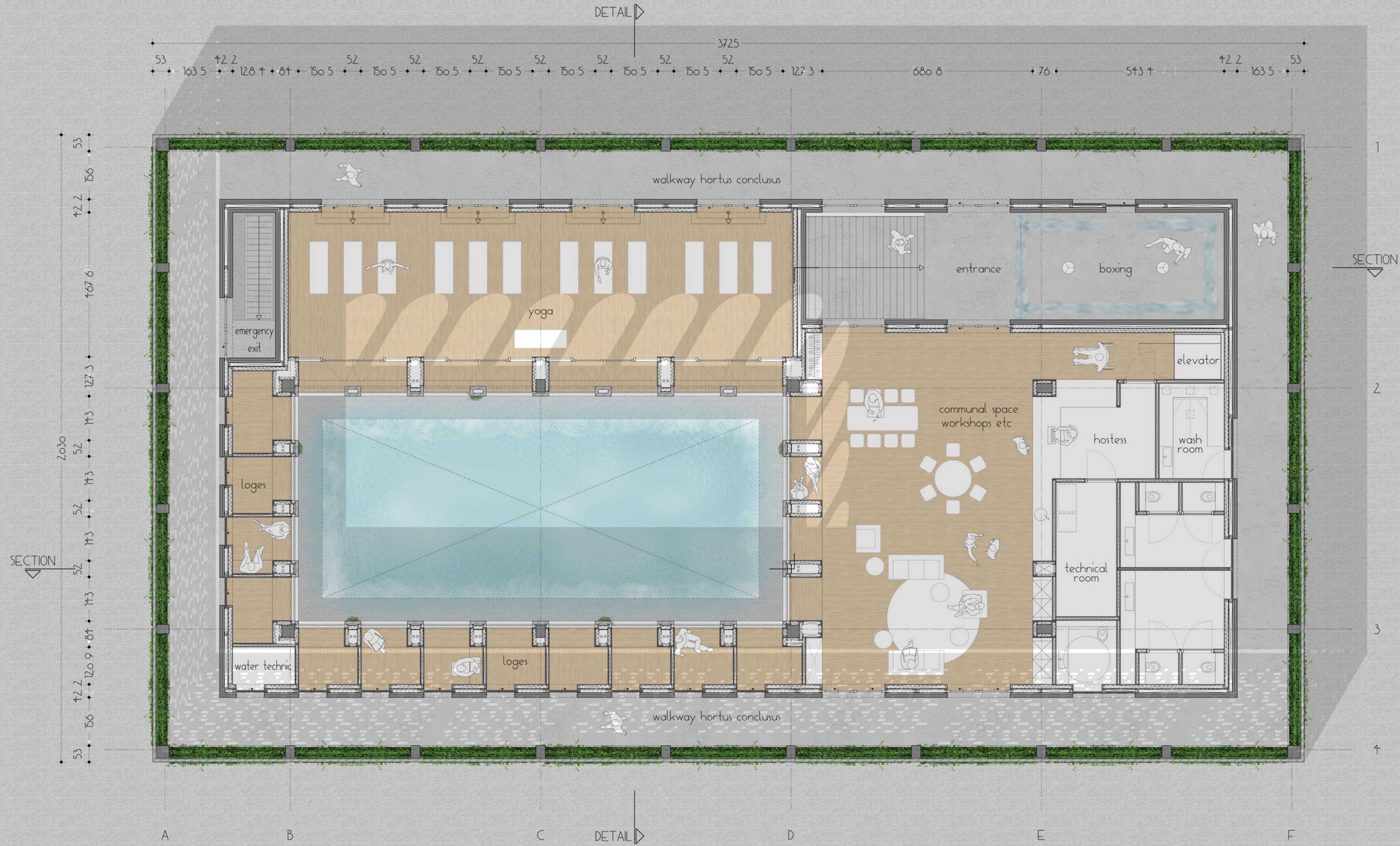
entrance parking garage



Paradijslaan ( park )

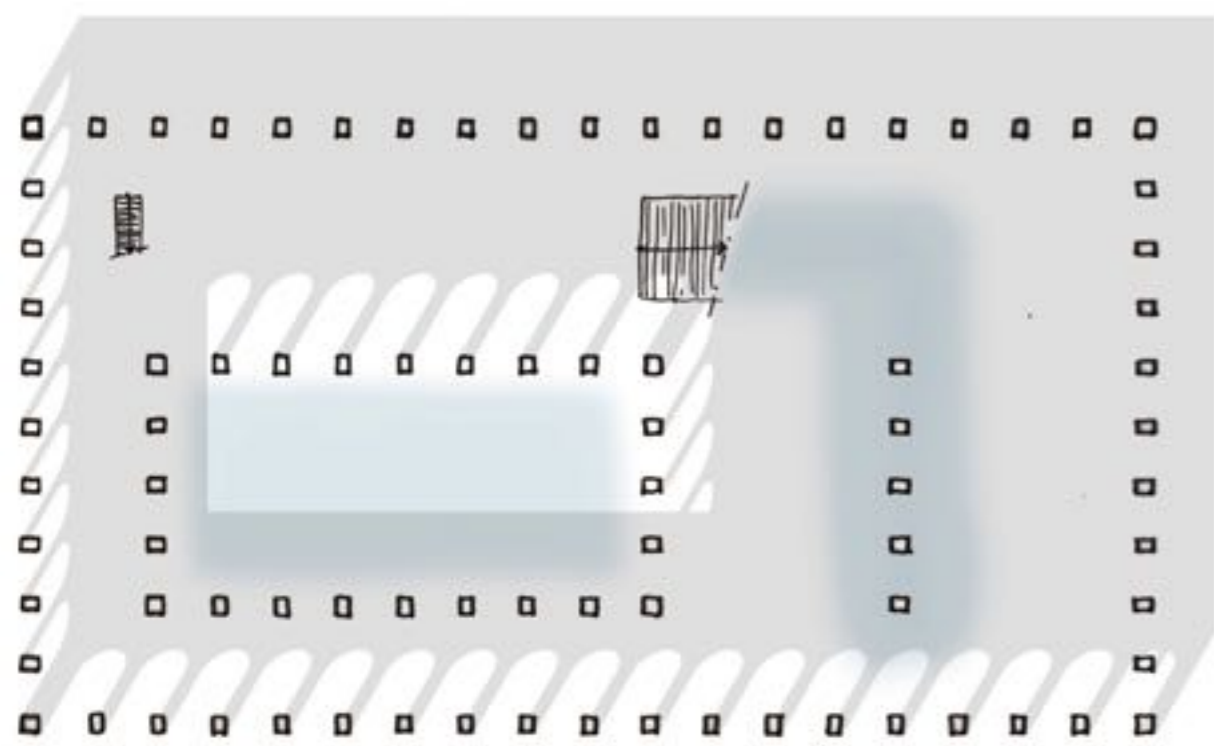
Groot Paradijs

Wal street ( city hall )

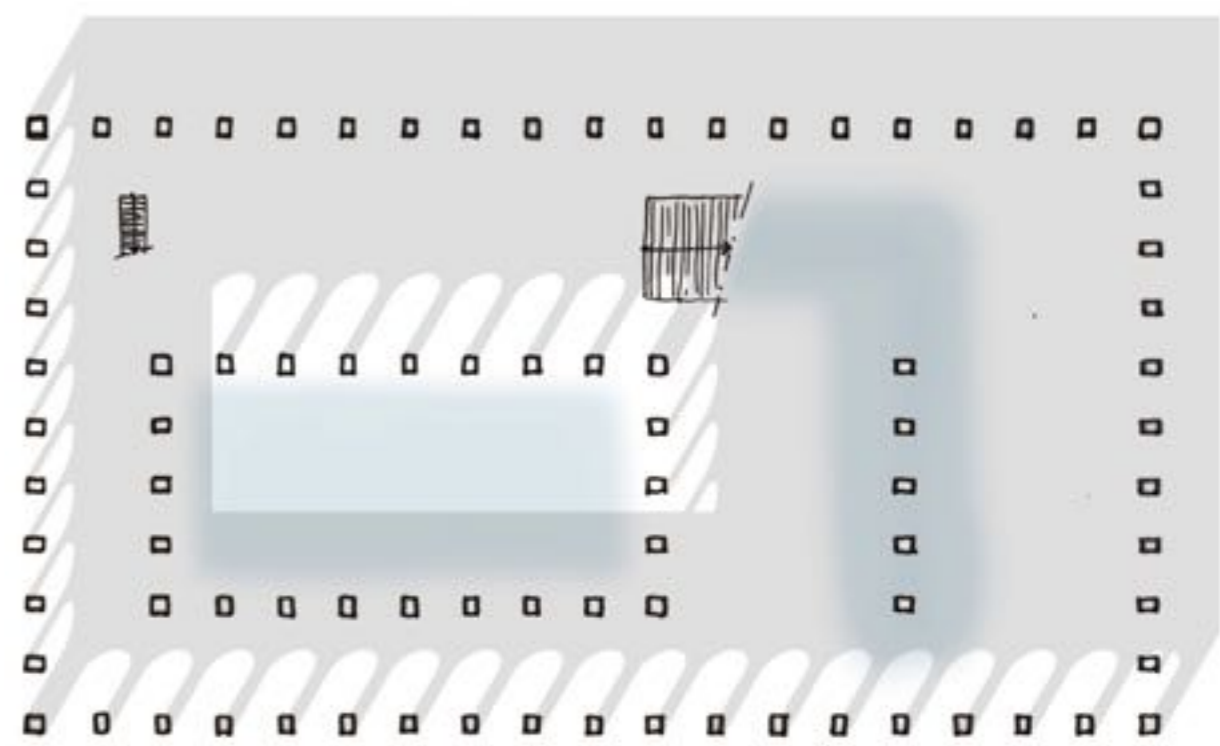




**01** view from cityhall (wal street) to Groot Paradijs square

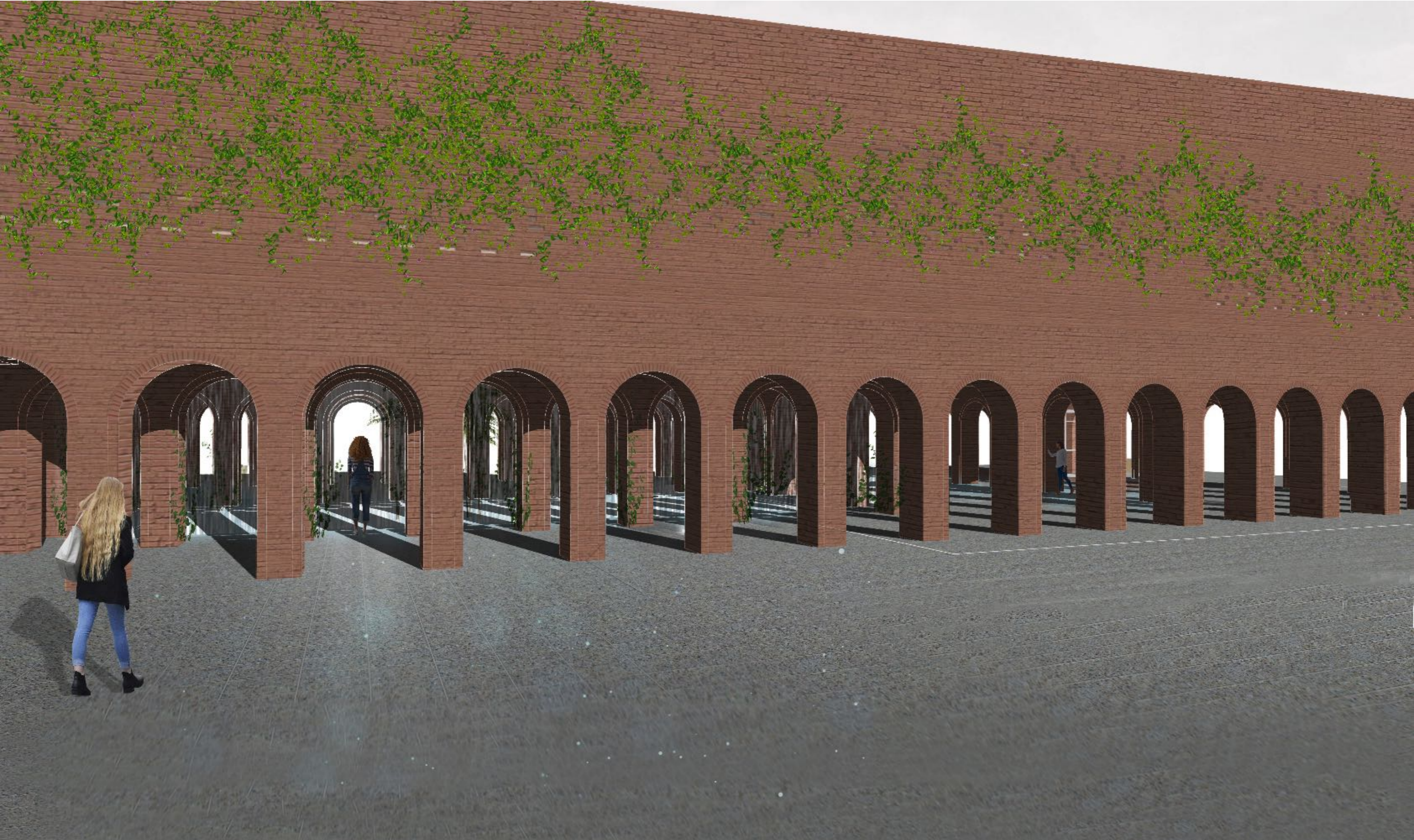


HIDE AWAY  
 "a claustrum for the mind"

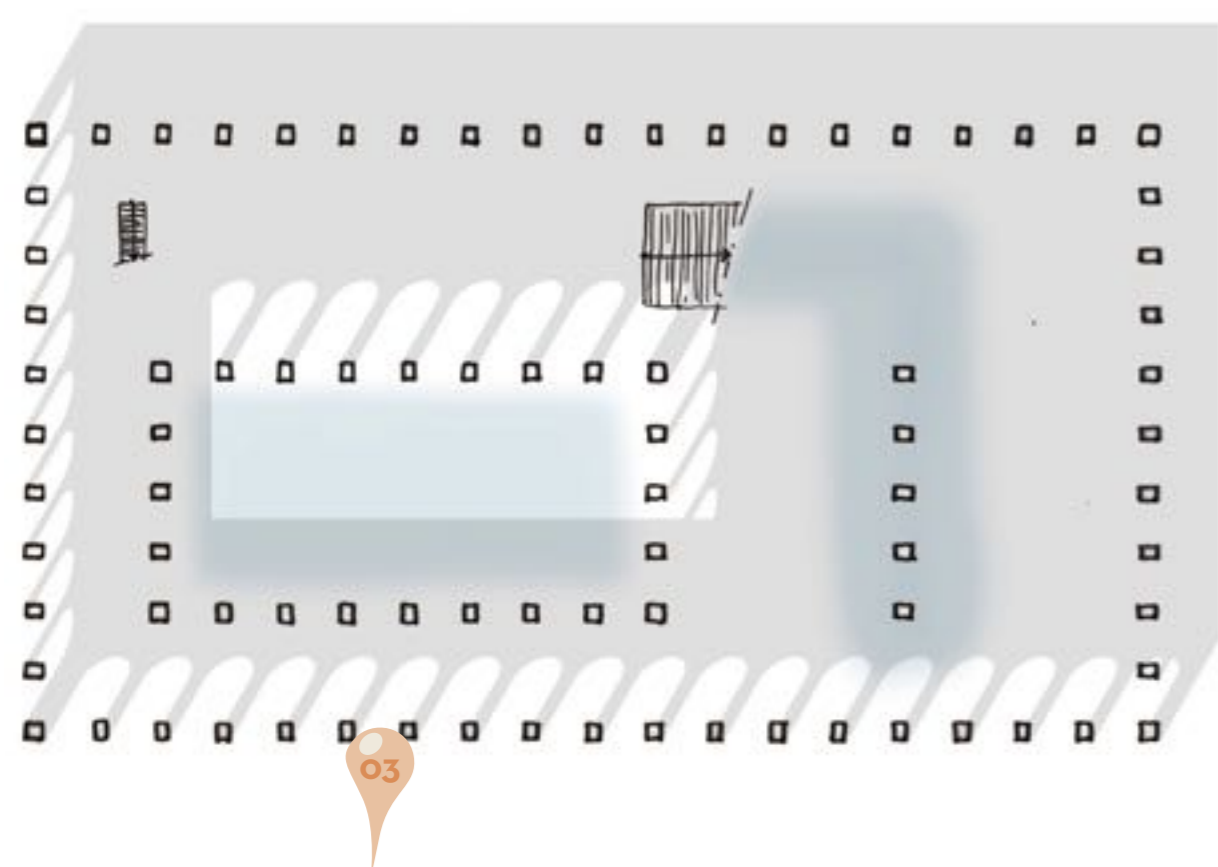


**02** view from park (paradijslaan) to Groot Paradijs square



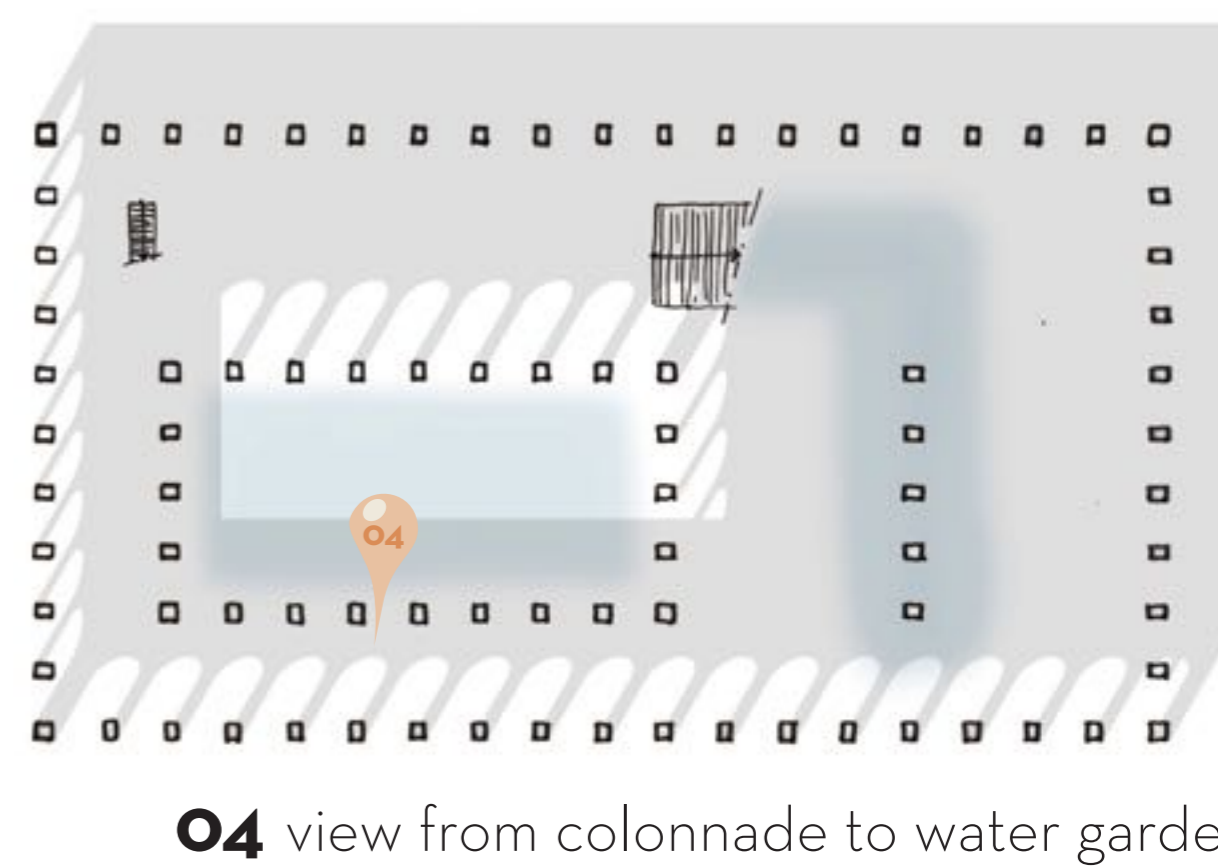


**03** view from square to forest of columns



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**04** view from colonnade to water garden

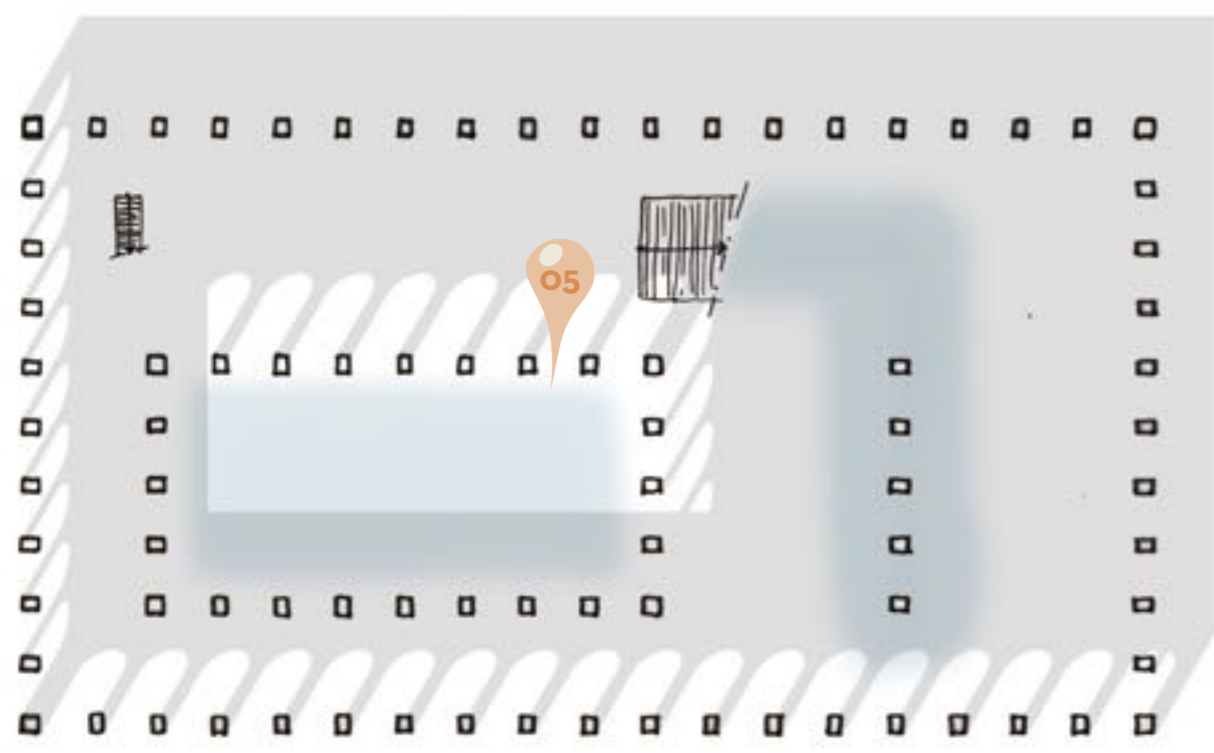




HIDEAWAY a claustrum for the mind

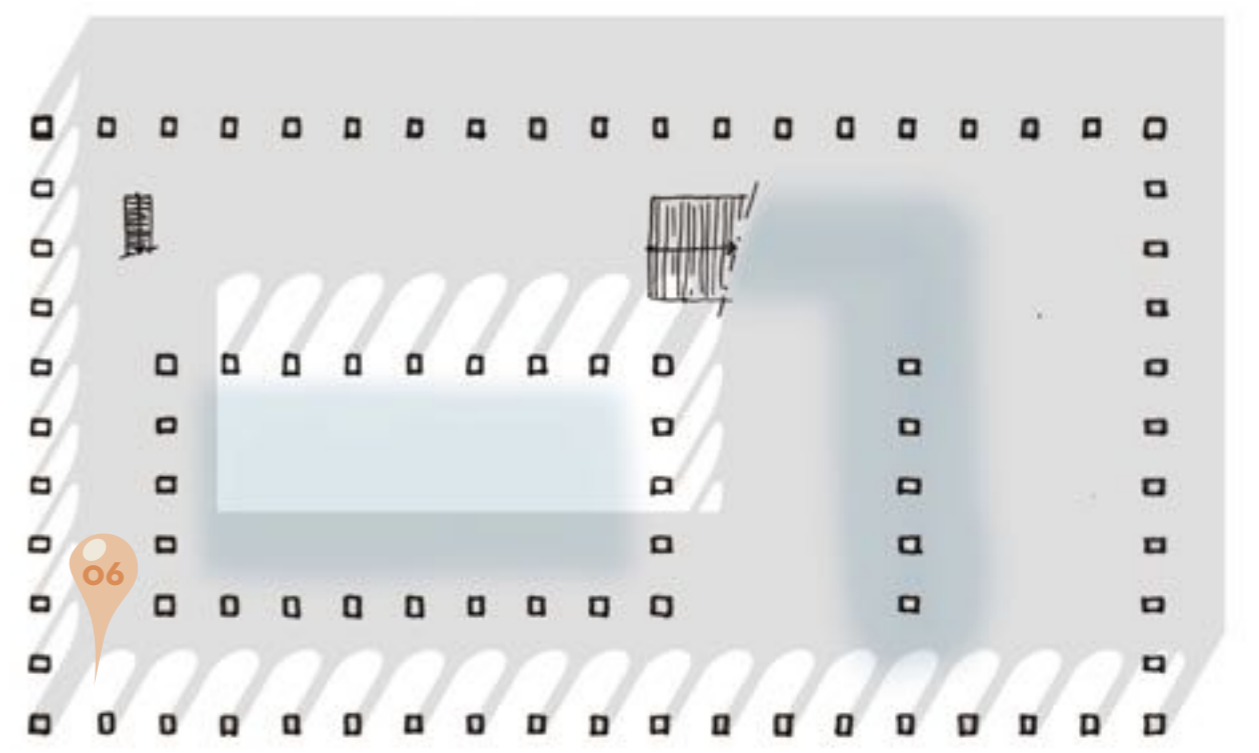


◀ **05** view in the water garden



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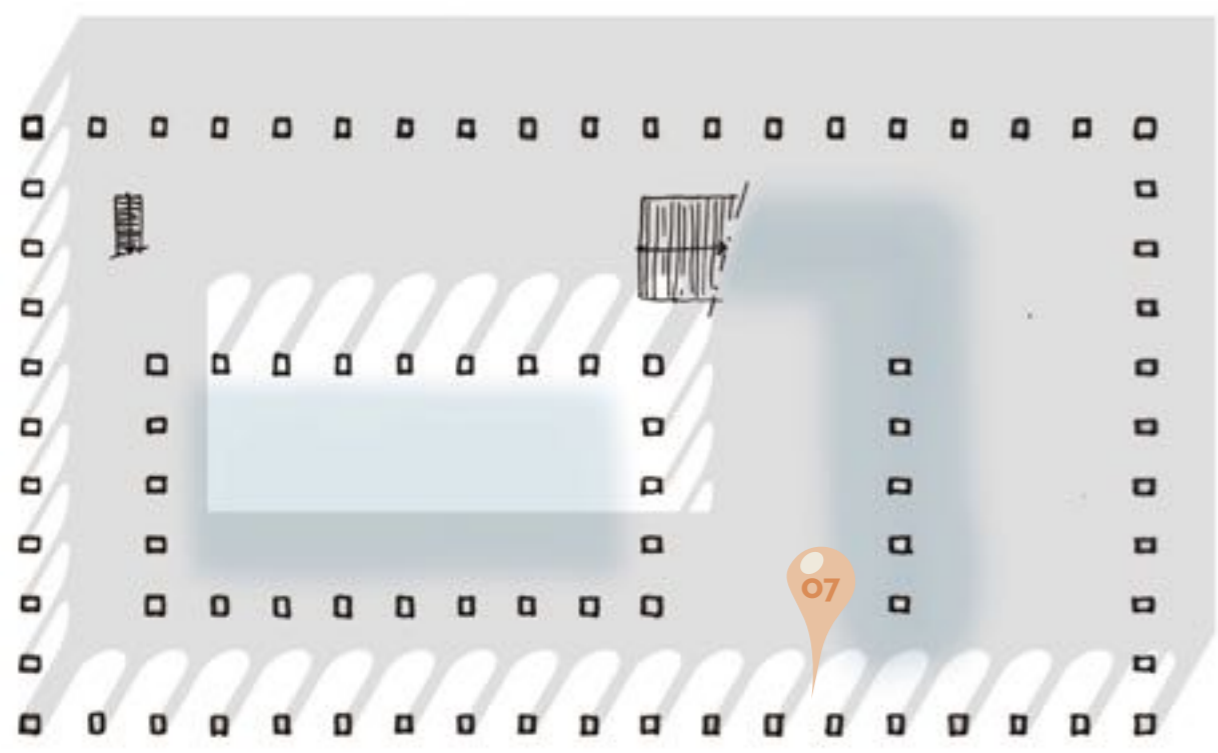


**06** view through colonnade

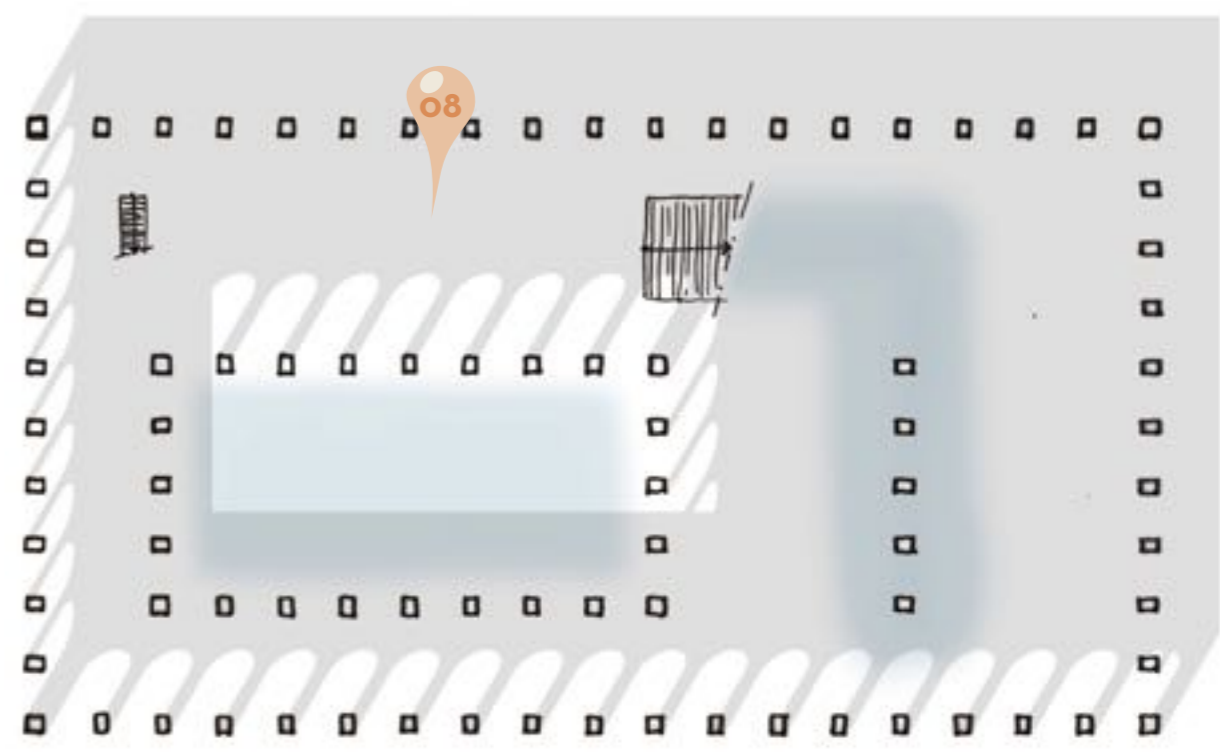




07 view from foot bath to stair



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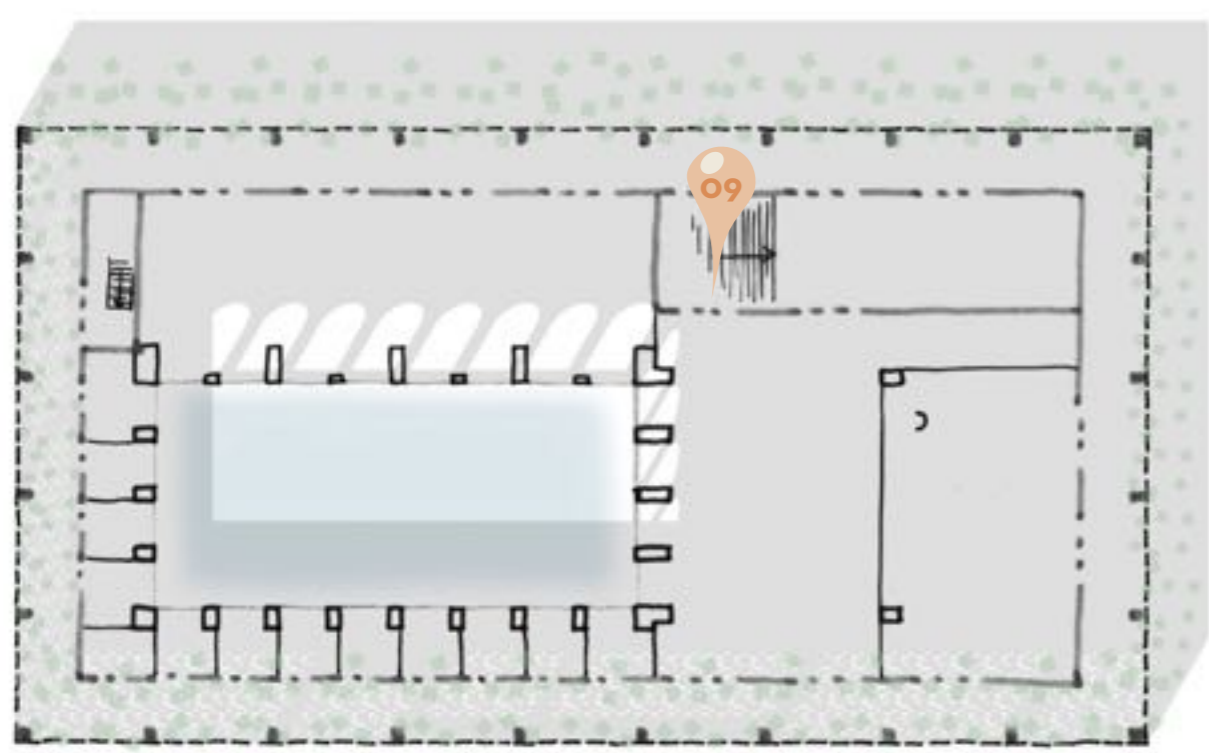


08 view to stair



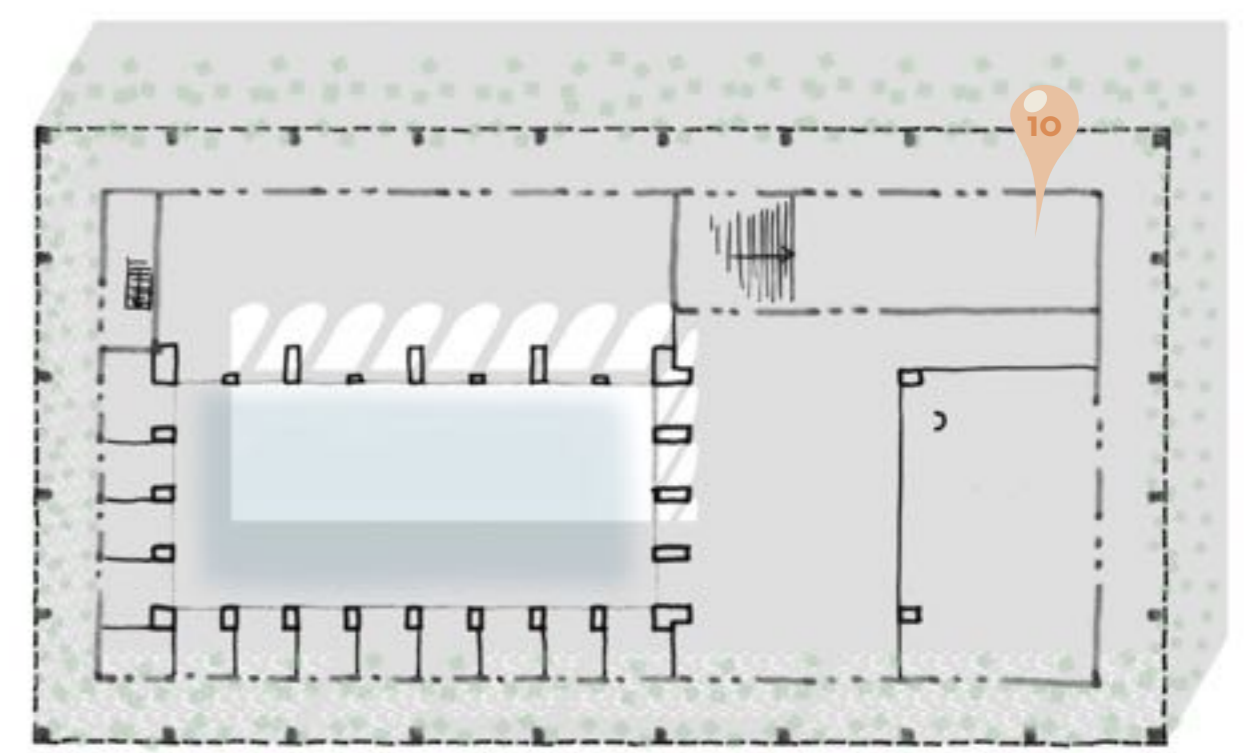


**09** view from stair to water wall and boxing space



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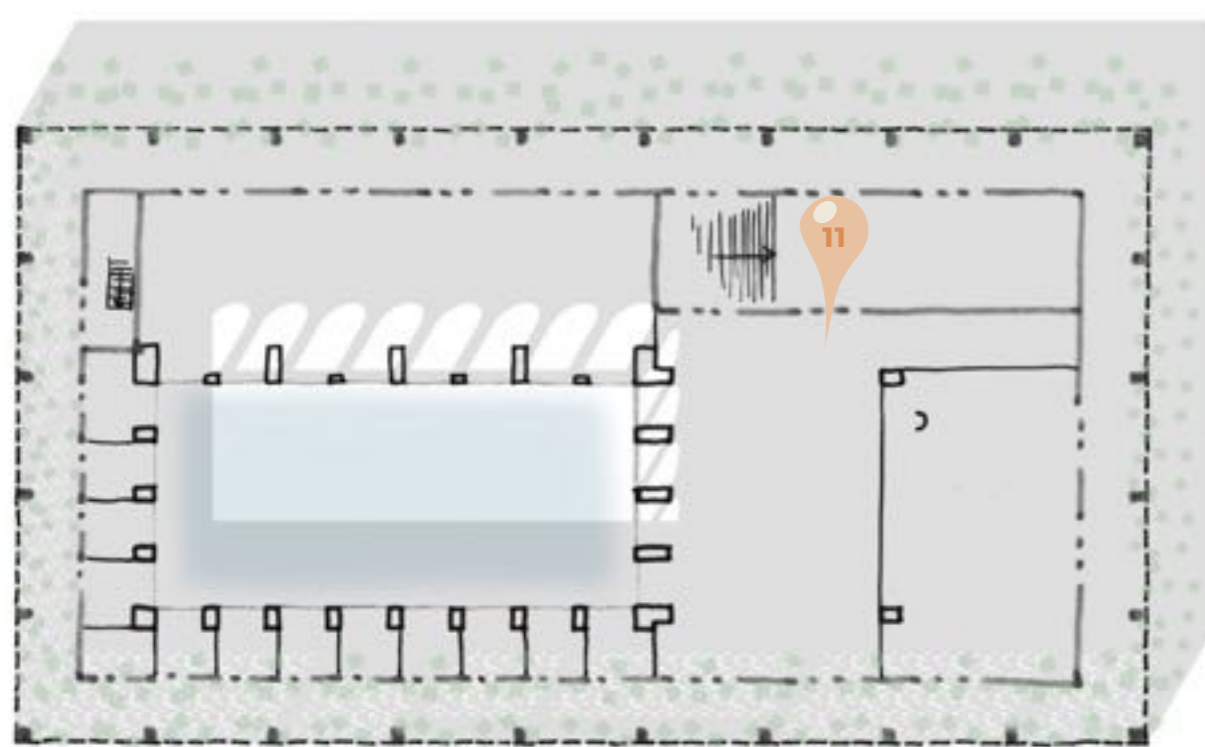


**10** view in the boxing space



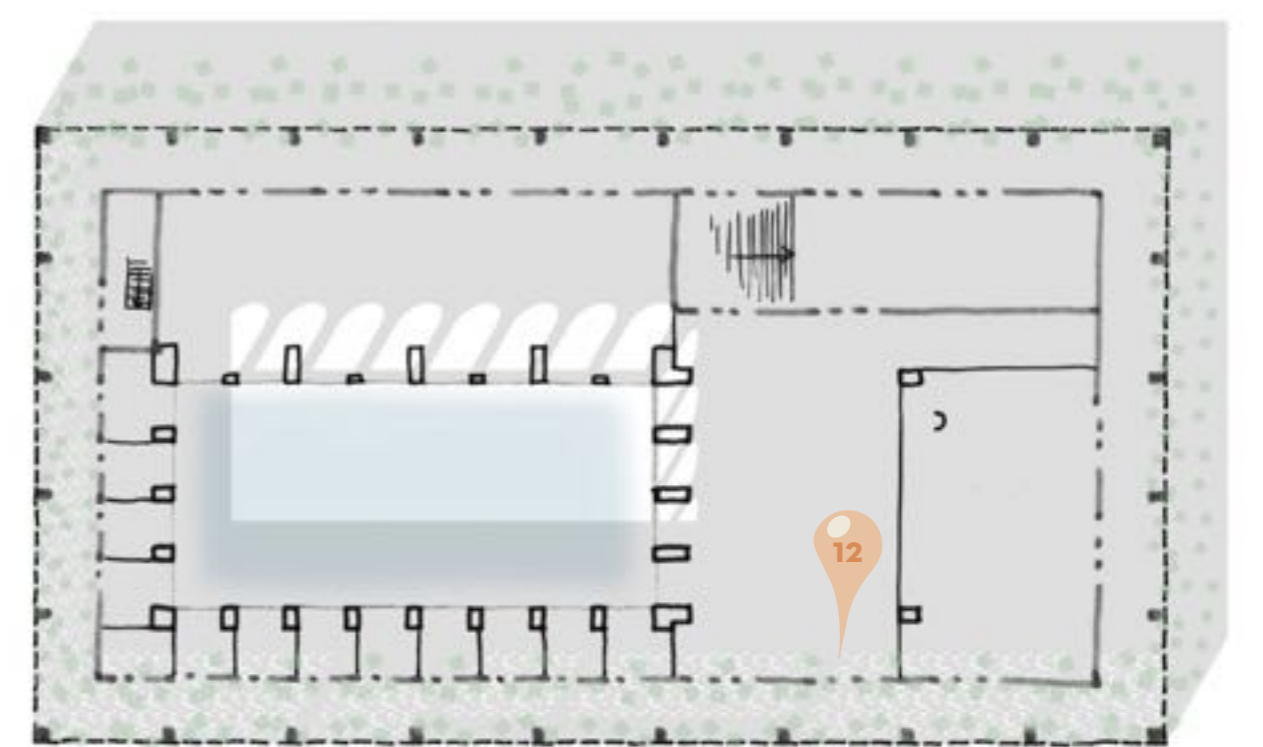


**11** view from entrance to hostess in the communal space



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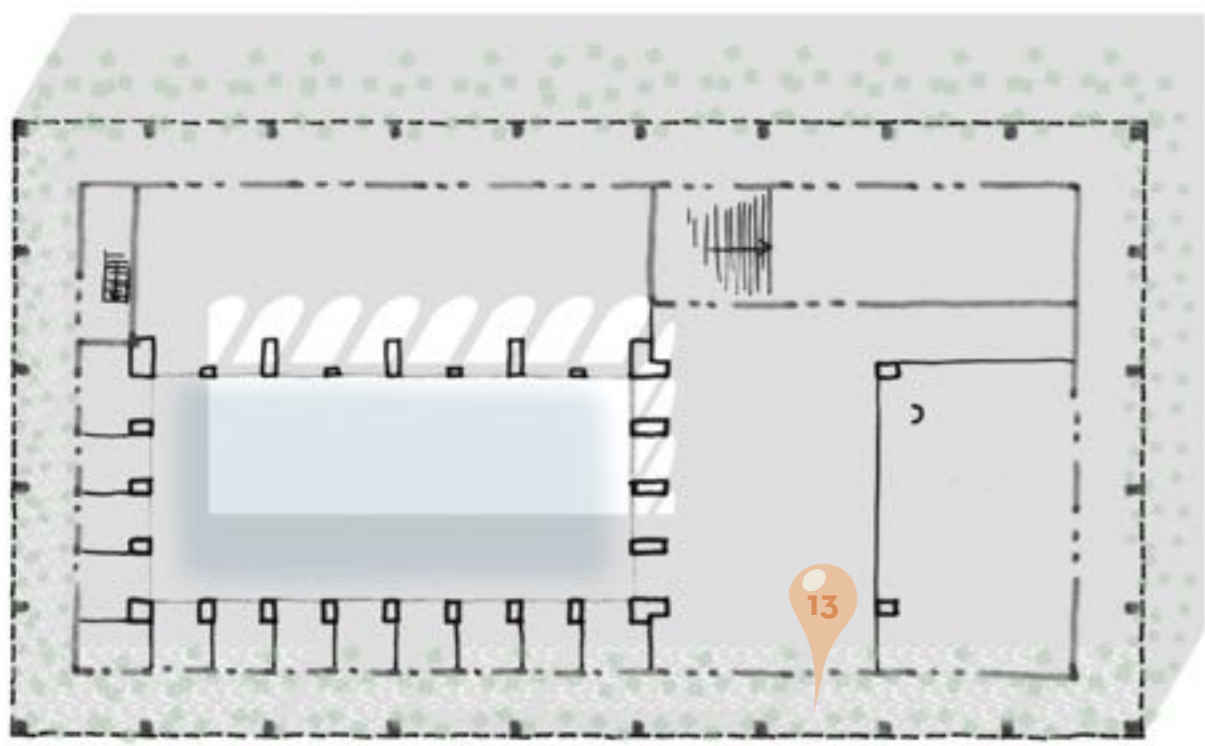


**12** view in the communal and workshop space



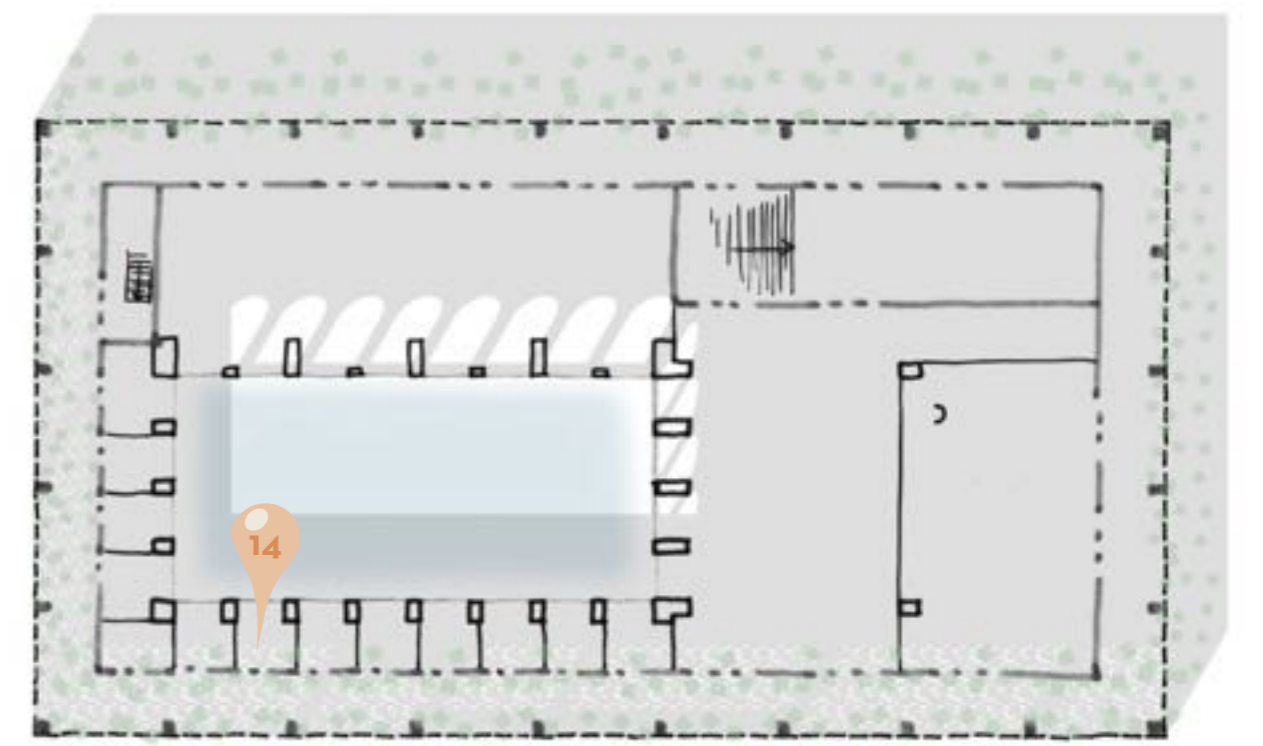


**13** view in walkway



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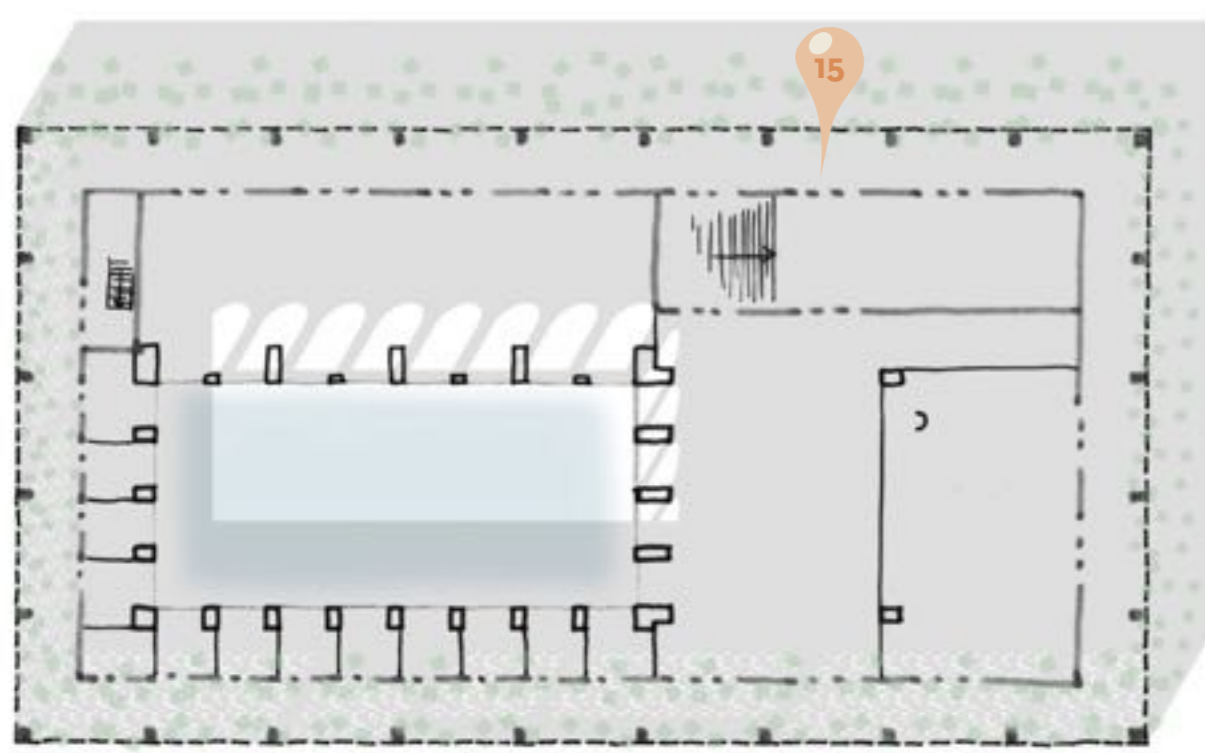


**14** view in one of the loges



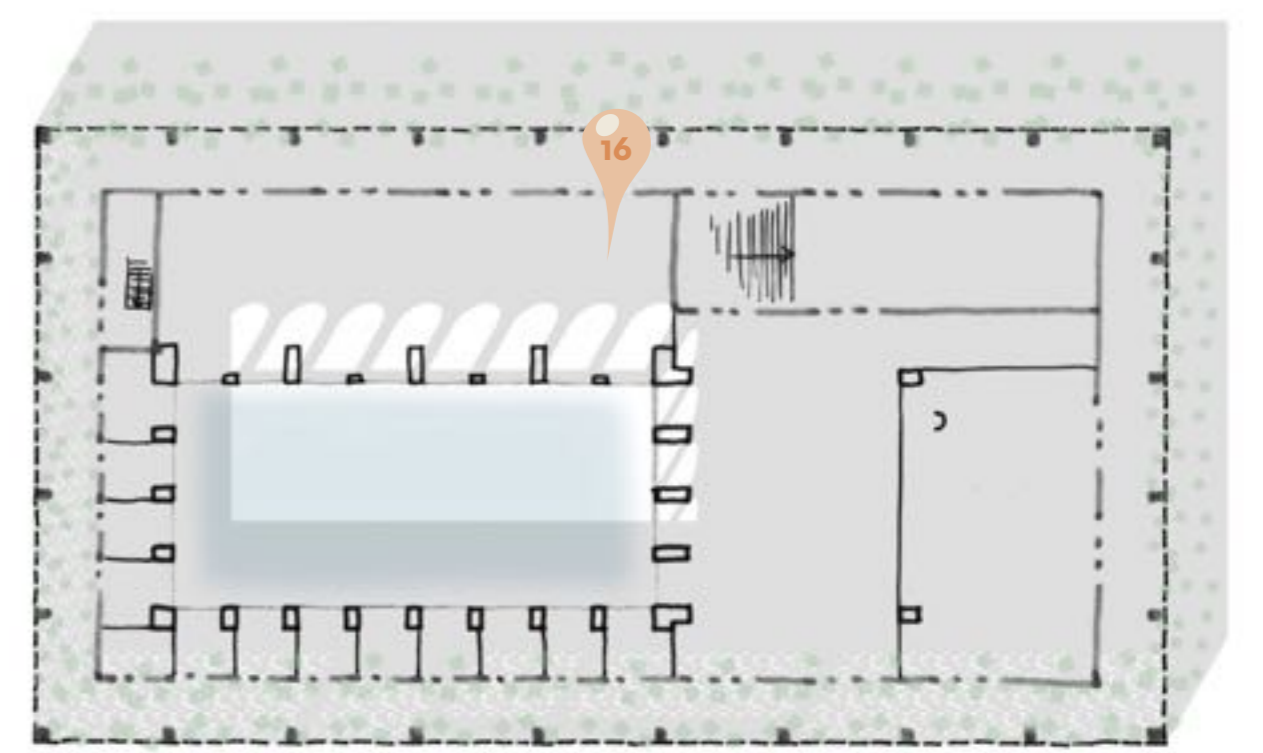


**15** view in walkway next to the entrance



## HIDE AWAY

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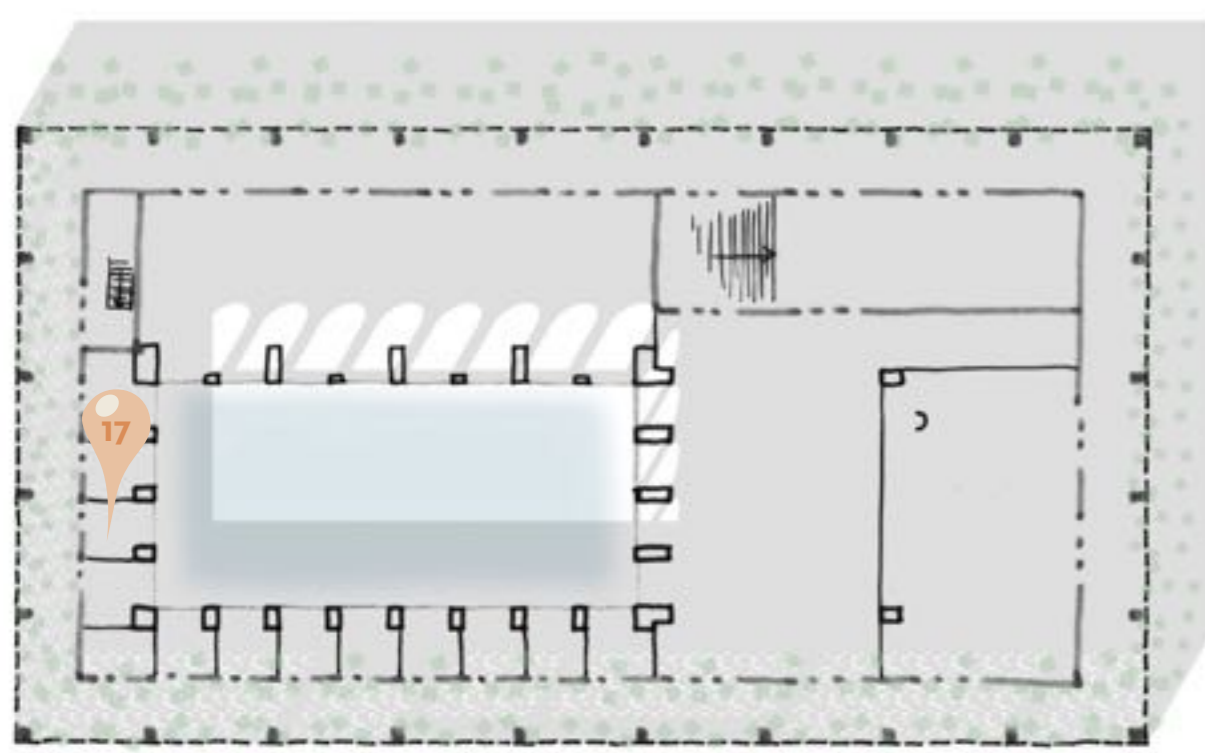


**16** view in the yoga space



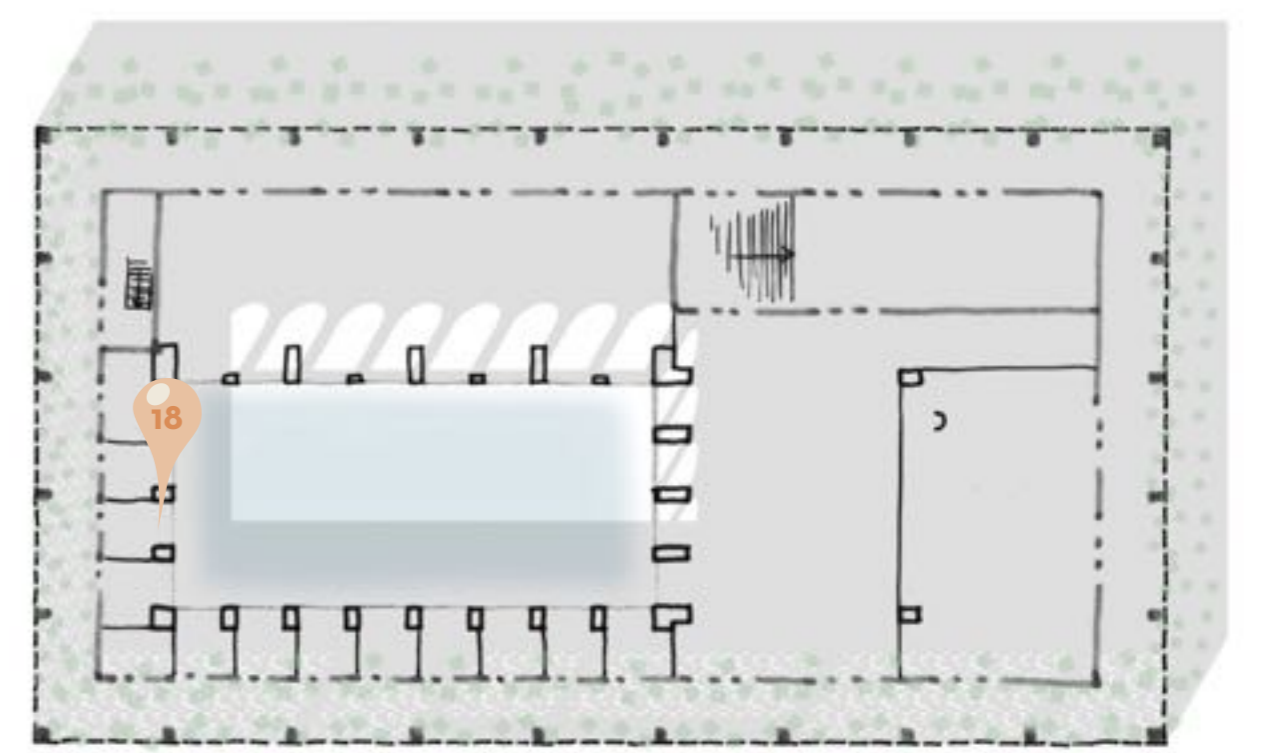


**17** view in one of the loges



## HIDE AWAY

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**18** view from loge to water garden

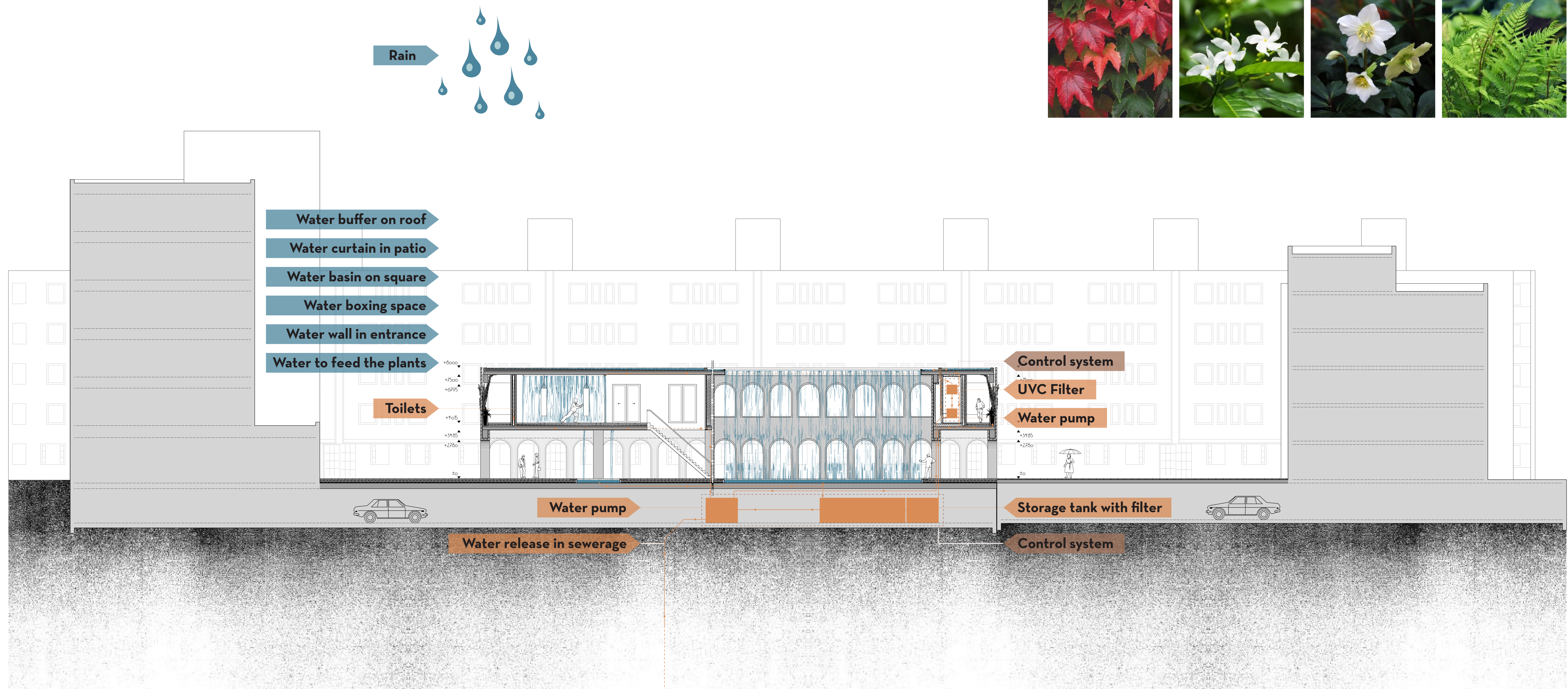


## Water garden

Hideaway uses water as a contemplative element, and at the same time for sustainable reasons. Rainwater is caught on the roof of 617m<sup>2</sup>. The water buffer on top of the building helps to keep the building cool inside, but is also a mirror to the sky for the residents living around Hideaway. It seems that the water overflows on the edge of the roof inside the patio, which creates a big water curtain. This creates privacy between interior spaces and creates a place to contemplate and to cool down in the mist.

### How does the water system work?

First of all, the rainwater is collected on the roof. A control system, an online platform, calculates the rainfall and makes sure that there is always space to collect the rain without overflowing. This control system also knows when there is water needed for the water curtain. The water pump gets a signal from the control system, and pumps water of the 'dirty' roof through the UVC filter, to clean the water and get rid of algae. From the UVC filter the water goes to the 'clean' roof, the boxing space and the plants in the walkway. The water falling from the roof is collected in a water basin on ground floor. The water falling in the boxing space falls in a second water basin on ground floor via a drainage. Thereafter the water is collected in a storage tank in the basement. The water in the tank can be used to flush the toilets or to create a water curtain during dry days. The control panel gives a signal to the water pump in the basement when a lot of rain is expected to release it in the sewerage system.



## Hortus Conclusus

Hideaway is a walkway in nature. On groundfloor around the water garden, on the first floor in an enclosed garden, a hortus conclusus.

The walkway on the first floor has an outside climate and leads to all the interior spaces. Daylight enters through an open brickwork facade and a gap in the ceiling that creates a dramatic flood light along the wall and plants. This gap allows rain to enter as well to water the plants. The plants also receive water from the water system. The walkway is full of shadow to experience the light that enters. This means that the plants also need to grow well in shadows. The plants climb along the wall and escape to the outside of the building through the open brickwork.

Which plants grow in the project?

Climbing plants:  
Parthenocissus (Virginia creeper)  
Trachelospermum jasminoides (Star jasmine)

Plants:  
Helleborus niger (Christmas rose)  
Polypodiopsida (Ferns)



